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April 1, 2015

VIA ELECTRONIC FILING

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor North
P.O. Box 3265
Harrisburg, PA 17105-3265

Re: **Columbia Gas of Pennsylvania, Inc.
Annual Asset Optimization Plan
Docket No. M-2015**

Dear Secretary Chiavetta:

Enclosed for filing on behalf of Columbia Gas of Pennsylvania, Inc, is the 2015 Annual Asset Optimization Plan for the above-referenced proceeding.

Copies will be provided as indicated on the Certificate of Service.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Andrew S. Tubbs".

Andrew S. Tubbs
Senior Counsel

AST/sfh
Enclosures

cc: Certificate of Service

CERTIFICATE OF SERVICE

I hereby certify that true and correct copies of the foregoing have been served upon the following persons, in the manner indicated, in accordance with the requirements of § 1.54 (relating to service by a participant).

VIA E-MAIL AND FIRST CLASS MAIL:

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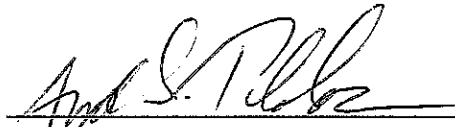
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Date: April 1, 2015



Andrew S. Tubbs
Senior Counsel

Columbia Gas of Pennsylvania, Inc.
2013-2017 Long-Term Infrastructure Improvement Plan
2015 Annual Asset Optimization Plan

Introduction:

Columbia Gas of Pennsylvania, Inc. (“Columbia” or “the Company”) received approval for its 2013 – 2017 Long Term Infrastructure Improvement Plan (“LTIIIP”) and Distribution System Improvement Charge (“DSIC”) from the Pennsylvania Public Utility Commission (“Commission”) by Order entered March 14, 2013 at Docket No. P-2012-2338282.¹ A DSIC was billed to Columbia’s customers from April 1, 2013 through June 30, 2013. Since that time Columbia has utilized the provisions of 66 Pa C.S. § 315 (e) to recover DSIC eligible investments through base rates and the DSIC rate is zero. Pursuant to the Joint Petition for Settlement approved by the Commission in a Final Order at R-2014-2406274 entered December 10, 2014, Columbia will be able utilize a DSIC again when its investment in DSIC eligible property exceeds the levels projected in its Fully Forecasted Rate Year ended December 31, 2015.²

In accordance with the requirements at 66 Pa. Code §1356, a utility with an approved DSIC must file an Annual Asset Optimization Plan (“AAOP”). The AAOP elements are prescribed as follows: (1) a description that specifies all eligible property repaired, improved and replaced in the immediately preceding 12-month period pursuant to the utility’s long-term infrastructure improvement plan and prior year’s asset optimization plan, and (2) a detailed description of all the facilities to be improved in the upcoming 12-month period.

Description of Columbia’s Existing Distribution System:

The Company owns and operates a natural gas distribution system, furnishes natural gas service to end use customers, and is a Natural Gas Distribution Company (“NGDC”) as defined in Section 2202 of the Pennsylvania Public Utility Code, 66 Pa. C.S. 2202. Currently, Columbia serves more than 419,000 residential, commercial, and industrial customers in portions of 26 counties throughout its greater York and Western Pennsylvania service territories. As documented in Columbia’s recent 2014 Annual DOT report, Columbia provides that service through approximately 7,443 miles of mains and approximately 420,733 services that it owns, operates, and maintains. These facilities (as of January 1, 2015) are composed of approximately 1,504 miles of bare steel, 25 miles of cathodically protected bare steel, 34 miles of cast iron, 94 miles of wrought iron mains (in total, 1,657 miles of “first generation” main), and 56,766 bare

¹ The Commission approved Columbia’s DSIC by Final Order entered on May 22, 2014. However, the DSIC remains subject to refund or recoupment based resolution of the appeal of this order currently pending before the Commonwealth Court at Docket No. 1012 CD 2014.

² On March 19, 2015, at Docket No. R-2015-2468056, Columbia requested that the Commission approve an increase to its base rates for, including a Fully Forecasted Rate Year ending December 31, 2016. Therefore, Columbia will not be permitted to use its DSIC until such time that its investment in DSIC eligible property exceeds the levels projected in its Fully Forecasted Rate Year ended December 31, 2016.

steel services.³ The balance of the system is comprised of coated cathodically protected steel, or plastic (polyethylene) mains and services, and 39.6 miles classified as other.⁴

In 2007, Columbia began to accelerate the replacement rate of bare steel and cast iron pipe. Between 2007 and 2015 Columbia has retired, or projects to retire, the following footages of bare steel, wrought iron, and cast iron by year:

	2007	355,764 feet
	2008	528,567 feet
	2009	344,488 feet
	2010	322,583 feet
	2011	533,765 feet
	2012	467,808 feet
	2013	449,856 feet
	2014	413,667 feet
	2015	402,109 feet (projected) ⁵
Total Actual	(Through YE 2014)	3,416,498 feet

By contrast, between 2002 and 2005 Columbia retired the following footages of bare steel or cast iron by year:

	2002	232,320 feet ⁶
	2003	179,520 feet
	2004	201,712 feet
	2005	174,240 feet
	4 Year Total	787,792 feet

It is important to note that the above-stated numbers represent only the bare steel, cast iron and wrought iron pipe that has been replaced since Columbia focuses on that pipe in order to optimize its capital to reduce the most risk on the Company’s overall distribution system.

Columbia’s total pipe replacement numbers for the purposes of its LTIP and this AAOP also include other categories of replacement such as mandatory relocation projects, replacement of first generation plastic pipe (if it is in need of replacement), and betterment projects. These figures underscore the scope of Columbia’s accelerated replacement program, as over the last 8 years (including 2014) the Company will have eliminated an average of 427,062 feet per year, compared to an average annual rate

³ The terms “bare steel,” “unprotected coated steel,” “unprotected steel,” and “wrought iron” are used interchangeably and all refer to steel pipe without cathodic protection that is susceptible to corrosion.

⁴ It should be noted that in 2011 Columbia deployed a GIS Mapping System (Geographical Information System) to provide both mapping and data retrieval capabilities on its system and facilities. The 41 miles of “other” main appear to be anomalies in the data conversion and through a scrubbing process have been reduced from over 41 miles in 2014.

⁵ This estimate is based on historic spend and footages achieved. As explained in great detail in the LTIP, the projection is subject to change based on emerging conditions.

⁶ This is based on using the 2000 bare steel and cast iron footages rather than the 2001 footages, because in 2001 the DOT reports actually show an increase in the amount of bare steel and cast iron in the system. Since bare steel and cast iron pipe was not added to the system, we believe this is an anomaly in the data.

of 196,948 feet in the 4 years from 2002 to 2005. This constitutes an increase in the annual retirement rate of cast iron, bare steel and wrought iron by a factor of 2.17 times that of the earlier period.

As described in Columbia's LTIP, DSIC eligible property includes more than cast iron, bare steel and wrought iron in that it includes all types of piping, service lines, excess flow valves, regulators, risers, meter bars and meters that must be replaced in order to repair, improve or replace eligible property that is part of the utility's distribution system, as well as unreimbursed costs related to highway relocation projects where a natural gas company must relocate its facilities. Excess flow valves, regulators, risers, and meter bars are replaced in concert with the service line replacements but are identified as separate units of property. Additionally, the Company elected not to include the cost of meters in the DSIC effective April 1, 2013 due to the absence of separate identification of meters purchased as replacements versus meters purchased for new businesses. The Company retains its right to include the cost of meters replaced in the future at such time that the appropriate identification is available. The following data, therefore, reports on all types of pipe and service lines replaced.

Property Repaired, Improved and Replaced during the Twelve Months Ended December 31, 2014:

Pipe:

Bare Steel	384,269
Plastic	114,827
Coated Steel	133,269
Other	421
Wrought Iron	13,190
Cast Iron	<u>15,787</u>

Footage Retired	<u>661,763</u>
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2014 Infrastructure Project Replacement Summary

PROJECT NAME	INSTALLED PIPE SIZE (IN.)	PRIORITY PIPE (BS, CI OR WI) ABANDONED (FT.)
Fairview	2" & 4"	1,717
Grandview	2", 4" & 6"	1,982
Buchanan	2" & 4"	654
Faust St	4"	14
Fruithurst	4" & 6"	298
Marylea	4" & 6"	2,426
Winifred	2", 4", 6"	894
D-135	10" & 12"	108
Delano	2", 4", 6"	1,712
Glenbury	2", 4", 6", & 8"	1,810
Lynnbrook	2", 4", 10", & 12"	760
Orchard/Parkway	2", 4", 8"	6,143
Fruithurst 2	2", 4", & 6"	4,205
Freeland	2", 4", & 8"	2,146
Grove Road	2", 6" & 8"	2,017
Greentree between Orchard & Oriole	4" & 8"	941
Brightwood Road	2", 4", 6", & 8"	3,221
Oak Forest	4"	1,093
Intersection of Private & Stromberg	4"	17
Middleboro	4" & 6"	250
Freeland	2", 4", 8"	1,144
Corace	2", 6", 8"	564
Warfle	2"	149
Carnegie	6"	5
Sagamore (abandon only)	n/a	113

PROJECT NAME	INSTALLED PIPE SIZE (IN.)	PRIORITY PIPE (BS, CI OR WI) ABANDONED (FT.)
Napoleon	2"	649
Montour Church (abandon only)	n/a	170
McNeilly Road	8"	541
Mimosa	2",4",6" & 8"	4,340
Centralia (abandon only)	n/a	120
Fairhaven/McKees Rocks	6"	5
Hanover	1 1/4"	80
SR 88	4" & 8"	74
Eiler	4"	8
Cochran	2", 8", & 10"	752
Dormont	6"	5
Chartiers/McKees Rocks	4"	17
Hillcrest/McKees Rocks	2" & 4"	1,463
Lambeth	2" & 6"	1,945
Sterling	4"	122
Thielman	3" & 4"	240
Greentree between Banbury & Oriole	2",4",6", & 8"	2,466
Page	4"	198
Dohrman/McKees Rocks	6"	54
Sylvania	3",4", & 6"	26
Berryman	3" & 4"	61
N Meadowcroft	6"	144
Parkway	2", 4", 8"	2,353
Edgemont	2" & 4"	410
Midway	4" & 6"	464

PROJECT NAME	INSTALLED PIPE SIZE (IN.)	PRIORITY PIPE (BS, CI OR WI) ABANDONED (FT.)
Brightwood Road	2", 4", 6"	2,338
Meadowgreen	4"	109
Amanda	2"	10
Arch	2"	178
Old Washington (abandon only)	n/a	521
Berg (abandon only)	n/a	480
Shadewell	4"	77
Expy	4"	15
Clairton (abandon only)	n/a	342
Brook	2"	97
Mitchell	2" & 4"	450
Maryann	6"	284
Hartranft	4" & 6"	127
Morningrise	2"	21
Zaruba	2" & 4"	262
Eleanor	2", 3", & 4"	147
National	2", 4", 6"	1,164
Hillcrest/McKees Rocks	2", 4"	1,667
Markham	2"	1
Lamont (abandon only)	n/a	48
St Patrick	2" & 4"	599
Weber	4"	244
Ralston	2", 3", & 4"	576
Washington Road	6" & 8"	223
N Meadowcroft	1 1/4"	69

PROJECT NAME	INSTALLED PIPE SIZE (IN.)	PRIORITY PIPE (BS, CI OR WI) ABANDONED (FT.)
Ella	4"	70
Plateau	2"	104
Kay	2", 4" & 6"	2,425
Wexford/Bayne	2", 4", & 6"	1,719
D-74 American Bridge	4", 6", 8" & 12"	1,258
Hillcrest/New Castle	2", 4" & 6"	4
3rd Ave between 5th & 6th	4" & 6"	479
Delaware/New Castle	2", 4", & 6"	9,113
Cleveland Ave/Pittsburgh	4" & 6"	5,360
Cleveland Ave, Florance to Sr 65	4" & 6"	1,826
Hinkel Road, Westminster to Darlington	2" & 3"	1,269
Bellaire Road, Glenmore to Dead end	2", 3", & 4"	2,012
D-260, 4th to 5th	4" & 8"	1,896
Route 68, Druschal to Rothart	2", 3", & 4"	1,228
8th Avenue, 4th Street to 5th Street	3" & 4"	400
4th Avenue Beaver Falls	2" & 4"	7,280
3rd Street, Insurance to Market	4" & 6"	2,009
Creekview/Slippery Rock	2", 3", & 4"	7,079
Pine Run Road	2" & 3"	1
Chestnut	2" & 4"	92
Giles Drive, Darlington to Dead End	2" & 4"	851
Thorn Ridge Road	2" & 4"	1,054
Willow Ridge Road	2" & 4"	2,126
Economy Street AMRP	2" & 4"	1,736
Arginne\Ellwood City	2", 4" & 6"	2,525

PROJECT NAME	INSTALLED PIPE SIZE (IN.)	PRIORITY PIPE (BS, CI OR WI) ABANDONED (FT.)
Terrace Avenue 6th to 8th	2"	570
Magnas Dr (Forest Grove to Strawberry)	2"	1,005
Hollow/NC	2" & 4"	3
W Poland	2" & 4"	892
Papermill & Eastbrook	2",3",4",&6"	650
Fire Street	4"	798
Hodgson Road	2", 4" & 6"	2,441
Koppel Borough	4", 6"	2,470
Summitview	2" & 4"	1,120
Chadwick/Sewickley	2", 4"	5,383
Adams St	4", 6" & 8"	2,440
Stanton/NC	10" Steel	1,454
8th/Beaver	4" & 8"	7
Lathrope/NC	4" & 6"	1,425
Ellwood/NC	2" & 6"	821
Wilson Ave, Miller to Sunset	2" & 4"	1,215
Scotland/NC	2" & 8" Stl	4,007
Cascade Street	4"	369
18th/Bvr	4"	678
Naugle Road	2"	142
3rd/Bvr (abandon only)	n/a	124
Dushane/NC	2' & 4"	1,029
Scotland/NC	2" & 8"	3,003
Scotland/NC	6" & 8"	406
Brighton Ave	2",4",6", & 8"	1,392

PROJECT NAME	INSTALLED PIPE SIZE (IN.)	PRIORITY PIPE (BS, CI OR WI) ABANDONED (FT.)
Woodland Road	2",3",4", & 6"	5,051
Mt Jackson/N/C	2",4", & 6"	2,252
Pink House	2" & 4"	3,213
Chestnut Rd, Beaver Rd to SR65	2",4" &	2,682
Harkess Lane	4"	390
Wellesley Ave	4" & 6"	661
D-99/NC	2",3", & 4"	6,746
Smithfuekd/NC	4"	673
Rinaman (abandon only)	n/a	1,729
Geer Alley	4"	302
Washington	4"	1,944
3rd SR 68	2", 4" & 6"	3,886
Birch (abandon only)	n/a	18
Oak/Berver	2"	214
Beaver Grade Road	2", 4"	5
Park	2"	744
3rd/NB (abandon only)	n/a	500
Center (abandon only)	n/a	14
Miller/NC	6" & 8"	620
Woodland	4"	404
Francis (abandon only)	n/a	302
Massachusetts	2"	320
Beaver Valley Mall	4", 6"	7,844
Indiana (abandon only)	n/a	143
D-226	3"	21

PROJECT NAME	INSTALLED PIPE SIZE (IN.)	PRIORITY PIPE (BS, CI OR WI) ABANDONED (FT.)
Mt Pleasant/NC	2" & 4"	378
Mt Herman Church (abandon only)	n/a	863
Washington (abandon only)	n/a	44
Fulton	1 1/4"	263
46th St/NB	2"	206
3rd/Bvr	6"	40
Grand	4" & 6"	46
Oak/Ambridge (abandon only)	n/a	10
Cresmont	2", 4"	3,431
Clover	2" & 4"	539
SR4005	2" & 4"	4,075
McHenry & Ninevah	2" & 4"	3,881
Emleton Ph 3	2", 4", & 6"	3,987
Sr 208	2" & 4"	937
Woodbury	2"	12
Perryville (abandon only)	n/a	18
W Sunbury (abandon only)	n/a	946
SR2005 (abandon only)	n/a	254
Knox St	2"	235
Riverview Drive	2"	60
N Palmer Ave (abandon only)	n/a	356
Huber Road	2"	3,046
Arch	2" & 4"	429
South	4"	992
Middle Run Road	2"	170

PROJECT NAME	INSTALLED PIPE SIZE (IN.)	PRIORITY PIPE (BS, CI OR WI) ABANDONED (FT.)
SR 3007	2" & 4"	684
Chestnut	2"	5
Penn	2" & 4"	80
Liberty (abandon only)	n/a	168
Second	2"	21
Lawsonham	1 1/4"	37
D-4002 replacement	2" & 8"	1,321
Seaward Ave replacement	2" & 4"	5,670
Futures Way and Kendall Crk	2" & 4"	122
Main St	2" & 4"	2,383
Short St.	4"	202
Bates	4"	43
Bennett	4"	198
Liberty	4"	1,437
D-4227 Phase 1	8"	7,383
Yankee Bush	2"	2,461
Park Ave	2",4",& 6"	2,414
Henry (abandon only)	n/a	154
River (abandon only)	n/a	194
Struthers (abandon only)	n/a	27
Maple Lane	4"	1,037
Railroad Street	4"	1,187
Fuscus	2"	742
Resina	2"	411
D 8500	4" & 10"	417

PROJECT NAME	INSTALLED PIPE SIZE (IN.)	PRIORITY PIPE (BS, CI OR WI) ABANDONED (FT.)
W George	1 1/4" & 2"	76
Henry	2" & 4"	453
Cedar	2" & 4"	2,515
N Vine	2" & 4"	295
Blue Jay Drive	2" & 4"	583
E Crawford	2",4",6",& 8"	1,122
Pittsburgh St	2",3", & 4"	828
Grant Ave	2",3",& 4"	612
Pennsylvania	2",4",6",& 8"	2,807
Barton Mill Rd	8"	249
Main	2" & 6"	318
D-1254 Mud Pike	2" & 8"	3,503
Vestaburg	2",4",6",& 8"	7,889
D-1254 Suter Rd	6" & 8"	1,316
D-7024 Skellytown	2",4",& 6"	2,127
Cemetery/Railroad	2",4",6",& 8"	58
Arthur Ave	2" & 4"	3,359
SR 88	8"	15
Elm Str	2" & 4"	96
Esabella	2" & 4"	5,809
Breakneck Rd	4",6",8",& 10"	1,534
D7215 Mon River Bore	8"	2,152
Ridge	2" & 4"	574
Virgina	2"	5
Gillis	2"	50

PROJECT NAME	INSTALLED PIPE SIZE (IN.)	PRIORITY PIPE (BS, CI OR WI) ABANDONED (FT.)
Bolivar (abandon only)	n/a	66
Hyndman	4"	232
1st/Fallowfield	2"	517
Third	2"	62
Melton	2"	26
Berkeley	4"	13
Rebecca	2" & 8"	1,012
2nd	2",3",4",& 6"	1,582
Show	2"	2
N/Somerset	2"	539
Clearview	2",3",& 4"	1,168
Digons	2"	83
Beacon (abandon only)	n/a	45
Maple Terrace	2"	217
Glades Pike (abandon only)	n/a	1
Cannel (abandon only)	n/a	680
Sixth	2"	440
SR 981	4"	556
Orchard	2"	118
Henderson Avenue	2",4",6",& 8"	558
D-503	3",4",6", & 8"	5,563
North	4"	100
Jefferson	3",4",6", & 8"	1,068
705 Euclid Avenue	2" & 4"	1,768
Gardner	2",3",4",& 6"	677

PROJECT NAME	INSTALLED PIPE SIZE (IN.)	PRIORITY PIPE (BS, CI OR WI) ABANDONED (FT.)
207 Grandview	2",4",& 6"	2,089
N Main	2",4",& 6"	1,880
D-1581 Replacement (SB 7353)	12" & 16"	5,873
Caldwell	2",6",& 10"	5,481
Thorne Rd	2"	527
Sanitarium	2" & 8"	1,424
S. Central Av	2",3", & 6"	1,579
Rennerdale	2",3", & 4"	4,810
Ten Mile Road (SB 7435)	6"	2,330
Park Avenue (SB 7437)	2",4",6', & 8"	6,192
E McMurray Rd (SB 7441)	2",4",& 6"	1,965
Wolfdale Phase End (SB 7447)	2",4", & 8"	6,687
Cross Creek	2"	1,174
SR 519	4"	272
School (Rogersville)	2" & 4"	2,720
Highland Ridge	2",4",& 6"	8,264
Highland Av (Canonsburg)	4"	546
Park	2"	231
Franklin	2",4",& 6"	1,190
Hutchenson	4"	556
Hill School House (abandon only)	n/a	52
Hillsboro (abandon only)	n/a	2
East	2"	327
Country Club	4"	198
D-1581	12"	191

PROJECT NAME	INSTALLED PIPE SIZE (IN.)	PRIORITY PIPE (BS, CI OR WI) ABANDONED (FT.)
Alexander	2"	457
Pike	2" & 8"	774
Allison	8"	6
Manse	4"	3
Noblestown	4" & 6"	1,417
Spring	2" & 3"	950
Cove	2"	484
Wilmot	2"	40
Elm	2"	164
School	4"	380
Ellis	6" & 8"	11
Centrifugual (abandon only)	n/a	96
Marshall	2"	1,207
S Keesey	2"	685
S Rockburn	2"	548
S Keesy	4"	1,256
Steinwehr	2"	1,915
W College Ave	2"	1,347
Salem Ave	2"	1,780
S Hartman	2" & 4"	459
S Sumner	2",3", & 4"	2,001
S Clinton	2",6",8", & 10"	2,919
N Lehman	2"	631
N Camp	2" & 4"	1,989
Margaret	2"	930

PROJECT NAME	INSTALLED PIPE SIZE (IN.)	PRIORITY PIPE (BS, CI OR WI) ABANDONED (FT.)
Church St, Spry	2"	488
W Broadway	2",3",4", & 6"	2,161
York St	2",4", & 6"	3,035
York St	2",4", & 6"	2,076
Edgewood	8" & 12"	4,035
York	6"	189
York	2" & 6"	1,101
Main St- Arendtsville	4"	334
Locust Grove	2" & 4"	490
Lafayette	2" & 8"	231
Church St Glen Rock	2",4",& 6":	1,001
SR0034 Biglerville	2",3",& 4"	715
W King	4" & 6"	167
S Duke	2"	230
S Lehman St	2"	3,384
E High	2"	988
E Market (Abandon only)	n/a	1,115
W Howard	2"	20
Wallace (Abandon only)	n/a	115
S George	4"	34
W Hanover	2" & 4"	218
Schoolhouse	4"	8
Susquehanna	10" & 12"	566
E Market	2" & 4"	266
Norwood	2"	3,022

PROJECT NAME	INSTALLED PIPE SIZE (IN.)	PRIORITY PIPE (BS, CI OR WI) ABANDONED (FT.)
Obryan	4"	586
Westerley	2" & 4"	4,036
Park	4"	539
Hamilton	2", 3", & 4"	865
S Garner St	2" & 4"	3,612

Service Lines Replaced: 8,321

Columbia owns and reflects in its property records and rate base a customer service line for each customer premise. Columbia's total customer service lines as of December 31, 2014 are 420,733. Due to state law, in the eastern portion of the Company's service territory, Columbia owns the entire service line, extending from the distribution main to the service site. In the western portion of Columbia's service territory, the customer owns the portion of the service line that lies within the customer's property, and the Company owns that portion of the service line that extends from the distribution main to the customer's property line. The count of service lines replaced stated above includes all of the Company service lines replaced, whether the full service line or the portion of the line linking the customer-owned service line to the distribution main. In addition, the Commission has authorized Columbia to replace, but not own, the customer-owned portion of services in the Western portion of its service territory, as part of the Company's cast iron and bare steel replacement program. The cost of those replacements are booked as part of the cost of main replacements.

Property Projected to be Repaired, Improved and Replaced during the Twelve Months Ended December 31, 2015:

Pipe: 640,000 feet projected

Service Lines: 7,000 - 9,000 projected

Meters: 2,000 – 4,000 projected

The list of projects below is a dynamic roster that is subject to modification based on emerging conditions. It will be supplemented throughout the calendar year to reflect the continued assessment of system conditions.

Columbia's capital prioritization process for replacement projects generally addresses the highest risks

identified in the Company's Distribution Integrity Management Plan and is designed to systematically eliminate those risks on a priority basis. Capital replacement projects are developed and prioritized based on the following top risks:

- External Corrosion on Bare Unprotected Steel Mains
- Pipe Weld Integrity on Coated Unprotected Steel Mains
- Bell Joint Integrity on Cast Iron Mains

It should be noted that other top risks, including External Corrosion on Bare Steel Unprotected Services and Incorrect Operations/Construction of Plastic Service Risers, are also addressed with capital, but are not developed into projects, per se. Rather, they are replaced once leaks are discovered via leak surveys or when the connecting main is replaced.

Capital replacement projects are prioritized by the Company's engineering team with input from the operations team. Prioritization is based on a number of factors, including type of risk, leak & operations history, pipe size & material, operating pressure, and population density. The engineering team uses Optimain DS®, a software solution, to help assess risk and prioritize capital replacement projects. The Company's process retains some fluidity in order to ensure that unforeseen higher risk projects that may be identified during the year may be addressed appropriately. Consequently, sometimes the list of Columbia's planned projects may be modified during the year or other, higher priority projects are added to the roster of projects for any given year. These modifications and additions account for differences between the projected annual replacement footage and the total of projects shown below. Additionally, mandatory replacements, non-reparable leakage and active and atmospheric corrosion continue to drive replacement of segments of pipe that will impact the ultimate timing of the completion of projects on the Plan.

CPA – 2015 Infrastructure Project Replacement Summary⁷

PROJECT NAME	PIPE SIZE	INSTALL FOOTAGE
D8542	6"	4,200
D1254	8"	4,725
Pennsylvania Ave	8"	3,000
D7007 Gate Nest	4", 8"	2,997
Grandview	2", 4", 6", 8"	2,360
South Mt Vernon	2", 4", 6"	4,050
Broadway (Meyersville)	2", 4", 6", 8"	1,977
SR 0088	2", 6"	1,313
Pennsylvania Ave (Gregg)	2"	3,000
Walnut	2", 6"	1,475
North	4", 6"	954
Vine	2", 4", 6", 8"	2,875
Broadway (Berlin)	2", 4"	893
West Main	4"	250
Ash Street	2", 4"	3,585
Pittsburgh St (N. Mt Vernon to Johnson)	6", 8"	836
Pittsburgh St (Enamel St to Fairview St)	6"	750
F Alley	2"	370
Wood St (California)	2", 4", 6"	5,377
East Main	6"	650
Wood St (Monongahela)	2"	802
8th Street	2", 4"	535
Fayette Street	8"	650
Yough River Crossing	8" St, 8" PI	2,700

⁷ Includes estimate of all pipe being replaced.

PROJECT NAME	PIPE SIZE	INSTALL FOOTAGE
Mulberry	2", 4"	1,270
D7194 - Warwick Mine	2, 6	3,460
New Stanton North	2, 4	7,800
Route 31	4"	2,700
Baileys Crossroads	2", 4"	1,000
Brownsville Area School Relocation	8"	590
Glencoe Avenue	4"	1,900
McLain Street	4"	340
Stowe Avenue	2", 4"	1,155
Bell Avenue	2", 4", 6"	2,750
Parkfield Road	4"	1,900
Mitchell Avenue	4"	2,030
Mansfield Avenue	2", 4"	2,050
Wylie Avenue	2"	1,800
Parker and Beverly	2"	1,000
Highgrove Drive	2", 4"	4,531
Hamilton Road	6"	450
Steubenville Pike	6"	1,320
Arlington (Sterling to Eleanor)	4"	1,222
McLaughlin Run Road MP	4"	1,150
McLaughlin Run Road HP	8"	1,140
McRoberts Road Valve	8", 20"	200
Old Clairton Road	6"	1,154
Sunnyfield Drive	4"	3,200
Sprucewood Drive	4"	390
Donati	6"	350

PROJECT NAME	PIPE SIZE	INSTALL FOOTAGE
Rennie Drive	4", 6"	2,010
Walnut Street	2"	150
Orchard Drive	2", 4", 8"	10,540
Southside Phase 1	2", 4"	4,755
Castle Shannon Boulevard	6", 8"	1,660
D584 (Deerfield Road)	2"	6,225
S. Main Street Extension	4"	3,600
Fawcett Church Road	2"	710
Ridgewood Drive	6"	900
Vista Valley Drive	2"	6,300
Western	2"	1,750
Wylie Avenue	2"	140
Bower Hill Road	2"	2,060
Industrial Park/Noblestown Rd	6"	2,880
Archer Street	6"	60
Country Club Road	6"	780
Becker Street	2"	795
101 Trenton Circle	2"	54
Elm Street	2", 4", 6"	9,291
Broad Street	2", 4", 6", 8"	26,620
Wylie Avenue	2", 8"	12,030
D1581 (USC to Hastings Mill)	12"	7,400
Battleridge	2", 4"	475
Library Road	n/a	n/a
Island	6"	208
Cedar	2", 6", 8"	965

PROJECT NAME	PIPE SIZE	INSTALL FOOTAGE
25 Holt St	2"	140
W College St	6"	690
Arnold St.	2"	330
Oak Rd	2"	1,520
Forest Road	2"	1,600
Gateway Ave	2", 4"	1,000
D-272 from Branch Rd and Edgewater	8"	1,800
Highland Ave	4"	2,953
Merriman Rd	6"	1,720
Norwood Ave	4", 6"	2,340
Johnson	4", 6"	3,027
Roosevelt Rd and Bradshaw Dr	2", 4"	2,880
7th Ave	2", 4", 8"	2,825
Amsler	4"	820
D-81 between Wexford Rd and Tierra Vista Dr	2", 6"	3,820
Winterburn	4"	750
High St off of Chapel Rd	2"	2,720
11th Ave from 7th St to Allegheny	4"	1,320
McMillen Ave	2"	2,000
Camp Meeting Rd bet Skymark Ln and Young Rd	2", 4"	2,600
6700 Church Ave	2"	300
9th Avenue	2", 4", 6"	2,160
Hoening Rd	2"	760
Fairlane between Careywood & Big Beaver	4"	2,080
Kenyon Avenue Replacement Project	2", 4"	4,120
Glenfield Rd, Ferry Rd Replacement	2"	2,780

PROJECT NAME	PIPE SIZE	INSTALL FOOTAGE
Thawmont Dr Replacement	2"	2,400
Cochran St between Nevin & Beaver	4", 6"	2,825
6th Avenue - Replacement Job	2"	2,000
Broad Street Between Kost/Mohawk	4"	1,700
5th St, Beaver	4"	850
40th St, Beaver Falls	2"	600
Lincoln Rd, Bradford Woods	2"	350
Elm Rd from 5th St To Wilson Ave	4"	3,800
D-1680 Bet Lacock Av and Locust Ln	10"	8,000
Franklin Ave	2"	400
Falls Ave Replacement Project	2", 4"	2,942
Furnace St	2", 10"	2,700
Rhodes Place Replacement & Uprate	4"	1,300
Court St at Ray St	2", 4"	750
Pearson St Between Fairview & Taylor	2", 4"	1,350
Montgomery Replacement Project	2", 4", 6"	2,150
Harrison St Replacement Project	4"	870
Blue Jay Portersville Rd	2", 4"	3,175
Vista Ln Replacement Project	2"	1,115
4th St Ellport Replacement Project	4"	1,200
Lundys Lane	8"	80
Hamilton St Replacement Project	4", 6"	2,000
Wurtemberg Rd Replacement Project	2", 4", 6"	5,285
D-22 At Countryview Road Replacement	2", 8"	10,400
Home St-New Castle	2"	660
Laurel Replacement Project	2", 4", 6"	3,078

PROJECT NAME	PIPE SIZE	INSTALL FOOTAGE
Mt Herman Church Rd At Mill Bridge	4"	1,080
Clearview @ Reynolds St/ N-C	2"	170
Palo Alto Dr (D-500) Replacement	4", 6"	2,400
Burns St at Scotland Lane New Castle	2", 4"	690
Sumner Av - New Castle	2"	800
McClelland	4"	1,200
D-1601 Phase IV	8", 12"	5,600
Avalon Park Betterment D-213	6"	1,300
Mt Pleasant Rd	6"	2,342
D-1009 Gottlieb - Street Improvement	2", 8"	3,000
Pine Twp Rd Widening	4", 6"	1,860
D-5242 Clintonville Replacement Project	4"	4,700
Palmer	2"	1,000
SR 208 and Dog Leg Rd Replacement	2", 4"	2,800
SR 208 @ Ron McHenry Replacement	4"	1,500
Popetown Road Replacement	2"	970
SR2011 Nickleville Road Replacement	2"	4,030
Knox AMRP Phase 1	2", 4"	9,625
D-22 Between SR 308 and Goff Rd	2", 8"	7,620
SR 66 Replacement Project	2", 6"	1,400
Carwick Road Replacement	2"	1,290
High St Replacement Project	2"	2,760
Pleasant/Bennett St Replacement Project	4", 8"	3,460
Bank St Area Replacement	4"	1,000
Wagner Ave Replacement	6"	1,000
E Main Replacement	2"	1,860

PROJECT NAME	PIPE SIZE	INSTALL FOOTAGE
Pleasant and Hillview Dr Replacement	2"	4,670
Bradley St Replacement	2"	350
Hickory St Area Replacement	2"	1,850
D-4227 Buena Vista Dr	2", 8"	11,000
Harbaugh St, Chestnut to Logan	6", 8"	330
Dean Rd, Warrendale Bakerstown to Dean	2"	3,920
Larry St Replacement	2", 4"	7,502
601-609 Wayne Ave	4"	160
Clinton St bet McCaslin and Lincoln	6"	2,000
N Carver St Area Replacement	2", 6", 8"	6,190
Park Forest	2", 4"	4,200
University	2"	2,086
Beaver	4"	940
Pike Alley	2"	720
Atherton St	2", 4", 6"	4,570
Church Rd Farm Tap Elim	2"	935
W Monroe St	2", 4"	3,655
Greenwood Rd	2", 4", 8"	5,185
W Market St	2", 4", 6", 8"	8,720
Lee St	2", 4"	1,535
E Market St / York City	2, 4	1,735
Locust St / Wrightsville	n/a	n/a
D1661 North York WHP	12	5,100
Strathcona	2	2,620
Pinehurst	2	3,099
S. Queen St (Revised)	2, 6	8,596

PROJECT NAME	PIPE SIZE	INSTALL FOOTAGE
Valley Road	2, 4, 6	7,680
Clover Lane	2	3,140
Vander & Boundary	2	500
East Queen Street	2	650
S. Howard St.	2	275
Paul St.	2	4,270
Locust St. (Hanover)	2, 4	4,104
Winter Ave. Glen Rock	2	1,420
Center St.	2, 4, 6	1,522
Carlisle St.	2, 4, 6	6,626
Mt. Rose Southern Bore	2, 8	2,500
Mt. Rose Ave. Western Replacement	6	2,235
Haines Rd.	8	2,075
Baltimore St.	6	543
E Middle St	2, 8	3,160
Zerfing Alley	2, 4	325
Hanover St Eastern Gettysburg Project	2, 8	4,886
Rampike Hill Rd	4	950
Seminary Ave	2	1,314
Fohl St	4	2,010
Linden Ave	4	1,500
Franklin St	2, 4	3,380
Seminary St. Mercersburg	2, 4	1,999
S Fayette St	2	1,315
Franklin Farm Ln	4	1,250
Greendale	2, 8	558

PROJECT NAME	PIPE SIZE	INSTALL FOOTAGE
Southern	8	5,000

Summary:

Since 2007, Columbia embarked on a long-term initiative to replace its aging infrastructure in its distribution system to ensure the provision of safe and reliable service throughout its territory in a manner that will optimize available capital and direct it to the most critical projects. This AAOP describes all eligible property repaired, improved and replaced in the immediately preceding 12-month period pursuant to the utility’s long-term infrastructure improvement plan and provides a detailed description of all the facilities Columbia plans to improve in the upcoming 12-month period. Columbia’s planning, capital allocation prioritization, and construction programs are dynamic and continually updated to deploy resources in such a way that the safety of our customers, our employees and the communities we serve remain our foremost consideration. As such, this plan provides a snapshot of Columbia’s proposed property to be repaired, Improved and replaced during the Twelve Months Ended December 31, 2015 based on the best available information at the time of this plan; however, throughout the year, Columbia will continue to optimize this plan by adding or modifying projects to ensure continued consistency with the goals of Columbia’s LTIP and its Distribution Integrity Management Plan.