BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Columbia Gas of Ohio, Inc. for Authority to Amend its Filed Tariffs to Increase the Rates and Charges for Gas Services and Related Matters.	)))))	Case No. 21-637-GA-AIR
In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval of an Alternative Form of Regulation.	)))	Case No. 21-638-GA-ALT
In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval of a Demand Side Management Program for its Residential and Commercial Customers.	)))))	Case No. 21-639-GA-UNC
In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval to Change Accounting Methods.	)))	Case No. 21-640-GA-AAM

APPLICATION FOR AUTHORITY TO INCREASE RATES, FOR APPROVAL OF AN ALTERNATIVE RATE PLAN, FOR APPROVAL OF A DEMAND SIDE MANAGEMENT PROGRAM, AND FOR APPROVAL TO CHANGE ACCOUNTING METHODS

Applicant:

Columbia Gas of Ohio, Inc.
290 W. Nationwide Blvd.
Columbus, Ohio 43215

Company Official to Contact Regarding Rate Case Matters:

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Proposed Test Year: Calendar Year 2021

Proposed Date Certain: March 31, 2021

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June 30, 2021

Verification

STATE OF OHIO)
) ss:
FRANKLIN COUNTY)

Vincent Parisi, being first duly cautioned and sworn, deposes and says that he is the President of Columbia Gas of Ohio, Inc.; that the statements and schedules submitted herewith contain proposed revisions to existing schedule sheets and establish the facts and grounds upon which this Application is based; and that the data and facts set forth herein are true to the best of his knowledge and belief.

Vincent Parisi
President

Sworn to before me, and subscribed in my presence, this 28th day of June, 2021.

Notary Public

SEAL

NOTARIAL SEAL
STATE OF OHIO

Melissa L. Thompson, Attorney At Law
NOTARY PUBLIC - STATE OF OHIO
My commission has no expiration date
Sec. 147.03 R.C.

Verification

STATE OF INDIANA)
) ss:
LAKE COUNTY)

Randy Hulen, being first duly cautioned and sworn, deposes and says that he is the Treasurer and Vice President, Investor Relations of Columbia Gas of Ohio, Inc.; that the statements and schedules submitted herewith contain proposed revisions to existing schedule sheets and establish the facts and grounds upon which this Application is based; and that the data and facts set forth herein are true to the best of his knowledge and belief.

Randy Hulen
Vice President, Investor Relations and Treasurer

Sworn to before me, and subscribed in my presence, this 3rd day of June, 2021.

Notary Public

SEAL

DANA LLEWELLYN
Seal
Notary Public – State of Indiana
Lake County
My Commission Expires Mar 7, 2025

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Columbia Gas of Ohio, Inc. for Authority to Amend its Filed Tariffs to Increase the Rates and Charges for Gas Services and Related Matters.	)))))	Case No. 21-637-GA-AIR
In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval to Change Accounting Methods.	)))	Case No. 21-640-GA-AAM

APPLICATION OF COLUMBIA GAS OF OHIO, INC. FOR AUTHORITY TO INCREASE RATES AND TO CHANGE ACCOUNTING METHODS

1. Introduction

Columbia Gas of Ohio, Inc. ("Columbia") is an Ohio corporation with its principal place of business at 290 W. Nationwide Blvd., Columbus, Ohio 43215. It is "engaged in the business of supplying natural gas for lighting, power, or heating purposes to consumers within this state" and, consequently, is a "natural gas company" pursuant to R.C. 4905.03(E) and a "public utility" pursuant to R.C. 4905.02(A).

In the Stipulation and Recommendation filed to resolve Columbia's alternative rate plan application in Case No. 17-2202-GA-ALT, which the Public Utilities Commission of Ohio ("Commission") approved in November 2018, Columbia agreed to "file an application to adjust its base rates with a test period of calendar year 2021 and a date certain that is prior to the filing date of that rate case[,] unless otherwise ordered by the Commission."[1]

[1] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval of an Alternative Form of Regulation to Establish a Capital Expenditure Program Rider Mechanism*, Case No. 17-2202-GA-ALT, Opinion and Order, at 23 (Nov. 28, 2018).

Pursuant to that approved Stipulation and R.C. 4909.18, Columbia now submits this Application to change its distribution rates, modify its rate class structure, make various other changes to its tariffs and accounting methods, recover approved cost deferrals since the last rate case, and adopt new riders, all of which are further described in this Application and the attached schedules. This Application applies to every customer that Columbia currently serves, and every customer to which it may offer service in the future, in the counties and municipalities listed in PFN Exhibits 1 and 2 of the Notice of Intent filed in these dockets on May 28, 2021.

Columbia notified the mayor and legislative authority of each municipality Columbia serves that Columbia intended to file this Application and of the rates Columbia proposed, as required by R.C. 4909.43(B). Columbia mailed those notices on May 28, 2021. Columbia's notice to the municipalities is attached as PFN Exhibit 5 to its Notice of Intent to File an Application to Increase Rates.

As proposed in Columbia's Motion to Establish Test Period and Date Certain and for Waivers of Standard Filing Requirements, filed May 28, 2021, Columbia's Application is based upon a test year beginning January 1, 2021, and ending December 31, 2021, and a date certain of March 31, 2021. This Application includes and is supported by the applicable schedules and other submissions required by the Commission's Standard Filing Requirements (SFRs) in Ohio Adm.Code 4901-7-01, Appendix A, with the exception of those schedules and submissions for which Columbia has requested a waiver.[2] All testimony supporting the Application will be filed within fourteen days of the filing of this Application. An index identifying the location of major issues covered by each witness supporting Columbia's Application is attached as Exhibit A.

In conjunction with this Application for an increase in rates, Columbia is simultaneously filing an Application for approval of an alternative rate plan and an application to continue its Demand Side Management ("DSM") Program, all of which combined Columbia will refer to as its "Application." To aid the reader, each of these Applications has a separate header and separate supporting exhibits and appendices. The Schedules filed in support of this Application for an increase in rates, and the supplemental information which Columbia is providing to Staff

[2] Columbia is withdrawing Section 2.2.14 of its Motion for Waivers of Standard Filing Requirements, and is providing a clean copy of its current tariff schedules as Schedule E-2 in support of this Application.

at the time of the filing and will provide at the time of the field audit, also support the Application for approval of an alternative rate plan.

2. Columbia's Proposed Rates and Revenue Requirement

Columbia files this Application to recognize in rate base its substantial investment in pipelines, meters, and other jurisdictional assets since its last rate case in 2008, and to generate sufficient revenues for Columbia to pay its operating expenses, service its debt, provide an adequate rate of return on its property used and useful in the rendition of gas service to its customers, and continue to ensure the safe, reliable natural gas distribution and transportation service that customers expect and demand. The increase in base rates resulting from inclusion of investment since the last base rate case is mostly offset by declines in Columbia's Infrastructure Replacement Program ("IRP") and Capital Expenditure Program ("CEP") rider rates.

Columbia's current base rates, authorized by the Commission in Case Nos. 08-72-GA-AIR, *et al.*, are based on a test year beginning October 1, 2007, and ending September 30, 2008, and a date certain of December 31, 2007. The current rates are projected to provide a 2.94% rate of return for the test period, as shown on Schedule A-1. This is substantially below the 8.12% rate of return found reasonable for Columbia by the Commission in Columbia's last base rate proceeding. Moreover, the schedules supporting this Application indicate that, based upon three months of actual data and nine months of estimated data, Columbia has a revenue deficiency of $221.4 million. Accordingly, Columbia concludes that the rates presently being charged and collected for gas service in Columbia's service areas are unjust, unreasonable, and insufficient to yield a reasonable compensation for the service, giving due regard to the service rendered and to all of Columbia's property actually used and useful in furnishing gas service to Columbia's customers. The rate of return is, and will be, unjust, unreasonable, and insufficient to yield Columbia reasonable compensation for the gas service rendered.

The new rates set forth in the proposed tariff schedules (*see* Schedule E-1, Proposed Original Sheet 1c) would, during the twelve months ending December 31, 2021, as adjusted, provide Columbia the opportunity to earn a rate of return on Columbia's property used and useful of 7.85%. Columbia believes this rate of return is fair and is justified, based upon the capital structure indicated in the exhibits filed with this Application and the company's weighted average cost of capital. Such proposed rates are just and reasonable for the services rendered, and to be rendered, and will provide a fair rate of return on Columbia's property used and useful in the rendition of gas service. The proposed rates would, if approved, represent a 27.07% increase to total operating revenues.

3. Proposed Changes to the Tariff

In addition to the rate changes described above, Columbia is proposing several other revisions to its Rules and Regulations Governing the Distribution and Sale of Gas. (*See* Schedules E-2.1 and E-3.) The proposed revisions include numerous minor formatting and stylistic changes, reorganizations, and typographical error corrections. Additionally, for ease of use, Columbia is proposing to add a rate summary sheet (Proposed Original Sheet 1c) and a new set of definitions for Sections I through IV of the tariff (Proposed Original Sheet 1d). Columbia is also proposing a small number of changes to its rate structure, including:

- Increasing the volumetric breakpoint between its Small General Service (SGS) / Small General Transportation Service (SGTS) / Full Requirements Small General Transportation Service (FRSGTS) rate classes, and its General Service (GS) / General Transportation Service (GTS) / Full Requirements General Transportation Service (FRGTS) rate classes, from 300 Mcf per year to 600 Mcf per year, to minimize customer switching between rate classes;

- Removing the seasonal load factor requirement for the Large General Service (LGS) / Large General Transportation Service (LGTS) / Full Requirements Large General Transportation Service (FRLGTS) rate classes (*i.e.*, the requirement that 50% of the customer's annual consumption occur between April and October) to increase the number of customers qualifying for service under those rate classes;

- Incorporating the IRP and CEP Riders into base rates;

- Establishing a Monthly Delivery Charge for the Full Requirements Cooperative Transportation Service (FRCTS) rate class;

- Adding new LGS/LGTS/FRLGTS Schools Services, for primary and secondary school customer accounts consuming at least 18,000 Mcf per year; and

- Eliminating the Mainline Delivery Charge in the LGTS tariff.

Further, Columbia is proposing two new riders in this Application. The first, a Federal/State Tax Reform Rider, is a placeholder rider to recover charges or provide credits due to any federal or state tax reform that may occur after the filing of this Application. The second, a Carbon Reduction Rider, is an opt-in rider that will allow customers in the SGS/SGTS/FRSGTS, GS/GTS/FRGTS, and LGS/LGTS/FRLGTS rate classes to pay an additional $5.00 per account per month to fund the purchase of carbon offsets. (A third proposed rider, the Federally Mandated Investment (FMI) Rider, is discussed in the alternative rate plan section of this Application.)

4. New Request for Deferral Authority – Picarro

As Columbia reported in its application in Case No. 20-1356-GA-WVR, Columbia has engaged Picarro, Inc. ("Picarro") to pilot Picarro's mobile leak detection equipment on a preliminary basis. Traditional leakage inspection methods involve a worker using a gas detector walking over the top of mains and service lines. Although this is the industry standard for leakage inspection, multiple factors can affect its effectiveness, including the soil's moisture content and density. Picarro is a new leakage inspection technology that enables Columbia to perform leakage inspection surveys without having to walk over the top of its facilities. The Picarro technology is installed on a vehicle and can have a range of view of up to 400 feet.

To use the Picarro mobile leak detection equipment, Picarro must drive the designated survey area at least three separate drives (six passes), which is typically done over a minimum of two separate nights (depending on the weather) to ensure the best probability of leak detection. After the final drive, Columbia runs an analytics report the following business day. During the analytics, each methane plume indication is risk ranked with Picarro's proprietary algorithm based on amplitude, concentration, ethane to methane ratio, disposition, and disposition confidence percentage. Picarro's analytics likewise assign a risk score for each indication and group them into risk ranking groups, numbered 1 through 4. Risk ranking Group 1 is defined as the top 10 percentile of highest-risk leaks. Groups 2, 3, and 4 are the top 25, top 50, and bottom 50 percentile, respectively.

Columbia investigates all methane plumes with an amplitude of 5.0 or greater within the same business day. Columbia then investigates all methane plumes in risk ranking Group 1 within two business days. After investigating all risk ranking Group 1 plumes, Columbia continues to investigate Groups 2, 3, and 4 within five business days, pending inclement weather, not to exceed ten calendar days. After grading the leaks in each Group, Columbia remediates all graded leaks in the timeframes required by Ohio Adm.Code 4901:1-16-04(I), including dispatching its crews immediately for any hazardous (e.g., Grade 1) leaks. Columbia will make necessary repairs for any leaks found.

Columbia is currently piloting the Picarro equipment to conduct supplemental leak surveys of Accelerated Mains Replacement Program ("AMRP") projects completed within the last two years, newly installed mains, and quality assurance of previously surveyed traditional leakage compliance surveys. Beginning in July 2021, Columbia will expand the use of Picarro to perform traditional leakage survey methods and Picarro mobile leak detection on survey routes simultaneously. Columbia will then analyze the additional leaks detected using Picarro and the types of pipe (bare steel, cast iron, plastic, etc.) for each leak not detected using traditional methods. This will provide a model for estimating the additional costs associated with leakage inspection and repair utilizing Picarro and how much additional leakage will be detected for each type of main. Columbia anticipates that its pilot of Picarro's mobile leak detection equipment will last until July 31, 2022.

Columbia, therefore, requests accounting authority to defer its incremental O&M expenses for the Picarro pilot and future company use of the Picarro equipment to conduct leak surveys and repair leaks discovered that are not recovered through base rates.

5. Recovery of Existing Deferrals

5.1. Deferred Depreciation/Property Taxes Recorded in 2008

In June 1994, in Case No. 94-987-GA-AIR, Columbia filed an application for an increase in rates. A joint stipulation and recommendation signed by 13 parties was filed on the same day as the application. The Commission adopted the stipulation in September 1994.[3] Thereafter, the signatories to the stipulation proposed amendments to the 1994 stipulation in 1996, 1997, and 1999, which the Commission approved, and on October 9, 2003.[4]

Paragraph 26 of the Fourth Amendment to Joint Stipulation stated that Columbia would be "authorized to capitalize post-in-service carrying charges ('PISCC') on all investments as detailed in Attachment E (PISCC Application Schedule) * * * and defer related depreciation and property taxes [from November 1, 2004] through December 31, 2010 or until the effective date of base rates that

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[3] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Authority to Amend Filed Tariffs to Increase the Rates and Charges for Gas Service*, Case No. 94-987-GA-AIR ("*1994 Rate Case*"), Opinion and Order (Sept. 29, 1994).

[4] *1994 Rate Case*, Fourth Amendment to Joint Stipulation and Recommendation in Case No. 94-987-GA-AIR (Oct. 9, 2003).

reflect a return on the cost of such investments." In March 2004, the Commission approved Section 26 of the amended stipulation, with modifications.[5] The Commission approved the PISCC and deferrals as provided in Section 26, but modified the Stipulation to limit such deferrals to the time period from November 1, 2004 to December 31, 2007.[6] On rehearing, the Commission extended the PISCC and related deferrals through November 1, 2008.[7] In its June 9, 2004 Entry on Rehearing, the Commission rejected the Office of the Ohio Consumers' Counsel's challenge to the Commission's treatment of deferred depreciation and property taxes.[8]

Columbia now seeks to recover the balance of deferred depreciation and property tax that was deferred after December 2007 (and thus not recovered in Columbia's last base rate case) and not included in the IRP and CEP recovery mechanisms. The proposed amortization and recovery of these deferred amounts will be discussed in the testimony of Company witness Jeffery Gore.

5.2. NiFiT

In December 2012, Columbia filed an application requesting authority to create a regulatory asset and accounting deferral for project management, training, and data conversion costs that Columbia began incurring in 2011 relating to the NiFiT Project launched by Columbia's parent company, NiSource.[9] The NiFiT program was a NiSource initiative to adopt a uniform, company-wide financial system that would permit the use of a common general ledger and chart of accounts for all NiSource companies, including Columbia. The NiFiT initiative focused on the replacement of four separate general ledger software packages, three of which were no longer supported by their respective vendors, including the financial software package used by Columbia. The initiative included installation of new computer software across NiSource to enable the adoption of common processes and financial systems.

Process improvements achieved through NiFiT include enhanced intercompany billing reports; streamlined ability to generate Generally Accepted Accounting Principles ("GAAP") financial statements, Federal Income Tax financial

[5] *1994 Rate Case*, Entry, at 17 (March 11, 2004).

[6] *Id.*

[7] *1994 Rate Case*, Entry on Rehearing at 7 (May 5, 2004).

[8] *1994 Rate Case*, Entry on Rehearing at 9 (June 9, 2004).

[9] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval to Change Accounting Methods*, Case No. 12-3224-GA-AAM, Application (Dec. 17, 2012).

statements; required regulatory formatted financial statements; automated approval processes with audit trails; and improved account validation that would reduce the amount of manual intervention required. Additional benefits included an increase in Sarbanes-Oxley controls automation; easier access to information analyses on project costs for internal managers across all companies; automation of NCSC's allocation; and billing of charges to the NiSource companies for services provided by NCSC directly, as well as third-party vendors.

NiFiT project expenditures were charged across NiSource operating companies, with approximately 67% allocated to capital accounts and the remaining 33% related to one-time startup operation and maintenance expenses. NiFiT Project expenditures were to be separately identified by accounting charge code and billed directly to the NiSource operating company incurring these expenditures. Expenditures related to the design and implementation of the NiFiT Project not directly attributed to any individual company would be allocated to the operating companies using a combination of NiSource Corporate Services Company ("NCSC") allocation billing methods previously approved by the Securities and Exchange Commission. Columbia's allocation of the one-time startup operation and maintenance expenditures associated with the NiFiT Project were expected to be approximately $4.5 million. Columbia thus requested the authority to defer approximately $4.5 million for the one-time expenditures required by the NiFiT project, with the eventual recovery of these costs to be determined in Columbia's next base rate proceeding. Columbia stated that it would record these expenses on its balance sheet in Account 182, and that the expenses would remain in this account until a determination was made as to their recovery. In October 2013, the Commission approved the Application.[10]

At this time, Columbia seeks to amortize the accumulated NiFiT expense deferral and recover it through base rates. The total deferred costs under the NiFiT Project for which Columbia seeks Commission approval to recover in this proceeding are approximately $6.544 million. Columbia proposes to amortize that balance over five years, resulting in an annual amortization of approximately $1.309 million.

[10] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval to Change Accounting Methods*, Case No. 12-3224-GA-AAM, Finding and Order (October 30, 2013).

5.3. Columbia Pension & Other Postretirement Employee Benefits (OPEB)

In 2009, Columbia filed an application requesting authority to revise its accounting treatment for pension costs and other post-retirement benefits other than pension costs ("OPEB").[11] As Columbia explained in its application, like many other companies, Columbia provided defined contribution plans for its employees and had continuing obligations under noncontributory defined benefit retirement plans, with benefits under the latter plans reflecting the employees' compensation, years of service, and age at retirement. Additionally, health care and life insurance benefits were provided for certain retired employees. Pension costs comprised pension expense for Qualified and Non-Qualified Plans and Retirement Income Plan - Amortization. OPEB costs comprised Medical Expense, Group Life Insurance, and Medical Expense – Amortization.

Pension and OPEB costs are calculated pursuant to SFAS No. 87, "Employers' Accounting for Pensions" and SFAS No. 106, "Employers' Accounting for Retirement Benefits Other Than Pensions." Both SFAS No. 87 and No. 106 require that these costs be accrued and charged to operations over the time employees perform services. The net periodic benefit costs are calculated annually by an actuary for NiSource. Per the Commission's February 25, 1993 Finding and Order in Case No. 92-1751-AU-COI approving the recovery of these costs on an accrual basis, the Company established trust funds to set aside the cash collected for the payment of retirees' health care costs. As Columbia noted in its 2009 Application, its Pension and OPEB expense can vary significantly over time. The primary reason for these variances is that Pension and OPEB costs are volatile, due to the return on plan assets and discount rates – factors beyond Columbia's control. The market value of Columbia's Pension and OPEB plan assets is subject to significant changes caused by fluctuations in long-term interest rates and in trust asset returns available in the capital markets.

The volatility of expenses made it nearly impossible for Columbia or the Commission to determine a representative level of Pension and OPEB expense for inclusion in base rates, potentially resulting in a significant impact on earnings and/or rates charged to customers. Accordingly, Columbia requested authority to revise its accounting procedures, effective January 1, 2009, to provide for the deferral of the difference between annual Pension and OPEB expense calculated

[11] *In the Matter of the Application of Columbia Gas of Ohio, Inc., for Approval to Change Accounting Methods*, Case No. 09-371-GA-AAM, Application (April 30, 2009).

through SFAS No. 87 and No. 106 and the annual Pension and OPEB expense included in base rates. Columbia sought to defer only those amounts attributable to operation and maintenance expense, and to recognize only those amounts as a regulatory asset or liability pursuant to SFAS No. 71.

The Commission concluded that Columbia's "incurrence of pension and OPEB expenses * * * is a necessary business cost" and authorized Columbia to modify its accounting procedures to defer annual pension and OPEB costs incremental to amounts included in base rates.[12] The Commission also directed Columbia to file annual updates on the status of the deferred balances, with Pension and OPEB data determined by Columbia's actuary, and with the amounts attributable to Columbia's operation and maintenance expense. Columbia has filed the annual reports required by the Commission in Case No. 09-371-GA-AAM from calendar years 2009 through 2020.

At this time, Columbia seeks to recover these prudent and necessary expenses through base rates. The unamortized balance of the Pension and OPEB expense deferral as of March 31, 2021, is approximately $18.436 million. Columbia proposes to amortize that balance over five years, for an annual amortization of approximately $3.687 million.

Pursuant to the deferral authority granted in Case No. 09-371-GA-AAM, Columbia will continue to defer annual pension costs that are incremental to amounts included in base rates. However, because Columbia is recommending a $0 adjustment for OPEB medical, Columbia proposes to discontinue deferring OPEB costs that are incremental to amounts included in base rates.

5.4. NiSource Corporate Services OPEB

In March 2012, Columbia filed an Application with the Commission seeking authority to establish a regulatory asset related to a change in expense recognition for Other Post-Employment Benefits other than Pension ("OPEB") costs included in the management services provided by NCSC.[13] In its Application, Columbia noted that NCSC provides a range of services to the individual operating companies within NiSource, including corporate, administrative, and technical support services. NCSC renders all services performed under a Service Agreement

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[12] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval to Change Accounting Methods*, Case No. 09-371-GA-AAM, Entry (July 8, 2009).

[13] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval to Change Accounting Methods*, Case No. 12-1135-GA-AAM, Application (March 30, 2012).

with the affiliates at cost, including overheads and interest charges for financing. And like many other companies, NCSC provides health care and life insurance benefits for certain retired employees, including those of NCSC. OPEB costs are primarily composed of retiree medical expense and retiree group life insurance.

In 1991, Columbia and NCSC adopted SFAS 106 (codified in ASC 715), "Accounting for Employee Postretirement Benefits other than Pensions." Both companies recorded a liability reflecting the expected future obligation for OPEB cost and recognized the offset as a regulatory asset.

Columbia continued to defer the difference between claims paid and the SFAS 106 accrual expense until Columbia's 1994 rate case, when the rate treatment for Columbia OPEB costs was addressed in a Joint Settlement approved by the Commission (Case No. 94-987-GA-AIR). As a result, Columbia recognized in its cost of service the accrual based Columbia expense level and began amortizing the regulatory asset costs on its books. And Columbia began funding an OPEB trust to set aside the dollars collected for future retiree costs. Thus, Columbia changed its accounting practices to recognize OPEB costs on an accrual basis.

NCSC continued to defer the difference between OPEB claims paid and the SFAS 106 accrual expense. As of December 31, 2010, NCSC had continued to bill affiliates for OPEB claims paid as part of the management services fee. Therefore, the costs included in the Columbia management services charges in the 1994 rate case and subsequent rate case activity reflected NSCS OPEB costs on a cash basis.

Through a review of GAAP and FERC guidance, as well as consultations with its auditors, NCSC determined that it could no longer continue to carry the deferral of the difference between OPEB claims paid and SFAS 106 accruals as an asset on its balance sheet. So, NCSC began recording and billing its affiliates' retiree medical and life insurance costs on an SFAS 106 accrual basis beginning in 2011. And the December 31, 2010 NCSC regulatory asset balance of $9,883,242 was billed by NCSC to its subsidiaries, including Columbia, in 2011.

In addition to changing the expense recognition procedure, NCSC implemented a change to fund an OPEB trust for the accrual related costs collected in advance of the need to pay retiree costs in a manner similar to Columbia's procedures. The $9,883,242 billed to the subsidiaries was funded into an OPEB trust in 2011. The funding of the annual NCSC SFAS 106 accrual accounts began in January 2012.

Columbia was billed a total of $2,315,919 for its allocated share of the NCSC regulatory asset. Columbia capitalized $142,321 of this billing, reflecting the fact that a portion of the NCSC management service charges were allocated to capital projects. The remaining $2,173,598 was recorded as a regulatory asset pending the Commission's ruling on the Application in Case No. 12-1135-GA-AAM. In that case, Columbia requested authority from the Commission to defer $2,173,598 for the one-time charge generated by the NCSC accounting procedure change, with the ultimate recovery to be determined in Columbia's next base rate proceeding.

In July 2012, the Commission held that Columbia's incurrence of OPEB expenses in compliance with SFAS 106 was a necessary business cost and granted Columbia's Application, authorizing Columbia to defer $2,173,598 for the one-time charge generated by the NCSC accounting procedure change for OPEB expenses, with the deferred balances not to accrue carrying charges.[14] At this time, Columbia seeks to recover these prudent and necessary expenses through base rates. The unamortized balance of the NCSC OPEB expense deferral as of March 31, 2021, is approximately $2.174 million. Columbia proposes to amortize that balance over five years, for an annual amortization of approximately $0.435 million.

5.5. Environmental Remediation

In May 2008, Columbia filed an application requesting authority to defer, on its books, environmental investigation and remediation costs in those situations where Columbia no longer owns the site in question, or where the site owned is no longer used and useful in the rendition of service. Columbia also requested authority to recover carrying charges on the deferred balances.

Most of these environmental cleanup costs are related to former manufactured gas plant sites. Manufactured gas plants were operated in Ohio from approximately 1850 through 1950 in order to produce commercial grade gas from the combustion of coal, oil, and other fossil fuels. While these manufactured gas plants no longer exist, the remains of the subsurface structures and associated residuals such as coal tar, scrubber wastes, chemicals, and tanks may remain under ground.

Pursuant to Ohio Adm.Code 3745-300-1 through 3754-300-15 and the federal Comprehensive Environmental Response Compensation and Liability Act ("CERCLA" or more commonly "Superfund"), these environmental hazards should be removed in accordance with applicable state and federal standards or

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[14] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval to Change Accounting Methods*, Case No. 12-1135-GA-AAM, Entry (July 18, 2012).

guidelines. As the generator of the wastes and the owner of the property at the time of disposal (or its corporate successor), Columbia is identified by Ohio Adm.Code 3745-300-1 and 3754-300-15 and/or CERCLA as a party responsible for removing the environmental and/or public health hazard.

As Columbia noted in its 2008 Application, Columbia's investigation and remediation of former manufactured gas plant sites typically takes four to seven years to complete and often costs millions of dollars per site. However, some sites can take much longer to remediate, particularly sites that Columbia does not currently own.

In Case No. 08-606-GA-AAM, the Commission approved Columbia's request to defer its environmental investigation and remediation costs, finding that these costs were necessary business costs incurred by Columbia in compliance with state and federal rules and regulations.[15] The Commission limited the deferral authority to costs in excess of $25,000 per site and required Columbia to separately identity all deferred costs in a sub-account of Account 182, Other Regulatory Costs. The Commission also approved Columbia's request to accrue carrying charges on all deferred amounts between the dates the expenditures were made and the date recovery commences. The carrying charge rate is determined annually based on Columbia's embedded debt-only interest rate, is exclusive of the equity component, and is not compounded.

The Commission directed Columbia to file annual deferral cost updates that include costs incurred in the prior 12-month period and the amount deferred to date. Columbia filed those updates in Case No. 08-606-GA-AAM for calendar years 2008 through 2020. The unamortized balance of the environmental remediation expense deferral as of March 31, 2021, is approximately $11.288 million.[16] Columbia proposes to amortize that balance over 5 years, for an annual amortization of approximately $2.258 million. Columbia plans to present testimony from

[15] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Authority to Defer Environmental Investigation and Remediation Costs*, Case No. 08-606-GA-AAM, Entry (Sept. 24, 2008).

[16] This deferral amount does not include $4,493,618 in environmental remediation costs at a manufactured gas plant site (Toledo I Land). As supported by Columbia witnesses Marc Okin and Jeffery Gore, Columbia capitalized Toledo I Land's environmental remediation costs for that site pursuant to the Commission's August 5, 1999 Entry in *In the Matter of the Application of Columbia Gas of Ohio, Inc., for Authority to Modify Its Accounting Procedures to Provide for Capitalization of Environmental Cleanup Charges*, Case No. 99-195-GA-AAM.

Marc Okin, the Director of the Remediation Department for NCSC, to support recovery of the environmental remediation expense deferral. Columbia also plans to continue deferring its environmental investigation and remediation costs after this rate case, pursuant to the authority granted to it in Case No. 08-606-GA-AAM.

5.6. Pipeline Safety Program

In December 2009, the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration ("PHMSA") amended the Federal Pipeline Safety Regulations (49 CFR Part 192) to include a new Subpart P, Gas Pipeline Integrity Management. This subpart requires operators of gas distribution pipelines to develop and implement a gas Distribution Integrity Management Program ("DIMP") that includes a written integrity management plan. It requires operators to identify risks to their pipelines where an incident could cause serious consequences and focus priority attention in those areas. It also requires operators to implement a program to accelerate risk reduction on its system.

Pursuant to Subpart P, Columbia developed its Pipeline Safety Program ("PSP") to further improve the safety of its distribution system. The PSP contains four initiatives designed to target specific threats to Columbia's system:

(1) <u>Cross Bore Safety Initiative</u>: Cross bores are defined as the intersection of one underground utility or structure by a second underground utility or structure that compromises the structural integrity of the underground utility and or the underground structure. The Cross Bore Safety Initiative systematically identifies, investigates, and remediates potentially dangerous cross bores on Columbia's system. Columbia also develops and distributes communication and education materials that discuss the risks associated with cross bores to be used in Columbia's service areas.

(2) <u>Damage Prevention Technology Initiative</u>: The Damage Prevention Technology Initiative gathers the GPS location of Columbia's mains, service lines, and curb valves, and engages in damage prevention activities designed to reduce system risks associated with excavation damage. The Damage Prevention Technology Initiative targets gaps in, and improves the accuracy of, Columbia's infrastructure records and uses a risk assessment tool to analyze, prioritize, and strategize responses to 811 Call Before You Dig locates.

(3) <u>Advanced Workforce Training Initiative</u>: The Advanced Workforce Training Initiative provided for the development of a new training center that

features classroom training, technology labs, and an outside gas simulation facility. The new training center capitalizes on modern technologies and training approaches, including controlled gas leak simulations, to prepare gas operations employees for changing job requirements. This program also developed a training curriculum that incorporates these new training approaches and provides the performance support materials employees need to properly execute newly acquired skills once released from training.

(4) Enhanced Public Awareness Initiative: The Enhanced Public Awareness Initiative provides increased funding to engage a third-party marketing firm, Fahlgren Mortine, to prepare a comprehensive pipeline safety public campaign to the general public, construction contractors, first responders, and municipalities. The primary focus of the Initiative is third-party excavation damage, and the smell and tell messaging of natural gas identification and safety.

Each of these initiatives is described in more detail in Attachment A to Columbia's application to establish the PSP deferral in Case No. 14-1615-GA-AAM.

In that case, the Commission approved Columbia's application to establish a regulatory asset to defer up to $15 million annually to increase customer safety through the PSP, with carrying charges based on Columbia's embedded debt-only interest rate.[17] For the Cross Bore Safety Initiative, the Commission directed Columbia to "research its records and use its experience to develop a risk-based approach to determine when to inspect sewer lines * * * ." It also directed Columbia to develop specific performance measures and establish baseline performance criteria to track risk reduction for all four Initiatives.[18]

Moreover, the Commission required Columbia to file an annual report for its PSP by June 1 each year. Columbia's annual report must include an audit report prepared by Columbia's external auditor summarizing its findings with respect to the accuracy of Columbia's accounting for PSP-related expenditures. The Commission also directed Staff to conduct an annual review of reported program expenditures and file a Staff Report no later than 90 days after the annual report.

[17] *In the Matter of the Application of Columbia Gas of Ohio, Inc., for Approval to Change Accounting Methods*, Case No. 14-1615-GA-AAM, Finding and Order at 19 (Dec. 17, 2014).
[18] *Id.* at 17-19.

In Case No. 16-552-GA-AAM, the Commission authorized Columbia to begin deferring up to $25 million annually in calendar year 2016.[19] This incremental $10 million of deferral authority has a fixed 3% interest rate per annum for carrying costs and solely funds Columbia's Damage Prevention Technology Initiative through December 31, 2023. After that date, Columbia's deferral authority is currently set to revert to $15 million annually.

Columbia filed the annual reports required by the Commission in Case No. 14-1615-GA-AAM for Calendar Years 2015 through 2020. Copies of Columbia's PSP Programmatic Reviews for those years are attached to this Application as Exhibit B. These Programmatic Reviews demonstrate that the costs of implementing the PSP were prudent and necessary business expenses incurred by Columbia to comply with PHMSA's regulations and enhance safety throughout the communities Columbia serves.

At this time, Columbia seeks to reduce the approved regulatory asset and charge the applicable expense account to recover these prudent and necessary expenses through base rates. As shown on Schedule C-3.26, the unamortized balance of the PSP expense deferral as of March 31, 2021, equaled approximately $149.383 million. Columbia proposes to amortize this balance over a period of ten years, for an annual amortization expense of $14.938 million. Under the stipulation approved in Case No. 16-552-GA-AAM, Columbia's request to recover these deferred expenditures is "limited to the recovery of the deferred asset reflected on its books with no return on the asset being provided through rate base recognition."[20] Columbia also proposes to adjust its test-year expenses by approximately $25.709 million to provide cost recovery for the PSP's ongoing operations and maintenance (O&M) expenses. This additional PSP funding through base rates will cover annual PSP O&M expense, PSP public awareness expenses, and PSP technical training expenses.

5.7. COVID-19

In March 2020, the governor signed Executive Order 2020-01D declaring a state of emergency in Ohio resulting from the COVID-19 pandemic. Later that month, the Commission initiated Case No. 20-591-AU-UNC and directed all utility companies in the state to review their disconnection procedures in light of the state

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[19] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval to Change Accounting Methods Associated with its Pipeline Safety Program*, Case No. 16-552-GA-AAM, Opinion and Order (Aug. 26, 2016).

[20] *Id.* at 3.

of emergency. On March 18, 2020, in Case No. 20-637-GA-UNC, Columbia filed a motion to suspend certain provisions of the Ohio Administrative Code and corresponding provisions of its tariff to avoid otherwise applicable disconnection or reconnection requirements that could impose a service continuity hardship on customers. By Finding and Order issued in that case on May 20, 2020, the Commission directed Columbia to track the costs associated with the emergency in a separate FERC account, as well as to track any costs that Columbia avoids due to the emergency in the event that Columbia subsequently sought deferral authority or requested recovery of expenses.

In May 2020, in Case No. 20-1104-GA-AAM, Columbia filed an Application seeking authority to establish a regulatory asset and defer the expenditures incurred and revenues lost as a result of the COVID-19 emergency. Costs incurred and expected to be incurred as a result of the COVID-19 emergency included, but were not limited to: (1) IT-related modifications for PIPP eligibility; (2) incremental operational costs to protect the health and safety of employees and customers; (3) special cleaning and personal protective equipment costs; and (4) increased expenses related to resuming, and catching up to, work or other activities. Lost revenues incurred and expected to be incurred as a result of the COVID-19 emergency included, but were not limited to: (1) foregone revenue from late payment fees; and (2) bad debt expense resulting from the write-off of customers served under Columbia's LGS/LGTS/FRLGTS rate schedules. In July 2020, the Commission granted deferral authority for both expenses and foregone revenues, but did not authorize carrying charges on the deferral.[21]

Columbia now seeks to recover its deferred COVID-19 related costs and foregone revenues that are not reflected in current rates. A summary of those costs will be provided as an attachment to the testimony of Company witness Jeffery Gore. In compliance with the Commission's order in Case No. 20-637-GA-UNC, Columbia reports that were categories of expenses in which Columbia avoided costs due to the COVID-19 emergency. However, Columbia's current base rates do not fully compensate Columbia for its expenses in those categories, such that Columbia's avoidance of costs due to COVID-19 simply reduced the amount of its under-recovery in those categories, rather than resulting in an over-recovery. The total balance of Columbia's COVID-19 related lost late payment revenue, bad debt

[21] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval to Change Accounting Methods*, Case No. 20-1104-GA-AAM, Finding and Order at 9-10 (July 15, 2020).

expense, and incremental O&M expenses deferral as of March 31, 2021, was approximately $5.170 million. Columbia proposes to amortize that balance over five years, resulting in an annual amortization of approximately $1.034 million.

6. Conclusion

Because the rates and charges and other provisions in Columbia's current rate schedules do not yield just and reasonable compensation for providing gas service to Columbia's customers, and do not yield a just and reasonable return on the value of Columbia's property for furnishing gas service to those customers, Columbia respectfully requests that the Commission find that this Application and the attached schedules are in accordance with R.C. 4909.18 and the SFRs; find that the rates, charges, and other provisions of the proposed tariffs included in Schedule E -1 are just and reasonable, and approve them; approve the requested changes in Columbia's accounting methods and any other changes that may be necessary to implement the Commission's approval of this Application; and grant any other approval necessary and proper to implement the relief requested by this Application.

Respectfully submitted,

/s/ Joseph M. Clark

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EXHIBIT A

Index of the Location of Major Issues Covered By Each Witness

<u>Name of Witness</u>	<u>Rate Case Issues Covered</u>
Melissa Thompson	Application; Management Policies, Practices, and Organization; Rates and Tariffs; Rider IRP Extension; CEP Rider Extension; FMI Rider; DSM Program Extension; PSP Deferral; and Other Regulatory Matters
Jeff Gore	Rate Base, Other Deferrals
Tami Shaeffer	Revenue Requirement, Cost of Service including O&M Actuals
Russ Feingold	Revenue, Allocated Cost of Service, Rate Design
Melissa Bartos	COVID-19 Related Adjustments To Customer Counts
Kimberly Cartella	Compensation and Benefits
Don Ayers	Technical Training, Company Headcount Complement Pro Forma Adjustment
George Dice	Customer Call Center Minimum Wage Increase Pro Forma Adjustment
Marc Okin	Environmental Deferrals
Bryan Trapp	Taxes
Connor McGrath	Projected Capital and Capital Execution
Eric Slowbe	Infrastructure Replacement Program
Scott Tustin	Cross Bores Program Pro Forma Adjustment
John Spanos	Depreciation Study
Paul Moul	Weighted Cost of Capital, Return on Equity

Sarah Poe	DSM Program Extension
Randy Gunn	DSM Cost-Effectiveness Model Discount Rate

EXHIBIT B

PSP Programmatic Reviews for Calendar Years 2015 to 2020

ENHANCED PUBLIC AWARENESS INITIATIVE

INCREASING NATURAL GAS AWARENESS AND GAS INFRASTRUCTURE SAFETY

Baseline Survey (July/August 2015) and Annual Surveys (May 2016, May 2017, May 2018, May 2019, May 2020, and May 2021)

	Affected Public							Excavators							Emergency Responders							Public Officials						
	2015	2016	2017	2018	2019	2020	2021	2015	2016	2017	2018	2019	2020	2021	2015	2016	2017	2018	2019	2020	2021	2015	2016	2017	2018	2019	2020	2021
Natural Gas in close proximity.	90%	90%	66%	72%	67%	64%	60%								84%	91%	86%	*	85%	89%	84%	84%	76%	78%	80%	81%	84%	85%
In the past year, do you recall seeing, hearing or reading any information regarding natural gas safety?	44%	41%	39%	51%	35%	36%	37%	40%	53%	75%	54%	62%	67%	65%	45%	55%	63%	77%	62%	68%	53%	46%	56%	48%	60%	57%	54%	53%
Do you know what natural gas smells like?	88%	88%	87%	94%	80%	85%	80%	95%	92%	100%	84%	98%	100%	98%	97%	98%	97%	77%	96%	97%	97%	93%	96%	95%	75%	98%	96%	97%
Aware of locator service?	83%	79%	90%	75%	79%	80%	80%	97%	99%	100%	99%	100%	100%	100%	98%	92%	97%	*	99%	99%	98%	98%	100%	99%	99%	97%	99%	99%
What number are you supposed to call before digging?	18%	32%	39%	22%	66%	57%	70%	56%	64%	70%	88%	72%	71%	87%	44%	69%	65%	*	80%	81%	78%	50%	58%	62%	*	79%	84%	89%
Heard of '811' or another free 'One Call' number?	45%	51%	57%	75%	49%	54%	50%	90%	92%	92%	83%	98%	96%	98%	82%	91%	93%	*	97%	93%	92%	88%	90%	82%	*	90%	89%	89%
Is calling before you dig required by law?	22%	29%	26%	63%	24%	39%	34%	62%	75%	82%	*	76%	94%	84%	80%	82%	76%	*	81%	87%	82%	64%	60%	56%	76%	61%	68%	63%
Ohio has significant penalties for digging without calling to have utilities located.	47%	42%	27%	94%	32%	40%	41%	65%	71%	38%	*	44%	58%	63%	48%	47%	44%	*	42%	51%	52%	47%	46%	40%	*	48%	39%	44%

*For calendar year 2018, Columbia utilized the Ohio Gas Association survey for its PSP Public Awareness survey. This survey does not include several comparable questions to previous surveys.

STATISTICS AND SUCCESSES

1. Paid Media Campaigns

- *Stop. Leave. Call. (Jan – April, Nov – Dec), Call 811 (May – Sept) and CO Safety (Feb – March, Nov – Dec)*
- <u>Total Impressions</u>: 20.8M
- <u>Social</u>: 4.6M impressions, with 1.8M video completions and 8K clicks to website. CO Safety video educating on proper CO alarm use was the most popular video
- <u>Hulu</u>: 891.6K impressions, 98% video completion rate
- <u>Radio</u>: 13.9M impressions (metro, small market, Pandora)
- <u>Paid Search</u>: 120K impressions, 13.6K clicks to website
- <u>Pinterest</u>: 1.2M impressions, 2.5K link clicks to website

2. Content Sharing Programs

- With in-person events cancelled for the majority of the year, Columbia established content sharing programs with over 84 partners to locally disseminate safety messages (safety towns, city municipalities, first responders).

3. Custom Nursery and Hardware Partnerships

- Columbia partnered with garden and hardware stores to tag and distribute more than 55,000 pieces of branded stock with 811 message; grew program participation by 25%, including the addition of seven territory Lowe's.

4. Dig Into Safety Family Program

- Kid-friendly activity sheets created moments for families to discuss natural gas safety while spending more time at home. 500 families participated within 10 days of the program launch and were rewarded with a sweet treat.

5. Daylight Saving Stinks – and So Does Natural Gas

- Eight stores in populous cities across the territory gave away SLC branded coffee to make Daylight Saving day "stink" a little less. Emails and social posts with the SLC message promoted the program.

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- Excavators pose the largest risk. Standardized presentation materials were used to ensure consistent messaging across the service territory. Content programs launched with 16 city municipalities to improve relationships with public officials.

MIDTERM ADJUSTMENTS TO INITIATIVE

- After COVID forced in-person events to be cancelled, Columbia pivoted and created digital storybooks, activity sheets and more to create authentic, memorable moments for families to discuss natural gas safety.

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Columbia's surveys show that excavators have heard about 811 (90% in 2015 to 98% in 2021) and knowing what number to call before digging (56% in 2015 to 87% in 2020)

IDENTIFYING EFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia partnered with over 100 community organizations to efficiently share safety messages in hyper-local ways via trusted and beloved partners.

DAMAGE PREVENTION TECHNOLOGY INITIATIVE

2020 DISTRIBUTION FACILITIES LOCATED

Columbia Gas of Ohio – 2020 Year-to-Date Statistics[1]	
Total Distribution Facility Footage	**24,878,500**
Main Lines	14,989,644
Service Lines	9,888,757
Transmission Lines	99
Field Collectors (2020 YE)	177

[1] Walked footage as of December 31, 2020

TOTAL FACILITIES LOCATED (2015 – 2020)

Columbia Gas of Ohio – Program Statistics[1]	
Total Distribution Facility Footage	**105,412,181**
Main Lines	58,298,182
Service Lines	47,110,671
Transmission Lines	3,328
Field Collectors (average)	140

DAMAGE PREVENTION RISK MODEL (DPRM)

- DPRM predicts the riskiest one-call tickets and guides Damage Prevention Specialists (DPSs) to contact with excavators in the field
- Columbia's DPRM served as a model for predictive risk analytics for the other Columbia companies

DAMAGES FROM RECORD ERRORS

- Anticipated outgrowth of implementing a more robust system of maps and records is a decrease in damages due to a lack of updated records in Columbia's system

- Columbia is also reviewing its service line records to decrease its damages due to poor records.

- To set a baseline for this metric, in 2014, out of the 1933 damages, 494 were due to record errors (25.5%). In 2015, out of 1,802 damages, 367 were due to record error (20.4%); in 2016, out of 1,251 damages, 265 were due to record error (21.1%); in 2017 out of 1,625 damages, 287 were due to record error (17.6%); in 2018, out of 1,589 damages, 267 were due to record error (16.8%); in 2019, out of 1,826 damages, 438 were due to record error (24%); and in 2020, out of 1,557 damages, 349 were due to record error (22.4%). Columbia anticipates, over the life of the program, a decrease in damages from record error.

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- Once it meets a critical mass, damages due to records errors should decrease
- DPRM guides DPSs to meet in the field with excavators working on high risk tickets

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Columbia management of DPSs will continue to drive full utilization of DPRM, with particular focus on highest risk tickets

MIDTERM ADJUSTMENTS TO DAMAGE PREVENTION TECHNOLOGY INITIATIVE

- Columbia did not make any mid-term adjustments to this initiative in 2020.

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia continues to move geographically throughout its service territory to obtain GPS data
- Columbia continues to review collection processes to manage towards higher quality delivery and identify cost savings for the program

CROSS BORE SAFETY AND REMEDIATION INITIATIVE

CROSS BORES IDENTIFIED AND REMEDIATED

Targeted Camera Program

	2015	2016	2017	2018	2019	2020
Sewer mains, laterals and storm sewer facilities inspected (miles)	87	192.9	149.5	127	122.6	82.1
Gas Cross bores	23	35	58	40	27	20
Non-Gas Cross Bores	20	34	54	86	81	39

Cross Bores Identified in the Field

	2015	2016	2017	2018	2019	2020
Gas cross bores reported to Columbia	50	116	94	87	97	82

- Cross bores identified in the field during AMRP projects, construction, or by municipalities, plumbers and other stakeholders

CROSS BORE RISK RANKING MODEL

- The cross bore risk model identified central Ohio, Springfield, and Portsmouth to guide Columbia's inspections
- Columbia's tool is being updated to Synergi Pipeline to advance performance down to the detailed pipeline segment level and improve the metrics driving locations to find legacy cross bores
- This improved model will be included as part of the overall DIMP risk model to assist in assessing overall risk.

REDUCING CROSS BORE RISK

- In the long-term, cross bore risk on Columbia's DIMP should decrease as cross bores are remediated

CROSS BORE WEBSITE, PLUMBER BROCHURE, AND PUBLIC EDUCATION

- Columbia continues to update its sewer safety website: www.columbiagasohio.com/stay-safe/sewer-line-safety
- Columbia enhanced its digital cross bore education campaign by creating a video now viewable on the website and is now in out for distribution by the Damage Prevention specialist across Ohio.
- Columbia continued its public awareness messaging on YouTube. The video has now been viewed 4588 times.
- Columbia contributed an article in the Ohio PHC Contractor magazine which provided safety information related to cross bores. Ohio PHC Contractor magazine has a reach of over 6,000 contractors.

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- By identifying and remediating cross bores, the initiative will decrease cross bores

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- With additional education to municipalities and plumbers, Columbia is receiving more referrals and notifications of cross bores

MIDTERM ADJUSTMENTS TO DAMAGE PREVENTION TECHNOLOGY INITIATIVE

- Columbia looks for new and innovative ways to reach out to plumbers and contractors.

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia continuously monitors the contractor costs per foot to minimize expenses
- Columbia renewed its contract with external business partners through 2023 with minimal (2%) increase in costs.

ADVANCED WORKFORCE TRAINING INITIATIVE

TRAINING BY THE STATISTICS

New Service Technicians

	2020 attendees / hours		Program totals / hours:	
Service 1	47	1,880	154	6,160
Service 2A	45	3,240	141	8,448
Service 2B	31	2,480	126	10,080
Service 3	45	1,800	129	5,160
2020 graduates: 27 Cumulative program graduates: 77				

New Plant Technicians

	2020 attendees / hours		Program totals / hours:	
Plant Basic	55	6,600	256	30,720
Plant 1A	55	660	211	2,532
Plant 1B	55	2,200	210	6,328
Plant 1C	74	5,328	205	10,912
2020 graduates: 37 Cumulative program graduates: 131				

Community and Company Outreach

- Trained 162 external emergency responders on Gas Basics, Fire School, and emergency response activities
- 1,564 people (internal and external) utilized and/or toured the facility

Training Facility – Year in Review – Since January 1, 2020, the Training Facility delivered 379 courses to 2,578 attendees. Since the Training Facility opened, Columbia delivered 850 courses to 5,786 attendees.

TRAINING CURRICULUM: BUILDING NEW MODULES

Pipeline Integrity, Safety, and Customer Service

- Columbia continued to develop role specific Emergency Preparedness and Response training program for Incident Command.
- Columbia further the development of training for employees overseeing construction work (coordinators/inspectors) with a structured on-the-job training program.
- Columbia furthered the development of our competency training program (targeted individual learning).
- Columbia furthered developed the Measurement and Regulation curriculum by developing on stage of a structured on-the-job training program.

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- With a more comprehensive training, employees are able to better maintain Columbia's system
- Columbia will also be able to reduce incidents and other safety hazards due to operator error

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Columbia is utilizing data to prioritize curriculum development and revisions.

MIDTERM ADJUSTMENTS TO ADVANCED WORKFORCE TRAINING INITIATIVE

- Columbia suspended outside services curriculum development due to Covid-19.
- Columbia incorporated lessons learned from past safety incidents into its curriculum

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia is sharing the cost of building new curriculum with its affiliates

CROSS BORE SAFETY AND REMEDIATION INITIATIVE

CROSS BORES IDENTIFIED AND REMEDIATED AND TARGETED FACILITIES EXAMINED

Targeted Camera Program

	2015	2016	2017	2018	2019
Sewer mains, laterals and storm sewer facilities inspected (miles)	87	192.9	149.5	127	122.6
Gas Cross bores	23	35	58	40	27
Non-Gas Cross Bores	20	34	54	86	81

Cross Bores Identified in the Field

	2015	2016	2017	2018	2019
Gas cross bores reported to Columbia	50	116	94	87	97

- Cross bores identified in the field during AMRP projects, construction, or by municipalities, plumbers and other stakeholders

CROSS BORE RISK RANKING MODEL

- The cross bore risk model identified central Ohio and Springfield communities to guide Columbia's inspections
- Columbia's tool has been updated on a continual basis to assess performance and improve the metrics driving locations to find legacy cross bores

REDUCING CROSS BORE RISK

- In the long term, cross bore risk on Columbia's DIMP should decrease as cross bores are remediated
- The cross bore risk increased in Columbia's DIMP plan in 2018, and continues to be a risk in 2019 based on the findings of the cross bore initiative

CROSS BORE WEBSITE, PLUMBER BROCHURE, AND PUBLIC EDUCATION

- Columbia continues to update its sewer safety website: www.columbiagasohio.com/stay-safe/sewer-line-safety
- Columbia enhanced its digital cross bore education campaign by creating a video now viewable on the website and is now in out for distribution by the Damage Prevention specialist across Ohio.
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OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- By identifying and remediating cross bores, the initiative will, in the long term, decrease cross bores

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- With additional education to municipalities and plumbers, Columbia is receiving more referrals and notifications of cross bores

MIDTERM ADJUSTMENTS TO CROSS BORE INITIATIVE

- Columbia looks for new and innovative ways to reach out to plumbers and contractors

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia continuously monitors the contractor costs per foot to minimize expenses without impact to the quality of the program
- Columbia renewed their contract with external business partners through 2020 with no increase in costs.

DAMAGE PREVENTION TECHNOLOGY INITIATIVE

2019 DISTRIBUTION FACILITIES LOCATED

Columbia Gas of Ohio – 2019 Year-to-Date Statistics[1]	
Total Distribution Facility Footage	**29,564,915**
Main Lines	15,690,452
Service Lines	13,874,463
Transmission Lines	0
Field Collectors (2019 YE)	116

[1] Walked footage as of December 31, 2019

TOTAL FACILITIES LOCATED (2015 – 2019)

Columbia Gas of Ohio – Program Statistics[1]	
Total Distribution Facility Footage	**94,871,440**
Main Lines	53,494,329
Service Lines	41,360,746
Transmission Lines	16,365
Field Collectors (average)	99

DAMAGE PREVENTION RISK MODEL (DPRM)

- DPRM predicts the riskiest one-call tickets and guides Damage Prevention Specialists (DPSs) to contact with excavators in the field
- Columbia's DPRM served as a model for predictive risk analytics for the other Columbia companies

DAMAGES FROM RECORD ERRORS

- Anticipated outgrowth of implementing a more robust system of maps and records is a decrease in damages due to a lack of updated records in Columbia's system
- Columbia is also reviewing its service line records to decrease its damages due to poor records.
- To set a baseline for this metric, in 2014, out of the 1933 damages, 494 were due to record errors (25.5%). In 2015, out of 1,802 damages, 367 were due to record error (20.4%); in 2016, out of 1,251 damages, 265 were due to record error (21.1%); in 2017 out of 1,625 damages, 287 were due to record error (17.6%); in 2018, out of 1,589 damages, 267 were due to record error (16.8%); and in 2019, out of 1,826 damages, 438 were due to record error (24%). Columbia anticipates, over the life of the program, a decrease in damages from record error.

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- Once it meets a critical mass, damages due to records errors should decrease
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RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Columbia management of DPSs will continue to drive full utilization of DPRM, with particular focus on highest risk tickets

MIDTERM ADJUSTMENTS TO DAMAGE PREVENTION TECHNOLOGY INITIATIVE

- Columbia did not make any mid-term adjustments to this initiative in 2019.

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia continues to move geographically throughout its service territory to obtain GPS data
- Columbia continues to review collection processes to manage towards higher quality delivery and identify cost savings for the program

ENHANCED PUBLIC AWARENESS INITIATIVE

INCREASTING NATURAL GAS AWARENESS AND GAS INFRASTRUCTURE SAFETY

Baseline Survey (July/August 2015) and Annual Surveys (May 2016, May 2017, May 2018, May 2019, and May 2020)

		Affected Public						Excavators						Emergency Responders						Public Officials					
		2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
Natural Gas in close proximity.	Yes	90%	90%	66%	72%	67%	64%							84%	91%	86%	*	85%	89%	84%	76%	78%	80%	81%	84%
In the past year, do you recall seeing, hearing or reading any information regarding natural gas safety?	Yes	44%	41%	39%	51%	35%	36%	40%	53%	75%	54%	62%	67%	45%	55%	63%	77%	62%	68%	46%	56%	48%	60%	57%	54%
Do you know what natural gas smells like?	Yes	88%	88%	87%	94%	80%	85%	95%	92%	100%	84%	98%	100%	97%	98%	97%	77%	96%	97%	93%	96%	95%	75%	98%	96%
Aware of locator service?	Yes	83%	79%	90%	75%	79%	80%	97%	99%	100%	99%	100%	100%	98%	92%	97%	*	99%	99%	98%	100%	99%	99%	97%	99%
What number are you supposed to call before digging?	811	18%	32%	39%	22%	66%	57%	56%	64%	70%	88%	72%	71%	44%	69%	65%	*	80%	81%	50%	58%	62%	*	79%	84%
Heard of '811' or another free 'One Call' number?	Yes	45%	51%	57%	75%	49%	54%	90%	92%	92%	83%	98%	96%	82%	91%	93%	*	97%	93%	88%	90%	82%	*	90%	89%
Is calling before you dig required by law?	Yes	22%	29%	26%	63%	24%	39%	62%	75%	82%	*	76%	94%	80%	82%	76%	*	81%	87%	64%	60%	56%	76%	61%	68%
Ohio has significant penalties for digging without calling to have utilities located.	Agree	47%	42%	27%	94%	32%	40%	65%	71%	38%	*	44%	58%	48%	47%	44%	*	42%	51%	47%	46%	40%	*	48%	39%

*For calendar year 2018, Columbia utilized the Ohio Gas Association survey for its PSP Public Awareness survey. This survey does not include several comparable questions to previous surveys.

STATISTICS AND SUCCESSES

1. Paid Media Campaigns

- *Call 811 (April – Sept), Stop. Leave. Call. (Jan – March, Oct – Dec) and CO Safety (Nov – Dec)*
- Total Impressions: 26.6M
- Social Reach: Reached 395K users via video ads
- Audio: 21M impressions (radio & Pandora)
- Video: 2.4M impressions, 74% video completion rate
- Paid Search: 63K impressions, 75% YOY CTR increase
- Pinterest: 772K impressions. Provided insight into top customer search terms, including outdoor DIY projects, safe tree planting and mailbox installation

2. Influencer Relations

- Pilot program partnered with two home/DIY influencers with territory-wide audience to create original 811 safety content. Program drove 2.7K social engagements and 157 Stay Safe pageviews.

3. Custom Nursery and Hardware Partnerships

- Partnered with local garden centers to tag and distribute more than 60,000 pieces of nursery stock (100% YOY increase) with 811 message; grew program participation by 41%.
- Piloted new Hardware Program, partnering with three Central Ohio hardware stores to distribute 4,5000 pieces of hardware stock with 811 message.

4. Safety Towns & Fire Safety Days

- Attended safety town and fire safety events, reaching nearly 20,500 children (105% YOY increase) to provide education on key safety information across the service territory
- Increased Columbia volunteer participation by 25%
- Developed branded coloring sheets and crayons

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- The largest risk to Columbia's system is excavator risk. In 2019, excavator safety presentation materials were reinvented and standardized to ensure consistent messaging across the service territory.

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Columbia's surveys show that excavators have heard about 811 (90% in 2015 to 96% in 2020) and know calling is required by law (62% in 2015 to 94% in 2020)

MIDTERM ADJUSTMENTS TO INITIATIVE

- After identifying top safety search terms online are carbon monoxide safety inquires, Columbia expanded its initiative to educate customers about CO safety with new video content and expanded paid social support.

IDENTIFYING EFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia identified video as a consistent, engaging way to share safety messages. Users watched safety content, leveraged across platforms, for more than 19,000 hours.

ADVANCED WORKFORCE TRAINING INITIATIVE

TRAINING BY THE STATISTICS

New Service Technicians

	2019 attendees / hours		Program totals / hours:	
Service 1	40	1,600	109	4,360
Service 2A	36	2,304	97	5,248
Service 2B	46	3,680	95	7,600
Service 3	35	1,400	92	3,680
2019 graduates: 27 Cumulative program graduates: 77				

New Plant Technicians

	2019 attendees / hours		Program totals / hours:	
Plant Basic	72	8,640	202	24,240
Plant 1A	67	804	158	1,896
Plant 1B	67	2,680	160	4,244
Plant 1C	51	3,264	132	5,648
2019 graduates: 37 Cumulative program graduates: 131				

Community and Company Outreach

- Trained 162 external emergency responders on Gas Basics, Fire School, and emergency response activities
- 1,564 people (internal and external) utilized and/or toured the facility

Training Facility – Year in Review – Since January 1, 2019, the Training Facility delivered 379 courses to 2,578 attendees. Since the Training Facility opened, Columbia delivered 850 courses to 5,786 attendees.

TRAINING CURRICULUM: BUILDING NEW MODULES

Pipeline Integrity, Safety, and Customer Service

- Columbia developed an Emergency Preparedness and Response training program for Incident Command.
- Columbia furthered the development of the Plant and Service programs with Competency training (targeted learning) for existing employee needs.
- Columbia developed a Contractor Training program to evaluate contractors' learning organizations.
- Further developed curriculum for advancing the knowledge of our Plant, Construction, and Engineering employees through complex Tie-in and Bypass training.
- Columbia furthered developed the Measurement and Regulation curriculum by designing a structured on-the-job training program, similar to the existing Plant and Service programs.
- Developed training to support new technologies for over-pressure protection including Electronic Controllers (ER-350, EC-350) and multiple automatic shut-off devices.

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- With a more comprehensive training, employees are able to better maintain Columbia's system
- Columbia will also be able to reduce incidents and other safety hazards due to operator error

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Columbia is utilizing data to prioritize curriculum to build out and revisions.

MIDTERM ADJUSTMENTS TO ADVANCED WORKFORCE TRAINING INITIATIVE

- Columbia incorporated lessons learned from past safety incidents into its curriculum
- Columbia's training for Incident Command was a mid-term adjustment in 2019

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia is sharing the cost of building new curriculum with its affiliates

ENHANCED PUBLIC AWARENESS INITIATIVE

INCREASING NATURAL GAS AWARENESS AND GAS INFRASTRUCTURE SAFETY

Baseline Survey (July/August 2015) and Annual Surveys (May 2016, May 2017, May 2018, and May 2019)

		Affected Public					Excavators					Emergency Responders					Public Officials				
		2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Natural Gas in close proximity.	Yes	90%	90%	66%	72%	67%						84%	91%	86%	*	85%	84%	76%	78%	80%	81%
In the past year, do you recall seeing, hearing or reading any information regarding natural gas safety?	Yes	44%	41%	39%	51%	35%	40%	53%	75%	54%	62%	45%	55%	63%	77%	62%	46%	56%	48%	60%	57%
Do you know what natural gas smells like?	Yes	88%	88%	87%	94%	80%	95%	92%	100%	84%	98%	97%	98%	97%	77%	96%	93%	96%	95%	75%	98%
Aware of locator service?	Yes	83%	79%	90%	75%	79%	97%	99%	100%	99%	100%	98%	92%	97%	*	99%	98%	100%	99%	99%	97%
Do you know what number to call before digging?	811	18%	32%	39%	22%	51%	56%	64%	70%	88%	100%	44%	69%	65%	*	91%	50%	58%	62%	*	88%
Heard of '811' or another free 'One Call' number?	Yes	45%	51%	57%	75%	49%	90%	92%	92%	83%	98%	82%	91%	93%	*	97%	88%	90%	82%	*	90%
Is calling before you dig required by law?	Yes	22%	29%	26%	63%	24%	62%	75%	82%	*	76%	80%	82%	76%	*	81%	64%	60%	56%	76%	61%
Ohio has significant penalties for digging without calling to have utilities located.	Agree	47%	42%	27%	94%	32%	65%	71%	38%	*	44%	48%	47%	44%	*	42%	47%	46%	40%	*	48%

*For calendar year 2018, Columbia utilized the Ohio Gas Association survey for its PSP Public Awareness survey. This survey does not include several comparable questions to previous surveys.

STATISTICS AND SUCCESSES

1. Radio, Digital and Social Campaigns

- *811 Campaign (May – Sept 2018) and Smell & Tell Campaign (March 2018 & Dec 2018)*
- Total Audio Impressions: *12.4M (Radio & Pandora)*
- Online Video: *2.8M impressions and a 70.4% video completion rate*
- Paid Search: *20% increase in click through rate from 2017*

2. Custom Nursery Partnerships

- Partnered with local garden centers to tag more than 30,000 pieces of nursery stock with the 811 message; increased number of participating nurseries by 750% from 2017

3. Safety Towns & Fire Safety Days

- Attended safety town and fire safety events, reaching nearly 10,000 children, to provide education on key safety information across the service territory
- Developed new Digger Dog children's book

4. Video Engagement

- Utilized 5 videos addressing 811, Smell & Tell, Gas Line Responsibility, CO Safety and Dangers of DIY

5. Firefighter Video Contest

- Secured more than 25M impressions; engaged more than 85K unique users on social; appeared on people's feeds more than 160K times; personally contacted more than 100 fire departments across the state to build relationships as part of outreach

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- The largest risk to Columbia's system is excavator risk, which, as is shown in the damages per 1,000 locates, is decreasing

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Columbia's baseline survey and follow up survey shows that excavators have heard about 811 (90% in 2015 to 98% in 2019), knowing what number to call before digging (56% in 2015 and 100% in 2019). Columbia also found that the affected public that it needs to do more work regarding its affected public, as it saw several categories with dips in its survey results.

MIDTERM ADJUSTMENTS TO PUBLIC AWARENESS INITIATIVE

- Columbia is expanding its initiative to educate customers about gas infrastructure safety through additional safety messaging included on additional social media platforms

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia identified Facebook as an efficient social media ad partner, allowing it to reallocate dollars from other social media platforms to small market radio.
- News/weather/traffic and Pandora radio spots utilized station talent to eliminate all associated production costs for creative content.

DAMAGE PREVENTION TECHNOLOGY INITIATIVE

2018 DISTRIBUTION FACILITIES LOCATED

Columbia Gas of Ohio – 2018 Year-to-Date Statistics[1]	
Total Distribution Facility Footage	**27,895,551**
Main Lines	15,238,098
Service Lines	12,562,355
Uncategorized[2]	95,098
Field Collectors (2018 YE)	87

[1] Walked footage as of December 31, 2018
[2] Further Action Areas that are not distinguished by Main or Service

TOTAL FACILITIES LOCATED (2015 – 2018)

Columbia Gas of Ohio – Program Statistics[1]	
Total Distribution Facility Footage	**55,590,053**
Main Lines	30,474,332
Service Lines	25,020,623
Uncategorized[2]	95,098
Field Collectors (average)	95

DAMAGE PREVENTION RISK MODEL (DPRM)

- DPRM accurately predicts the riskiest one-call tickets and guides Damage Prevention Specialists (DPSs) to contact with excavators in the field
- Columbia's DPRM served as a model for predictive risk analytics for the other Columbia companies

DAMAGES FROM RECORD ERRORS

- Anticipated outgrowth of implementing a more robust system of maps and records is a decrease in damages due to a lack of updated records in Columbia's system

- Columbia is also reviewing its service line records to decrease its damages due to poor records.

- To set a baseline for this metric, in 2014, out of the 1933 damages, 494 were due to record errors (25.5%). In 2015, out of 1,802 damages, 367 were due to record error (20.4%); in 2016, out of 1,251 damages, 265 were due to record error (21.1%); in 2017 out of 1,625 damages, 287 were due to record error (17.6%); and in 2018, out of 1589 damages, 267 were due to record error (16.8%). Columbia anticipates a decrease in damages from record error over the life of the program.

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- Once it meets a critical mass, damages due to records errors should decrease
- DPRM guides DPSs to meet in the field with excavators working on high risk tickets

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Columbia management of DPSs will continue to drive full utilization of DPRM, with particular focus on highest risk tickets

MIDTERM ADJUSTMENTS TO DAMAGE PREVENTION TECHNOLOGY INITIATIVE

- Columbia is working with its Construction team to incorporate collection of new pipeline placed in service in 2019.

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia continues to move geographically throughout its service territory to obtain GPS data
- Columbia continues to review collection processes to manage towards higher quality delivery and identify cost savings for the program

CROSS BORE SAFETY AND REMEDIATION INITIATIVE

CROSS BORES IDENTIFIED AND REMEDIATED AND TARGETED FACILITIES EXAMINED

Targeted Camera Program

	2015	2016	2017	2018
Sewer mains, laterals and storm sewer facilities inspected (miles)	87	192.9	149.5	127
Gas Cross bores	23	35	58	40
Non-Gas Cross Bores	20	34	54	86

Cross Bores Identified in the Field

	2015	2016	2017	2018
Gas cross bores reported to Columbia	50	116	94	87

- Cross bores identified in the field during AMRP projects, construction, or by municipalities, plumbers and other stakeholders

CROSS BORE RISK RANKING MODEL

- The cross bore risk model identified central Ohio, Springfield and the Marysville communities to guide Columbia's inspection work
- Columbia's tool has been updated on a continual basis to asses performance and improve the metrics driving locations to find legacy cross bores

REDUCING CROSS BORE RISK

- In the long term, cross bore risk on Columbia's DIMP should decrease as cross bores are remediated
- The cross bore risk increased on Columbia's DIMP plan in 2017, continues to be a risk in 2018 based on the findings of the cross bore initiative

CROSS BORE WEBSITE, PLUMBER BROCHURE, AND PUBLIC EDUCATION

- Columbia continues to update its sewer safety website: www.columbiagasohio.com/stay-safe/sewer-line-safety
- Columbia enhanced its digital cross bore education campaign by creating a video now viewable on the website.
- Columbia continued its public awareness messaging on Facebook and YouTube. The posts had 1704 views, 65 engagements and 52 link clicks. In addition, the video has been viewed 4478 times on YouTube. Columbia also sent an e-newsletter to 705,838 customers that contained a video link about cross bore education. The mailing was sent to 705838 customers with an open rate of 22%. The link to the cross bore video was clicked on 244 times by 231 unique users.

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- By identifying and remediating cross bores, the initiative will, in the long term, decrease cross bores

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- With additional education to municipalities and plumbers, Columbia is receiving more referrals and notifications of cross bores

MIDTERM ADJUSTMENTS TO CROSS BORE INITIATIVE

- Columbia looks for new and innovative ways to reach out to plumbers and contractors

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia continuously verifies and inspects contractor invoices in this program
- Columbia continuously monitors the contractor costs per foot to minimize expenses without impact to the quality of the program

ADVANCED WORKFORCE TRAINING INITIATIVE

TRAINING BY THE STATISTICS

Service Technicians

	2018 attendees / hours		Program totals / hours:	
Service 1	36	1,440	70	2,800
Service 2A	28	1,792	62	3,968
Service 2B	26	2,080	50	4,000
Service 3	26	1,040	58	2,320
2018 graduates: 25 Total program graduates: 50				

Plant Technicians

	2018 attendees / hours		Program totals / hours:	
Plant Basic	24	2,880	133	15,960
Plant 1A	31	372	92	1,104
Plant 1B	31	1,240	94	3,760
Plant 1C	31	1,984	82	5,248
2018 graduates: 30 Total program graduates: 94				

Community and Company Outreach

- Trained 881 external emergency responders on Gas Basics, Fire School, and emergency response activities
- 1,454 people (internal and external) utilized and/or toured the facility

Training Facility – Year in Review – Since January 1, 2018, the Training Facility delivered 302 courses to 1,598 attendees

TRAINING CURRICULUM: BUILDING NEW MODULES

Plant, Construction, and Engineering

- Developed Refresher Training programs for existing Service and Plant employees.
- Designed Governance Team process for Service and Plant programs.
- Further developed curriculum for advancing the knowledge of our Plant, Construction, and Engineering employees through Advanced Plant Classes, including: High Pressure Pipeline Repair and Trenchless Technology.
- Developed Construction training for Planning and Site Preparation and Coordination Inspecting.

Pipeline Integrity, Safety, and Customer Service

- Columbia further developed the Measurement and Regulation curriculum enhancing 8 of our courses with Performance Support and structured hands-on activities.
- Developed new training for Pietro Fiorentini Norval Slam-Shut Regulators and Electronic Pressure Recorders

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- With a more comprehensive training, employees are able to better maintain Columbia's system
- Columbia will also be able to reduce incidents and other safety hazards due to operator error

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Columbia is utilizing qualitative and quantitative data to revise the Advanced Workforce Training Initiative curriculum
- Columbia prioritized curriculum build based on field experience and incident response, such as slam shut valves curriculum build

MIDTERM ADJUSTMENTS TO ADVANCED WORKFORCE TRAINING INITIATIVE

- Columbia incorporated lessons learned from past safety incidents into its curriculum

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia is sharing the cost of shared services for the training initiative with its affiliates

ADVANCED WORKFORCE TRAINING INITIATIVE

TRAINING BY THE STATISTICS

Service Technicians

- 130 Trainees attend 6,312 hours of instructor-led training
- 24 employees graduated from the Service On-the-Job Training ("OJT") program in 2017

Plant Technicians

- 207 Trainees attend 12,904 hours of instructor-led training
- 58 employees graduated from the Plant On-the-Job Training ("OJT") program in 2017

Community and Company Outreach

- Trained 124 external emergency responders on Gas Basics, Fire School, and emergency response activities
- 1,835 people (internal and external) utilized and/or toured the facility

Training Facility – Year in Review – On March 20, 2017, the Training Facility held its first classes and delivered 169 courses to 1,610 attendees

TRAINING CURRICULUM: BUILDING NEW MODULES

Plant, Construction, and Engineering

- Columbia further developed curriculum for advancing the knowledge of our Plant, Construction, and Engineering employees through Advanced Plant Classes, including: Sequencing Tie-In Operations, Advanced Purging, Advanced Main Line Plastics, and Complex Pressure Testing and Uprates
- Columbia developed curriculum for Construction Coordinators with a class on Site Planning and Preparation

Front Line Leader

- Columbia developed additional curriculum for Front Line Leaders, including: Service Overview, Leakage Control, M&R Overview, Plant Overview, Compliance Overview, and Emergency Response.

Pipeline Integrity, Safety, and Customer Service

- Columbia developed new curriculum for Leak Investigators and Locators, while working to enhance the already extensive Measurement and Regulation curriculum.
- Columbia further developed curriculum to enhance Emergency Response capabilities with a new Make Safe class.
- Columbia developed new curriculum for Pilot Relight Training, enhancing capabilities to restore service.

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- With a more comprehensive training, new hires are able to better maintain Columbia's system
- Columbia will also be able to reduce incidents and other safety hazards due to operator error

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Investigations into best practices of curriculum build and training facility design have shaped the Advanced Workforce Training Initiative

MIDTERM ADJUSTMENTS TO ADVANCED WORKFORCE TRAINING INITIATIVE

- Columbia incorporated lessons learned from past safety incidents into its Emergency Response curriculum and training facility

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia is sharing the cost of shared services for the training initiative with its affiliates

CROSS BORE SAFETY AND REMEDIATION INITIATIVE

CROSS BORES IDENTIFIED AND REMEDIATED AND TARGETED FACILITIES EXAMINED

Targeted Camera Program

- In 2017, Columbia inspected over 5,419 sewer laterals and over 149.5 miles of sewer laterals, sewer mains and storm sewer facilities
- In 2017, Columbia's legacy program identified 58 gas cross bores, with an additional 54 that were non-gas

Cross Bores Identified in the Field

- In 2017, Columbia identified 94 gas cross bores in the field
- Cross bores identified in the field during AMRP projects, construction, or by municipalities, plumbers and other stakeholders

CROSS BORE RISK RANKING MODEL

- The cross bore risk model identified central Ohio, Springfield and the Sandusky communities to guide Columbia's inspection work
- Columbia's tool has been updated on a continual basis to asses performance and improve the metrics driving locations to find legacy cross bores

REDUCING CROSS BORE RISK

- In the long term, cross bore risk on Columbia's DIMP should decrease as cross bores are remediated
- As Columbia anticipated, the cross bore risk increased on Columbia's DIMP plan in 2017 as a result of the targeted legacy program and increased internal and external public awareness

CROSS BORE WEBSITE, PLUMBER BROCHURE, AND PUBLIC EDUCATION

- Columbia continues to update its sewer safety website: www.columbiagasohio.com/stay-safe/sewer-line-safety
- Columbia enhanced its digital cross bore education campaign by creating a video now viewable on the website
- Columbia launched its public awareness messaging on Facebook and Twitter. The posts received 60,009 video starts and reached 88,620 people. Columbia also sent an e-newsletter to 63,421 customers that contained video link about cross bore education. This email resulted in 41,935 video views.
- Columbia continues visiting plumbing associations and working directly with its sewer infrastructure partners such as municipalities, home owners associations and schools

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- By identifying and remediating cross bores, the initiative will, in the long term, decrease cross bore risk identified on Columbia's DIMP

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Columbia anticipates, with the new model, more success finding legacy cross bores in its system
- With additional education to municipalities and plumbers, Columbia anticipates receiving more referrals and notifications of cross bores

MIDTERM ADJUSTMENTS TO CROSS BORE INITIATIVE

- Columbia continues to update its cross bore risk model, which provides targeted guidance

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia continuously verifies and inspects contractor invoices in this program
- Columbia continuously monitors the contractor costs per foot to monitor chances in expenses

DAMAGE PREVENTION TECHNOLOGY INITIATIVE

2017 DISTRIBUTION FACILITIES LOCATED

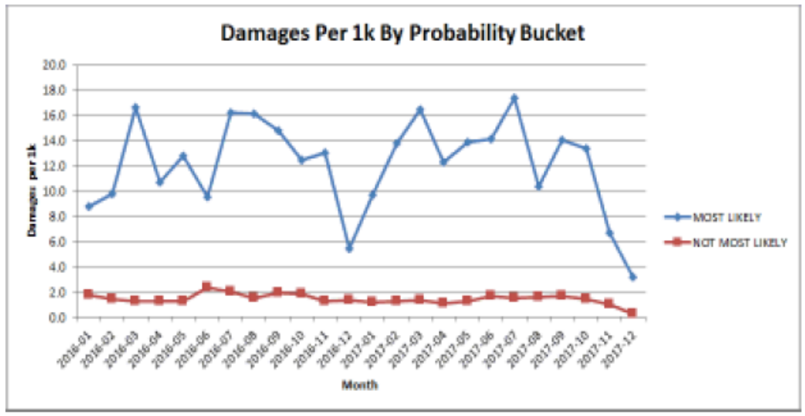
Columbia Gas of Ohio – 2017 Year-End Statistics	
Total Distribution Facility Footage	**14,290,677**
Main Lines	8,021,954
Service Lines	6,874,150
Vendor Points	2,692,277
Field Collectors (average)	104

TOTAL FACILITIES LOCATED (2015 – 2017)

Columbia Gas of Ohio – Program Statistics	
Total Distribution Facility Footage	**26,175,433**
Main Lines	15,509,971
Service Lines	10,665,462
Vendor Points	4,824,209
Field Collectors (average)	61

DAMAGE PREVENTION RISK MODEL (DPRM)

- DPRM accurately predicts the riskiest one-call tickets and guides Damage Prevention Coordinators (DPCs) to contact with excavators in the field
- Columbia continues to see increased accuracy with the DPRM software
- Columbia is currently working on ways to better utilize and tie DPRM to the DPC field form software.



DAMAGES FROM RECORD ERRORS

- Anticipated outgrowth of implementing a more robust system of maps and records is a decrease in damages due to a lack of updated records in Columbia's system
- To set a baseline for this metric, in 2014, out of the 1933 damages, 494 were due to record errors (25.5%). In 2015, out of 1802 damages, 367 were due to record error (20.4%), in 2016, out of 1,251 damages, 265 were due to record error (21.1%), and in 2017 out of 1,625 damages, 287 were due to record error (17.6%). Columbia anticipates a decrease in damages from record error over the life of the program

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- Once it meets a critical mass, damages due to records errors should decrease
- DPRM guides DPCs to meet in the field with excavators working on high risk tickets

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Columbia management of DPCs will continue to drive full utilization of DPRM, with particular focus on highest risk tickets

MIDTERM ADJUSTMENTS TO DAMAGE PREVENTION TECHNOLOGY INITIATIVE

- Columbia adjusted its DPRM program based on feedback from DPCs and program users
- Columbia also shifted bidding locate and GPS contracts to unit pricing versus time & equipment

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia continues moving geographically throughout its service territory to obtain GPS data

ENHANCED PUBLIC AWARENESS INITIATIVE

INCREASTING NATURAL GAS AWARENESS AND GAS INFRASTRUCTURE SAFETY

Baseline Survey (July/August 2015), Annual Survey (May 2016), Annual Survey (May 2017), and Annual Survey (May 2018)

		Affected Public				Excavators				Emergency Responders				Public Officials			
		2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018
Natural Gas in close proximity.	Yes	90%	90%	66%	72%					84%	91%	86%	*	84%	76%	78%	80%
In the past year, do you recall seeing, hearing or reading any information regarding natural gas safety?	Yes	44%	41%	39%	51%	40%	53%	75%	54%	45%	55%	63%	77%	46%	56%	48%	60%
Do you know what natural gas smells like?	Yes	88%	88%	87%	94%	95%	92%	100%	84%	97%	98%	97%	77%	93%	96%	95%	75%
Aware of locator service?	Yes	83%	79%	90%	75%	97%	99%	100%	99%	98%	92%	97%	*	98%	100%	99%	99%
Do you know what number to call before digging?	811	18%	32%	39%	22%	56%	64%	70%	88%	44%	69%	65%	*	50%	58%	62%	*
Heard of '811' or another free 'One Call' number?	Yes	45%	51%	57%	75%	90%	92%	92%	83%	82%	91%	93%	*	88%	90%	82%	*
Is calling before you dig required by law?	Yes	22%	29%	26%	63%	62%	75%	82%	*	80%	82%	76%	*	64%	60%	56%	76%
Ohio has significant penalties for digging without calling to have utilities located.	Agree	47%	42%	27%	94%	65%	71%	38%	*	48%	47%	44%	*	47%	46%	40%	*

*For calendar year 2018, Columbia utilized the Ohio Gas Association survey for its PSP Public Awareness survey. The OGA survey does not include several comparable questions to previous surveys conducted by Columbia. For calendar year 2019, Columbia will resume using its previous survey questions.

STATISTICS AND SUCCESSES

1. Radio, Digital and Social Campaigns

- *811 Campaign (April – Oct 2017)*
  Audio Impressions: 16M for radio; 7M for Pandora
  Digital: 12K clicks across Pandora, paid search and Facebook
- *Smell & Tell Campaign (March 2017 & Oct-Nov 2017)*
  Audio Impressions: 9M for radio; 7M for Pandora
  Digital: 4K clicks; 66 direct calls via paid search

2. Custom Nursery Partnerships

- Partnered with local garden centers to tag more than 5,000 pieces of nursery stock with the 811 message to connect with customers right before they planned to dig

3. Safety Towns & Fire Safety Days

- Attended more than 140 individual safety town presentations and fire safety events, reaching nearly 22,000 children, to provide education on key safety information across the service territory

5. Video Engagement

- Developed five educational videos addressing 811, Smell and Tell, Gas Line Responsibility, CO Safety and the Dangers of DIY, which secured more than 42,000 views

6. Decreased Damages Per 1,000 Locates

- Between 2012 and 2017, Columbia experienced a 32% decrease in damages per 1,000 locates

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- The largest risk to Columbia's system is excavator risk, which, as is shown in the damages per 1,000 locates, is decreasing

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Columbia's baseline survey and follow up survey shows that customers have heard about 811 (45% in 2015 to 75% in 2018), knowing that calling before digging is required by law (22% in 2015 and 63% in 2018), and being aware that Ohio has significant penalties if a person fails to call (47% in 2015 to 94% in 2018)

MIDTERM ADJUSTMENTS TO PUBLIC AWARENESS INITIATIVE

- Columbia is expanding its initiative to educate customers about gas infrastructure safety through additional safety messaging including don't do it yourself and customer responsibility messages
- Columbia is also increasing its outreach through the use of original videos, article placements and earned media

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia identified Facebook as an efficient social media ad partner, allowing it to reallocate dollars from other social media platforms to small market radio, reaching rural areas of the service territory more effectively.
- Traditional news/weather/traffic radio spots, as well as Pandora online radio spots, utilized station talent to eliminate all production costs typically associated with this type of advertising.

DAMAGE PREVENTION TECHNOLOGY INITIATIVE

2016 DISTRIBUTION FACILITIES LOCATED

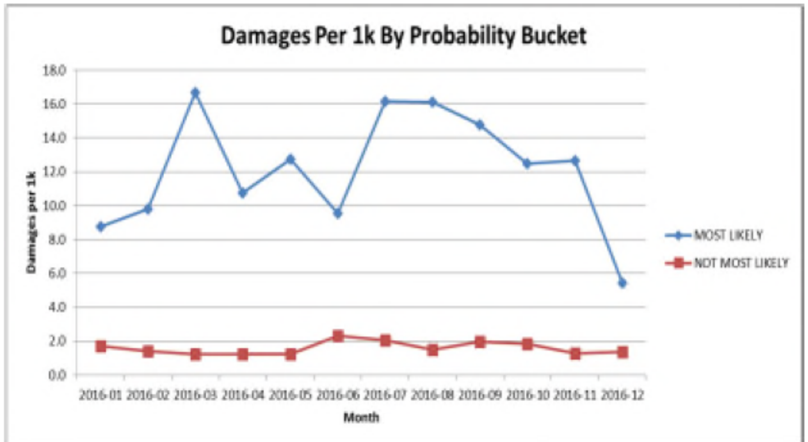
Columbia Gas of Ohio – 2016 Year-End Statistics	
Total Distribution Facility Footage	**9,329,361**
Main Lines	5,858,532
Service Lines	3,470,830
Vendor Points	1,735,205
Field Collectors (average)	49

TOTAL FACILITIES LOCATED (2015 – 2016)

Columbia Gas of Ohio – Program Statistics	
Total Distribution Facility Footage	**11,884,756**
Main Lines	7,488,017
Service Lines	4,396,739
Vendor Points	2,268,560
Field Collectors (average)	45

DAMAGE PREVENTION RISK MODEL (DPRM)

- DPRM accurately predicts the riskiest one-call tickets and guides Damage Prevention Coordinators (DPCs) to contact with excavators in the field
- Columbia continues to see increased accuracy with the DPRM software
- Columbia is currently working on ways to better utilize and tie DPRM to the DPC field form software.



DAMAGES FROM RECORD ERRORS

- Anticipated outgrowth of implementing a more robust system of maps and records is a decrease in damages due to a lack of updated records in Columbia's system
- To set a baseline for this metric, in 2014, out of the 1933 damages, 494 were due to record errors (25.5%). In 2015, out of 1802 damages, 367 were due to record error (20.4%). And in 2016, out of 1,251 damages, 265 were due to record error (21.1%). Columbia anticipates a decrease in damages from record error over the life of the program.

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- Once it meets a critical mass, damages due to records errors should decrease
- DPRM guides DPCs to meet in the field with excavators working on high risk tickets

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- New Columbia management of DPCs to better and more fully utilize DPRM
- Considering increasing DPRM usage with locate contractors

MIDTERM ADJUSTMENTS TO DAMAGE PREVENTION TECHNOLOGY INITIATIVE

- Columbia adjusted its DPRM program based on feedback from DPCs and program users
- Columbia also shifted bidding locate and GPS contracts to unit pricing versus time & equipment

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia is moving geographically throughout its service territory to obtain GPS data

ENHANCED PUBLIC AWARENESS INITIATIVE

INCREASING NATURAL GAS AWARENESS AND GAS INFRASTRUCTURE SAFETY

Baseline Survey (July/August 2015), Annual Survey (May 2016), and Annual Survey (May 2017)

		Affected Public			Excavators			Emergency Responders			Public Officials		
		2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017
Natural Gas in close proximity.	Yes	90%	90%	66%				84%	91%	86%	84%	76%	78%
In the past year, do you recall seeing, hearing or reading any information from Columbia Gas of Ohio regarding natural gas safety?	Yes	44%	41%	39%	40%	53%	75%	45%	55%	63%	46%	56%	48%
Do you know what natural gas smells like?	Yes	88%	88%	87%	95%	92%	100%	97%	98%	97%	93%	96%	95%
Aware of locator service?	Yes	83%	79%	90%	97%	99%	100%	98%	92%	97%	98%	100%	99%
Do you know what number to call before digging?	811	18%	32%	39%	56%	64%	70%	44%	69%	65%	50%	58%	62%
Heard of '811' or another free 'One Call' number?	Yes	45%	51%	57%	90%	92%	92%	82%	91%	93%	88%	90%	82%
Is calling 811 required by law?	Yes	22%	29%	26%	62%	75%	82%	80%	82%	76%	64%	60%	56%
Ohio has significant penalties for digging without calling to have utilities located.	Agree	47%	42%	27%	65%	71%	38%	48%	47%	44%	47%	46%	40%

STATISTICS AND SUCCESSES

1. Radio and Digital Campaigns

- *811 Campaign (August – September 30, 2016)*
  Radio: 3M radio impressions; 3M Pandora impressions
  Digital: 9,746 clicks to the 811Pledge; 520,632 users reached through Facebook ads and media
- *Smell & Tell Campaign (October – November 15, 2016)*
  Radio: 19.8M impressions; 509 media placements
  Digital: 4,062 post engagements; 566,823 impressions

2. Digger Dog

- Developed educational material, magnets and stickers to provide children for over 97 events and distributed over 108,000 safety materials to Columbia customers

3. Safety Towns

- Attended over 80 safety towns, reaching 6,888 children to educate them on 811 and Smell & Tell with company personnel

4. Safety Days Workshops – First Responder Partnership

- Attended over 43 events in 43 cities, partnering with first responders to educate communities during Fire Prevention Week

5. National Energy Foundation

- Partnered with the National Energy Foundation to provide 12,720 packets to students in Ohio about natural gas safety

6. Decreased Damages per 1,000 Locates

- Between 2012 and 2016, Columbia experienced a 32% decrease in damages per 1,000 locates

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- The largest risk to Columbia's system is excavator risk, which, as is shown in the damages per 1,000 locates, is decreasing

MIDTERM ADJUSTMENTS TO PUBLIC AWARENESS INITIATIVE

- Columbia is expanding its initiative to educate customers about gas infrastructure safety
- Columbia is also increasing its social media presence

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Columbia's baseline survey and follow up survey shows that customers are learning more about 811, including an increase in awareness of a locator service (83% in 2015 to 90% in 2017) and knowing what number to call before digging (18% in 2015 and 39% in 2017)

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia issued an RFP for its 2017 advertising specialist
- Columbia outsourced all Digger Dog appearances
- Columbia incorporated social media as part of an enhanced media campaign. Specific cost savings for social versus traditional radio mediums can be, for example, $0.03 per impression for radio versus $0.004 per impression for social media

CROSS BORE SAFETY AND REMEDIATION INITIATIVE

CROSS BORES IDENTIFIED AND REMEDIATED AND TARGETED FACILITIES EXAMINED

Targeted Camera Program

- In 2016, Columbia inspected over 6,426 sewer laterals and over 192.9 miles of sewer laterals, sewer mains and storm sewer facilities
- In 2016, Columbia's legacy program identified 35 gas cross bores, with an additional 34 that were non-gas

Cross Bores Identified in the Field

- In 2016, Columbia identified 116 gas cross bores in the field
- Cross bores identified in the field during AMRP projects, construction, or by municipalities, plumbers and other stakeholders

CROSS BORE RISK RANKING MODEL

- Columbia worked with Opvantek to develop a cross bore risk ranking tool and began utilizing the tool in 2016
- The cross bore risk model identified central Ohio communities to guide Columbia's inspection work, similar to the areas Columbia initially targeted when launching the initiative in June 2015
- Columbia's tool has been updated on a continual basis to improve the metrics driving locations to find legacy cross bores

REDUCING CROSS BORE RISK

- In the long term, cross bore risk on Columbia's DIMP should decrease as cross bores are remediated
- As Columbia anticipated, the cross bore risk increased on Columbia's DIMP plan in 2016 as a result of the program and increased public awareness

CROSS BORE WEBSITE, PLUMBER BROCHURE, AND PUBLIC EDUCATION

- Columbia continues to update its sewer safety website: www.columbiagasohio.com/stay-safe/sewer-line-safety
- Columbia continued its digital cross bore education campaign, targeting websites with sewer clearing materials
- The digital campaign yielded over 2.5 million impressions and over 1,500 click throughs
- Columbia also mailed over 7,000 cross bore education brochures to plumbers and municipalities in 2016
- Columbia continues visiting plumbing associations and working directly with its sewer infrastructure partners such as municipalities, home owners associations and schools

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- By identifying and remediating cross bores, the initiative will, in the long term, decrease cross bore risk identified on Columbia's DIMP

MIDTERM ADJUSTMENTS TO CROSS BORE INITIATIVE

- Columbia continues to update its cross bore risk model, which provides targeted guidance
- Columbia also is working on an education cross bore video

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Columbia anticipates, with the new model, more success finding legacy cross bores in its system
- With additional education to municipalities and plumbers, Columbia anticipates receiving more referrals and notifications of cross bores

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia continuously verifies and inspects contractor invoices in this program
- Columbia continuously monitors the contractor costs per foot to monitor chances in expenses

ADVANCED WORKFORCE TRAINING INITIATIVE

TRAINING BY THE STATISTICS: NEW CURRICULUM (58 NEW HIRES IN 2016)

Service Technicians

- Trainees attend 176 hours of instructor-led training
- 80% of the instructor-led training is received in the new training facility
- On-the-Job Training ("OJT") program takes, on average, 20 weeks to complete, and is monitored by OJT coaches
- Trainees are required to pass 8 Operator Qualifications ("OQ"), and must maintain the OQ every 3 years

Plant Technicians

- Trainees attend 228 hours of instructor-led training
- 80% of the instructor-led training is received in a training facility
- On-the-Job Training program takes, on average, 18 weeks to complete
- Trainees must pass 15 Operator Qualifications

TRAINING CURRICULUM: BUILDING NEW MODULES

Service Technician

- In 2016, Columbia further developed additional curriculum for Service Technicians
- This curriculum includes: Service Class 1, Service Class 2A (Field Operations Leaders), Service Class 2B (Field Operations Leaders), and Service Class 3 (Field Operations Leaders)

Plant Technicians & Emergency Response

- In 2016, Columbia further developed additional curriculum and training for Plant Technicians
- This curriculum includes: Plant Basics and Plant 1 (Field Operations Leaders)
- In addition, Columbia developed new Emergency Response curriculum and trained all Operations employees

BUILDING A NEW TRAINING FACILITY

- On August 11, 2016, Columbia broke ground on its new training facility in Gahanna, Ohio
- The facility is approximately 28,000 square feet, and is one of the largest training facilities in the NiSource footprint
- Columbia's training facility was completed in early April 2017, and Columbia's first class of trainees began training in late April, early May 2017

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- With a more comprehensive training, new hires are able to better maintain Columbia's system
- Columbia will also be able to reduce incidents and other safety hazards due to operator error

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Investigations into best practices of curriculum build and training facility design have shaped the Advanced Workforce Training Initiative

MIDTERM ADJUSTMENTS TO ADVANCED WORKFORCE TRAINING INITIATIVE

- Columbia incorporated lessons learned from past safety incidents into its Emergency Response curriculum and training facility

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia is sharing the cost of shared services for the training initiative with its affiliates

CROSS BORE SAFETY AND REMEDIATION INITIATIVE

CROSS BORES IDENTIFIED AND REMEDIATED AND TARGETED FACILITIES EXAMINED

Targeted Camera Program

- Beginning in June 2015, inspected sewer facilities in Hilliard, Worthington, Grove City, and Columbus
- Inspected over 87 miles of sewer facilities
- Equates to 25 miles of gas main
- In 2015, identified 23 cross bores, 20 were non-gas
- In 2016, to date, Columbia identified 20 gas cross bores

Cross Bores Identified in the Field

- In 2015, identified 50 gas cross bores
- Cross bores identified in the field during AMRP projects, construction, or by municipalities, plumbers and other stakeholders
- Columbia also found 43 non-legacy cross bores

CROSS BORE RISK RANKING MODEL

- Columbia worked with Opvantek to develop in late 2015/early 2016 a cross bore risk ranking tool
- Columbia began utilizing the Opvantek risk ranking tool in 2016
- The cross bore risk model identified central Ohio communities to guide Columbia's inspection work, similar to the areas Columbia initially targeted when launching the initiative in June

REDUCING CROSS BORE RISK

- Cross bore risk on Columbia's DIMP should decrease as they are remediated once discovered
- This is a long-term metric; Columbia anticipates this metric may increase in the short term and, as cross bores are identified and remediated, this risk may subsequently decrease

CROSS BORE WEBSITE AND PUBLIC EDUCATION

- Columbia launched its website in 2015 to provide customers and plumbers with cross bore information
- Columbia launched a digital cross bore education campaign, targeting websites with sewer clearing materials
- The digital campaign yielded over 2.5 million impressions and 1,640 click throughs
- Columbia also mailed over 2,500 cross bore education brochures to plumbers and municipalities
- Columbia continues visiting plumbing associations and working directly with its sewer infrastructure partners

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- By identifying and remediating cross bores, the initiative continues to decrease cross bore risk identified on Columbia's DIMP

MIDTERM ADJUSTMENTS TO CROSS BORE INITIATIVE

- In 2015, Columbia began working on its cross bore risk model, which provides targeted guidance for the program

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Columbia anticipates, with the new model, more success finding cross bores
- Columbia has found numerous cross bores this year, both gas and non-gas

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- To begin the cross bore program, Columbia issued an RFP for vendors
- Columbia has also worked with its contractor to streamline the process of investigating cross bores

ENHANCED PUBLIC AWARENESS INITIATIVE

INCREASING NATURAL GAS AWARENESS AND GAS INFRASTRUCTURE SAFETY

Baseline Metrix Matrix Survey (July/August 2015) and Annual Metrix Matrix Survey (May 2016)

		Affected Public		Excavators		Emergency Responders		Public Officials	
		2015	2016	2015	2016	2015	2016	2015	2016
Natural Gas in close proximity.	Yes	90%	90%			84%	91%	84%	76%
In the past year, do you recall seeing, hearing or reading any information from Columbia Gas of Ohio regarding natural gas safety?	Yes	44%	41%	40%	53%	45%	55%	46%	56%
Do you know what natural gas smells like?	Yes	88%	88%	95%	92%	97%	98%	93%	96%
Aware of locator service?	Yes	83%	79%	97%	99%	98%	92%	98%	100%
Do you know what number to call before digging?	811	18%	32%	56%	64%	44%	69%	50%	58%
Heard of '811' or another free 'One Call' number?	Yes	45%	51%	90%	92%	82%	91%	88%	90%
Is calling 811 required by law?	Yes	22%	29%	62%	75%	80%	82%	64%	60%
Ohio has significant penalties for digging without calling to have utilities located.	Agree	47%	42%	65%	71%	48%	47%	47%	46%

STATISTICS AND SUCCESSES

1. Radio and Digital Campaigns

- *811 Campaign (August 11 – September 30, 2015)*
  Radio: 2,641 spots; 14.021M impressions
  Digital: 4,931 click throughs; 7.9M impressions
  Mailers: 17,491 first mailer; 450 second mailer
- *Smell & Tell Campaign (October – Nov. 15, 2015)*
  Radio: 2,893 spots; 14.5M impressions
  Digital: 3,726 click throughs; 7.225M impressions

2. Digger Dog

- Developed educational material, magnets and stickers to provide children for over 60 events

3. Excavator and Emergency Responder Training

- Mailed 2,200 brochures throughout Ohio and hosted two training sessions

4. Damage Prevention Coordinators and Training

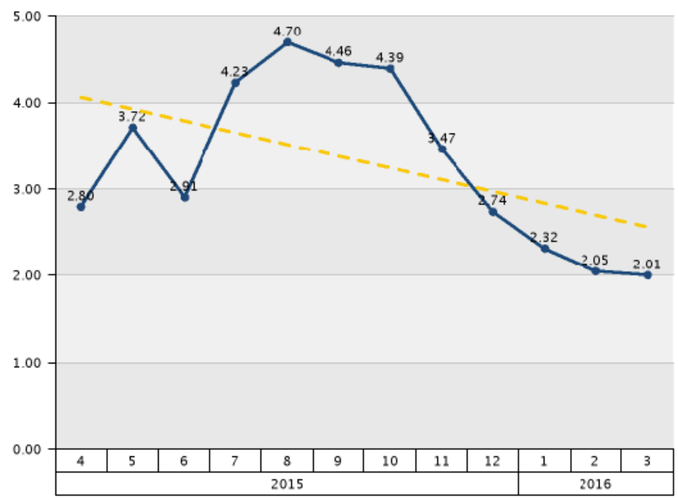
- Developed new presentation materials for DPCs

5. Increased 811 Ticket Call Volume

- Between 2015 and first quarter of 2016, 811 ticket volume increased by 22.71%

6. Decreased Damages per 1,000 Locates

- Between August 2015 and March 2016, Columbia experienced a 57% decrease between 4.70 and 2.01



OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- The largest risk to Columbia's system is excavator risk, which, as is shown in the damages per 1,000 locates, is decreasing

MIDTERM ADJUSTMENTS TO PUBLIC AWARENESS INITIATIVE

- Columbia is expanding its initiative to educate customers about gas infrastructure safety
- Columbia is also increasing its social media presence

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Columbia's baseline survey and follow up survey shows that customers are learning more about 811 and what to do when they smell gas

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia issued an RFP for its advertising specialist
- Columbia outsourced all Digger Dog appearances
- Columbia incorporated social media as part of an enhanced media campaign

DAMAGE PREVENTION TECHNOLOGY INITIATIVE

TRANSMISSION AND DISTRIBUTION FACILITIES LOCATED

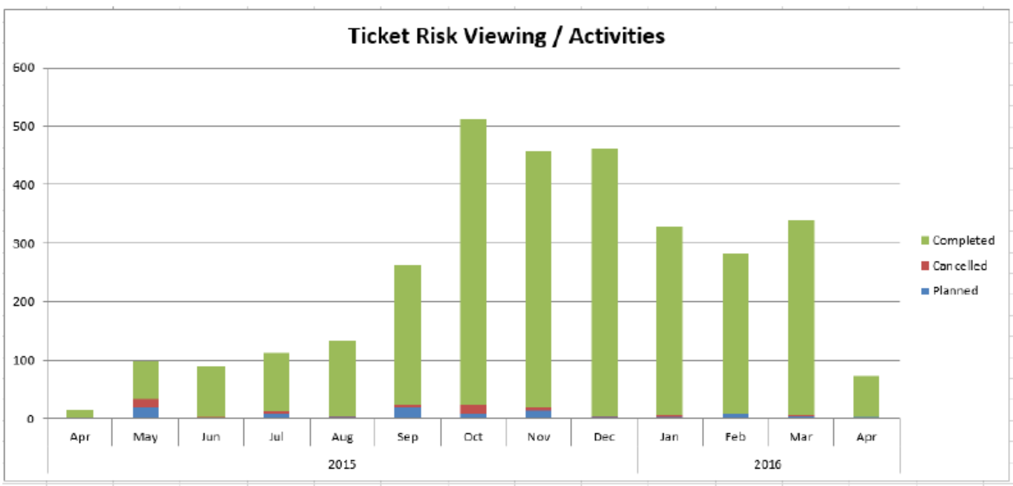
Columbia Gas of Ohio – 2015 Year-End Statistics	
Total Transmission Facility Footage	729,900
Total Distribution Facility Footage	6,222,173
Main Lines	3,473,798
Service Lines	2,018,475
Vendor Points	794,359
Field Collectors (average)	30.4
Challenge Points	101,966
Challenge Percentage	14%

DAMAGES FROM RECORD ERRORS

- Anticipated outgrowth of implementing a more robust system of maps and records is a decrease in damages due to a lack of updated records in Columbia's system
- To set a baseline for this metric, in 2014, out of the 1933 damages, 494 were due to record errors (25.5%), and in 2015, out of 1802 damages, 367 were due to record error (20.4%). Columbia anticipates a decrease in damages from record error over the life of the program.

DAMAGE PREVENTION RISK MODEL (DPRM)

- Columbia launched DPRM to risk rank its 811 tickets; DPRM provides Columbia's Damage Prevention Coordinators (DPCs) a guide to perform in-person mitigation measures before facilities are damaged
- From May 2015 to April 2016, 3,169 tickets were viewed



OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- Once it meets a critical mass, damages due to records errors should decrease
- DPRM guides DPCs to meet in the field with excavators working on high risk tickets.

MIDTERM ADJUSTMENTS TO DAMAGE PREVENTION TECHNOLOGY INITIATIVE

- Columbia is adjusting its DPRM program based on feedback from DPCs and program users
- Columbia is also shifted bidding contracts in unit pricing versus time and expense

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- An investigation of 811 tickets, WMS orders, and damages, guided the GPS program

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

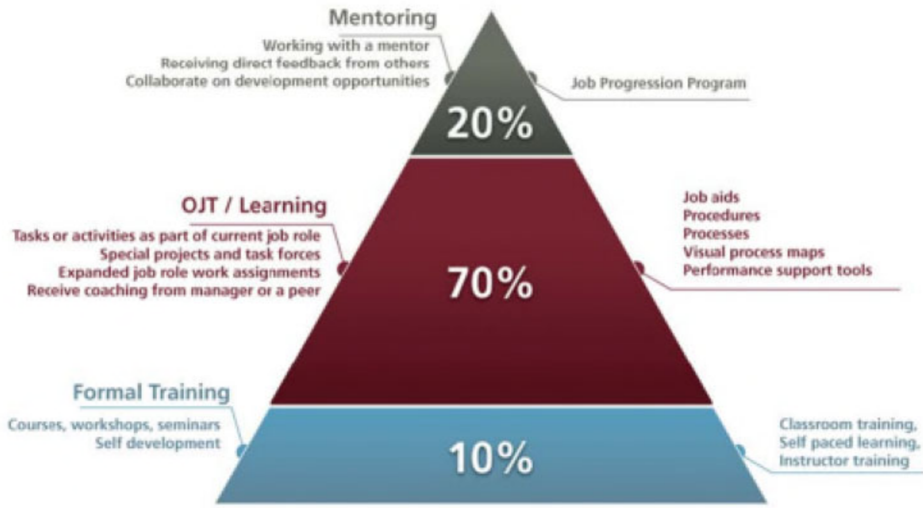
- Columbia is moving geographically throughout its service territory to obtain GPS data
- Columbia is sharing the costs of personnel

ADVANCED WORKFORCE TRAINING INITIATIVE

INCORPORATING NEW CURRICULUM

1. Developed New Hire Curriculum

- In 2015, Columbia designed and launched a three-week New Hire curriculum for new field employees
- Columbia launched the new curriculum in November 2015 with its wave hiring process based on the 70-20-10 Philosophy



2. Developed Basic Plant Curriculum

- Columbia completely reviewed, designed and launched a three-week Basic Plant curriculum for its new plant technicians
- Incremental training provides plant technicians with the foundation for on-the-job training

3. On-the-Job Training Coaches

- Hired 10 on-the-job training coaches to ensure new hires receive all necessary training

INCORPORATING NEW TECHNOLOGY

Launching Comply365

- Columbia piloted Comply365 software with Operations personnel
- Comply365, used by the airline industry, provides a comprehensive platform for technicians to track OJT tasks, access and search gas standards, view manufacturers videos, and obtain other reference material

SELECT A TRAINING FACILITY SITE

Selected Gahanna as the Training Facility location

- Gahanna training center will be located at 1600 Eastgate Parkway, Gahanna, Ohio
- The total square footage for the indoor training facility is approximately 28,000 square feet, with estimated completion in 2017

OTHER MEASURES OF EFFECTIVENESS

PROGRESS TOWARDS REDUCING RISKS TO COLUMBIA'S SYSTEM

- With a more comprehensive training, new hires are able to better maintain Columbia's system.

RESULTS OF ONGOING AND FUTURE INVESTIGATIONS

- Investigations into technology and curriculum produced the prioritization for the initiative

MIDTERM ADJUSTMENTS TO ADVANCED WORKFORCE TRAINING INITIATIVE

- After the November wave hire training, Columbia incorporated minor revisions into its curriculum

IDENTIFYING INEFFICIENCIES AND IMPLEMENTING COST SAVINGS MEASURES

- Columbia is sharing the cost of shared services for the training initiative with its affiliates

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval of an Alternative Form of Regulation.	)))	Case No. 21-638-GA-ALT

APPLICATION OF COLUMBIA GAS OF OHIO, INC. FOR APPROVAL OF AN ALTERNATIVE RATE PLAN

1. Introduction

Pursuant to R.C. 4929.05, 4929.051(B), and 4929.11, Columbia Gas of Ohio, Inc. ("Columbia") submits this Application for authorization to implement an alternative rate plan for its gas distribution service. The alternative rate plan consists of three separate rate recovery mechanisms: the Infrastructure Replacement Program ("IRP") Rider; the Capital Expenditure Program ("CEP") Rider, and the Federally Mandated Investment ("FMI") Rider.

The information required by Ohio Adm.Code 4901:1-19-06(C) is attached in the following exhibits:

Exhibit A: Alternative Rate Plan

Exhibit B: Authorized Exempted Services

Exhibit C: Discussion Regarding Cross-Subsidization of Services

Exhibit D: Discussion Regarding Compliance with R.C. 4905.35 and 4929.02 and Demonstration that the Plan is Just and Reasonable

Exhibit E: List of Witnesses Sponsoring Application Exhibits

Because Columbia is filing this alternative rate plan application in conjunction with an application for an increase in rates under R.C. 4909.18, Columbia will file the testimony in support of this Application within fourteen days of the filing of the base rate case Application.

2. Notice

As required by Ohio Adm.Code 4901:1-16-06(A), Columbia notified Commission Staff that Columbia intended to file this Application, by letter addressed to the directors of the Utilities Department and the Service Monitoring and Enforcement Department. Columbia also notified the mayor and legislative authority of each municipality that Columbia serves, in writing, of Columbia's intent to file this Application and of the proposed rates. Columbia mailed both of these notices on May 28, 2021, and filed them both, separately, in the dockets listed above on the same day. Columbia's notice to the municipalities is attached as PFN Exhibit 5 to its Notice of Intent to File an Application to Increase Rates.

3. Brief Description of Alternative Rate Plan

In this Application, Columbia seeks to continue its existing Infrastructure Replacement Program and Rider IRP, with only minor changes, for a five-year term (2021 to 2026). In particular, it proposes to stop recovering the costs to replace interspersed sections of non-priority pipe through Rider IRP when such interspersed sections comprise more than 50% of replaced pipe for a project; to include in the Accelerated Mains Replacement Program ("AMRP") only pipe replacement projects in which 50% or more of the pipe retired is priority pipe; and to eliminate the 5% annual limit on replacing first generation plastic or Aldyl-A plastic pipe under the AMRP.

Columbia currently has existing authority to defer and recover costs through Rider IRP through December 31, 2022;[22] however, for clarity, Columbia is requesting Rider IRP's continuation to capture investment in the latter nine months of 2021, Columbia's test year, and calendar years 2022 through 2026. Columbia also seeks to continue its Capital Expenditure Program and CEP Rider, for an additional five-year term (2021 to 2026). Similar to Rider IRP, Columbia currently has existing authority to defer and recover costs through the CEP Rider

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[22] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval of an Alternative Form of Regulation*, Case No. 16-2422-GA-ALT ("2016 IRP Case"), Opinion and Order (January 31, 2018).

through December 31, 2021;[23] however, for clarity, Columbia is requesting the CEP Rider's continuation to capture investment in the latter nine months of 2021, Columbia's test year, and calendar years 2022 through 2026. Additionally, it proposes to absorb all CEP and IRP investments as of March 31, 2021, into rate base. For both the IRP and the CEP Rider Investments for calendar year 2021, Columbia will file its Rider Adjustment Applications utilizing the previously granted authority in Case Nos. 16-2422-GA-ALT and 17-2202-GA-ALT until Columbia's base rate proceeding, and its associated rates, go into effect. When Columbia's proposed base rate increase goes into effect, Columbia will then adjust the Rider IRP and CEP Rider to the levels proposed in this application for the latter nine months of calendar year 2021.

Finally, Columbia seeks to establish a new Federally Mandated Investment ("FMI") Rider, to recover increased costs imposed under the Pipeline and Hazardous Materials Safety Administration ("PHMSA") "Mega Rule" and other future mandated governmental spending.

4. Conclusion

For the reasons provided in this Application and its exhibits, Columbia respectfully requests that the Commission extend Columbia's IRP and Rider IRP for another five-year period; extend and Columbia's CEP and CEP Rider for another five-year period; authorize Columbia to implement a Federally Mandated Investment Rider, pursuant to the terms outlined in this Application; and grant any other necessary and proper relief.

[23] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval of an Alternative Form of Regulation to Establish a Capital Expenditure Program Rider Mechanism*, Case No. 17-2202-GA-ALT, Opinion and Order (Nov. 28, 2018).

Respectfully submitted,

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Exhibit A
Ohio Adm.Code 4901:1-19-06(C)(2)(a)
Detailed Alternative Rate Plan

1. Infrastructure Replacement Program

1.1. Background

1.1.1. Case No. 07-478-GA-UNC

In 2005, the Commission opened an investigation into the cause of riser failures throughout the state. After Staff issued its report in November 2006, the Commission's Chairman asked local distribution companies to "begin [a] riser inventory to identify the types and locations of risers on [their systems]"; "address[ ] any * * * faulty riser conditions immediately"; "proactively repair or replace any riser identified" as prone-to-failure in Staff's report; and consider "taking over responsibility for * * * customer owned service lines."[24] Columbia responded by proposing a new Infrastructure Replacement Program ("IRP").[25] Columbia proposed to replace the prone-to-failure risers on its system and associated customer service lines; assume responsibility for maintaining, repairing, and replacing customer service lines; capitalize its investments in those facilities; and recover its riser- and service-line-related costs.

In 2007, the Commission approved Columbia's 3-year plan to replace its prone-to-failure risers and authorized Columbia to assume responsibility for associated service lines with hazardous leaks. It approved "Columbia's assumption of appropriate rights and responsibilities" for the risers and service lines Columbia replaced. And it gave Columbia accounting authority to defer the related costs. [26]

[24] *In the Matter of the Investigation of the Installation, Use, and Performance of Natural Gas Service Risers Throughout the State of Ohio and Related Matters*, Case No. 05-463-GA-COI, Letters from Alan R. Schriber, Chairman, PUCO to All Local Distribution Companies (Jan. 2, 2007, and Jan. 23, 2007).

[25] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval of Tariffs to Recover Through an Automatic Adjustment Clause Costs Associated with the Establishment of an Infrastructure Replacement Program and for Approval of Certain Accounting Treatment*, Case No. 07-478-GA-UNC ("*2007 IRP Case*"), Application (Apr. 25, 2007).

[26] *2007 IRP Case*, Entry, ¶23, at 8 (July 11, 2007); *see also 2007 IRP Case*, Entry on Rehearing, ¶13, at 5 (Sept. 12, 2007).

Early the next year, the Commission approved (with minor modifications) a stipulation and recommendation reaffirming Columbia's responsibility for replacing prone-to-failure risers and maintaining, repairing, and replacing customer service lines with hazardous leaks. The approved stipulation agreed Columbia could capitalize its investment in those risers and customer service lines. It agreed Columbia would recover its IRP revenue requirement through a monthly, fixed IRP Rider. It agreed Columbia could record as a regulatory asset the depreciation, incremental property taxes, and post in-service carrying charges ("PISCC") related to its investment in risers and service lines as Columbia replaced them, for recovery through the IRP Rider. And it established a process for annual proceedings to establish the IRP Rider rate and true-up revenues collected against revenue estimated. The stipulation required Columbia to "file a pre-filing notice containing estimated IRP schedules" by November 30 and an "updated application * * * each following February 28, reflecting actual costs incurred through the end of the preceding year and adjusted to reflect the associated gross receipts tax obligation." The revised IRP Rider rate would then be effective May 1.[27]

1.1.2. Case No. 08-73-GA-ALT

While that case was still pending, Columbia filed an application for authority to increase its gas distribution service rates and for approval of an alternative rate plan.[28] In that application, Columbia proposed adding two more components to its IRP: an Accelerated Mains Replacement ("AMRP") Program and an Automatic Meter Reading Devices ("AMRD") program. The AMRP was designed to "replace approximately 3,770 miles of bare steel pipe, 280 miles of cast iron/wrought iron pipe and an estimated 350,000 to 360,000 steel service lines (company-owned and customer-owned) over a period of approximately 25 years."[29] The AMRD program was, as the name suggests, intended to install AMRDs on "all meters located inside residences and small commercial facilities, as well as on inaccessible outside meters, served by Columbia."[30]

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[27] *See 2007 IRP Case*, Opinion and Order, at 9-13, 36 (Apr. 9, 2008).

[28] *See In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval of an Alternative Form of Regulation and for a Change in its Rates and Charges*, Case No. 08-0073-GA-ALT ("*2008 IRP Case*"), Verified Application for Authority to Increase Rates for Gas Distribution Service and for Approval of an Alternative Regulation Plan (Mar. 3, 2008).

[29] *Id.*, Alt. Reg. Exhibit A, at 1.

[30] *Id.*, Alt. Reg. Exhibit A, at 2.

In December 2008, the Commission approved a stipulation and recommendation to resolve Columbia's second IRP application. Among other things, the approved stipulation agreed that Columbia's IRP should continue for another five years (or until the Commission approved new base rates or a new alternative rate plan for Columbia, whichever came first). It agreed Columbia's Rider IRP should continue; that it should recover Columbia's costs for the components of the IRP, including the maintenance, repair, and replacement of customer service lines "determined by Columbia to present an existing or probable hazard to persons and property" and "[t]he replacement of cast iron, wrought iron, unprotected coated steel and bare steel pipe in Columbia's distribution system" and associated metallic service lines; and that it should "reflect the actual annual savings of operations and maintenance expense as an offset to the costs that are otherwise eligible for recovery through Rider IRP."[31] The Commission approved the recovery of costs related to the AMRP with the understanding that the rider would not recover project costs that would "otherwise be funded by Columbia's existing capital replacement program" and that Columbia would "provide evidence in its annual Rider IRP applications" to prove this.[32] The approved stipulation also agreed Columbia would install AMRD on all of the residential and commercial meters it served, over approximately five years.[33]

Lastly, Columbia agreed to the following limits on Columbia's monthly Rider IRP charge for customers in its Small General Service Class, and to defer any costs in excess of those limits for recovery in subsequent years during the five-year period (with carrying charges computed at Columbia's effective long-term debt rate):[34]

2009	2010	2011	2012	2013
$1.10 / month	$2.20 / month	$3.20 / month	$4.20 / month	$5.20 / month

[31] *2008 IRP Case*, Opinion and Order at 8-10 (Dec. 3, 2008).
[32] *Id.* at 14.
[33] *Id.* at 8.
[34] *Id.* at 9.

1.1.3. Case No. 11-5515-GA-ALT

In May 2012, Columbia filed an application to extend its alternative rate plan through 2017.[35] Columbia reported that it had finished replacing its prone-to-fail risers in 2011 and expected to finish installing AMRDs in 2013.

In September 2012, Columbia filed a stipulation and recommendation, which the Commission approved and adopted a few months later.[36] The approved stipulation required Columbia to develop a plan to finish installing AMRDs in 2013 and stated that Columbia would not seek to recover the costs of AMRD installed in 2014 or later through the IRP.[37] Per Columbia's application, it authorized Columbia to replace non-priority pipe as part of Columbia's AMRP when replacing it was more economical than tying it into existing pipe, but only if the pipe length was less than or equal to certain specified footages (between 205 feet and 435 feet, depending on pipe diameter). It authorized Columbia to replace sections of first generation plastic or Aldyl-A plastic pipe associated with priority pipe-replacement projects, so long as the plastic pipe replaced did not exceed 5% of the pipe footage replaced under the AMRP each year. And it authorized Columbia to replace ineffectively coated steel pipe associated with priority pipe-replacement projects, so long as Columbia cathodically tested the coating on any coated steel pipe installed after 1954 and only included the costs of testing and replacing ineffectively coated steel pipe in Rider IRP. The approved stipulation further stated that, if Columbia replaced less than 1,640 miles of priority pipe under the AMRP by the end of 2017, Columbia could not recover the costs for the shortfall through Rider IRP.[38]

The approved stipulation further clarified that the AMRP should include "costs of system improvements for future growth * * * only if the improvements are for the same purpose as the original role of the priority pipe and the cost is no more than an in-kind * * * replacement of the replaced pipe * * *."[39] It clarified that Columbia could capitalize and recover the cost to move inside meters outside only where Columbia replaced the pipe segment associated with the meter as part of the AMRP, increased the pipe's pressure to regulated pressure (greater than 1

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[35] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval of an Alternative Form of Regulation*, Case No. 11-5515-GA-ALT ("*2011 IRP Case*"), Application, Exhibit A (May 8, 2012).

[36] *2011 IRP Case*, Opinion and Order at 13 (Nov. 28, 2012).

[37] *See id.* at 8.

[38] *Id.* at 4-6.

[39] *Id.* at 6.

psig), and operated the replacement mains and associated service lines at that pressure within two years. And it clarified that, when a governmental entity asks Columbia to relocate its facilities, Columbia can recover costs associated with replacing pipe segments that include priority pipe within a public right-of-way only if plastic pipe makes up no more than 25% of the total relocated footage.[40]

The approved stipulation also established a new basis for calculating O&M savings from the AMRP. It agreed that O&M savings would be calculated based on savings from avoided leak inspection, leak repair, general/other, and half of supervision and engineering. Columbia also guaranteed minimum O&M savings, increasing from $750,000 in 2012 to $1,250,000 in 2014 through 2017. In return, the parties agreed that all IRP projects completed between 2012 and 2017 would not be "considered to be projects that otherwise would have been included in Columbia's capital replacement program * * *."[41]

Finally, the approved stipulation imposed the following caps on the monthly rider IRP charge for Columbia's SGS and SGTS customers:[42]

2014	2015	2016	2017	2018
$6.20 / month	$7.20 / month	$8.20 / month	$9.20 / month	$10.20/ month

Additionally, the approved stipulation required Columbia to provide $2,562,500, funded by Columbia's shareholders, to continue its low-income customer assistance fund from 2013-2014 through the 2017-18 winter heating season.[43]

1.1.4. Case No. 16-2422-GA-ALT

In February 2017, Columbia filed its most recent application to extend its IRP, on the same basic terms imposed in prior Commission orders.[44] In August 2017, Columbia filed a joint stipulation, which the Commission approved with modifications in January 2018.[45]

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[40] *Id.* at 6-7.
[41] *Id.* at 7-8.
[42] *Id.* at 8-9.
[43] *Id.* at 9.
[44] *2016 IRP Case*, Application at 1 (Feb. 27, 2017).
[45] *2016 IRP Case*, Opinion and Order (Jan. 31, 2018).

The approved stipulation extended the IRP through the end of 2022.[46] The approved stipulation also raised the minimum AMRP O&M savings to $2.00 million per year and imposed new SGS class rate caps for Rider IRP:[47]

2019	2020	2021	2022	2023
$11.35/month	$12.50/month	$13.70/month	$14.95/month	$16.20/month

Additionally, the parties to the stipulation agreed that all IRP projects completed between 2018 and 2022 would be considered projects that otherwise would not have been included in Columbia's capital replacement program.[48]

1.2. Columbia's Proposed Plan for the IRP

Columbia now seeks the Commission's approval to continue the previously approved IRP and Rider IRP, with minor changes to the scope and procedures currently applicable to both as described below, for another five-year period, from 2021 through the end of 2026.

1.2.1. Hazardous Service Line Program (HSLP)

Columbia completed its replacement of prone-to-failure risers in June 2011, for $16 million less than originally estimated. In its 2012 alternative rate case application, Columbia explained that its "riser replacement cost component [would] remain in Rider IRP until Columbia includes [those] investments into its base rates during its next base rate [case]."[49] Accordingly, in the base rate case filed in conjunction with this alternative rate case application, Columbia is proposing to include its riser-related deferred depreciation, incremental property taxes, and PISCC as of March 31, 2021, in base rates. *See* Schedule B-6.

Columbia proposes to continue capitalizing and including within its IRP the costs associated with maintaining, repairing, and replacing service lines that Columbia has determined to present an existing or probable hazard to persons or

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[46] *Id.* at 8.
[47] *Id.* at 9.
[48] *Id.*
[49] *2011 IRP Case*, Application, Exhibit A, at 3 (May 8, 2012).

property.[50] Through December 2020, Columbia had replaced approximately 85,106 hazardous customer service lines under the IRP. Columbia expects service line repairs and replacements to continue throughout its service area for the following five years.

1.2.2. Accelerated Mains Replacement Program (AMRP)

Columbia has identified approximately 4,100 miles of priority pipe to replace under the AMRP. By the end of 2020, Columbia had replaced more than 2,200 miles of priority pipe. Columbia proposes to continue capitalizing and recovering the costs of these priority pipe and service line replacements through Rider IRP. Based on current projections, Columbia estimates it will finish replacing priority pipe within twenty-five years, as originally planned.

Columbia will continue to use a systematic approach in the replacement of priority pipe. By identifying large portions of the system and prioritizing based on age, leak history, geographic proximity, and other factors, Columbia can concentrate resources in a given area and leverage economies of scale to minimize construction costs and disruption to the communities it serves. In addition, this systematic approach allows for the conversion of larger diameter pipe for low pressure systems to smaller diameter pipe for higher pressure systems, which improves service reliability and capacity while reducing installation and ongoing maintenance costs. Columbia continues to use Optimain DS™ to help evaluate and rank pipe segments system-wide against a range of environmental conditions, risks, and other factors. Starting in 2022, Columbia will upgrade to Uptime RMP.

With Columbia coming to the latter half of the IRP, Columbia is requesting additional flexibility with the scoping of its AMRP projects. Columbia proposes to remove the limitations on interspersed non-priority pipe eligible for inclusion in the AMRP program. In lieu of an interspersed pipeline limitation, Columbia proposes to set a simple 50% threshold. Projects in which 50% or more of the pipe retired is priority pipe will be included in the AMRP. Projects in which less than 50% of the pipe retired is priority pipe will be included in the CEP.

Columbia proposes to continue capitalizing and recovering its costs associated with replacing pipe segments that include priority pipe within a public right-

[50] Columbia is proposing to rename "customer service lines" as "service lines," to reflect the changes in responsibility for such lines granted to Columbia in Case Nos. 07-478-GA-UNC and 08-73-GA-ALT. *See* Schedules E-1, E-2.1, and E-3.

of-way under the AMRP, where a governmental entity has asked Columbia to relocate its facilities. However, per the proposal in the prior paragraph, Columbia would only include such projects in the AMRP so long as any priority pipe associated with the relocation is no more than 50% of the total relocated footage.

Columbia proposes to continue capitalizing and recovering its costs to replace first generation plastic pipe or Aldyl-A when such pipe is associated with priority pipe in replacement projects. However, per the proposal above, Columbia proposes to eliminate the current 5% plastic pipe replacement restriction associated with priority pipe-replacement projects. Instead, Columbia is proposing that the plastic pipe limitation be removed, in favor of the 50% threshold discussed above to determine which rider recovers the cost of the project. Columbia also proposes to continue capitalizing and recovering its costs to replace ineffectively coated steel pipe associated with priority pipe replacement projects.

1.2.3. Automatic Meter Reading Devices

Columbia previously included within Rider IRP the costs associated with installing automatic meter reading devices (AMRDs) on all residential and commercial meters. Columbia installed AMRDs on all but 1,102 active meters by 2013.[51] Columbia agreed, in the approved stipulation in Case No. 11-5515-GA-ALT, that it would not seek cost recovery through Rider IRP for any AMRDs installed after December 31, 2013. As with the riser replacement cost component, Columbia's base rate case application proposes to include in base rates its deferred depreciation, property taxes and PISCC for AMRD installed before 2014.

1.2.4. Rider IRP Revenue Requirement Components

Columbia is proposing to include its cumulative IRP investments and adjusted operating expenses as of March 31, 2021, in base rates and reset Rider IRP to zero. Columbia will continue to recover its incremental IRP costs above the IRP investment absorbed into rate base by computing a revenue requirement based on cumulative plant investment through December 31 (date certain) of the calendar year prior to that in which the rates from its annual IRP application become effective. This revenue requirement will provide for a return on rate base of 9.32% (a 7.85% rate of return plus a 1.27% tax gross-up factor) and the return of all program

[51] *2011 IRP Case*, Report on Installation of Automatic Meter Reading Devices (Mar. 3, 2014).

costs. The revenue requirement for IRP will continue to include the components discussed in the following subsections.

1.2.4.1.Return on Net Plant Investment

Investment will continue to be valued at the date certain and include cumulative gross plant additions (capitalized at Columbia's actual cost of replacement and shown as an increase to rate base as projects are placed in service), less cumulative retirements, less the associated accumulated reserve for depreciation, plus the cost of removal, plus cumulative retirements, plus cumulative capitalized interest or post-in-service carrying costs (at Columbia's weighted long-term cost of debt), plus cumulative deferred depreciation expense (at the applicable, Commission-approved depreciation rate), plus cumulative deferred property taxes (at the estimated composite property tax rate), and less net deferred income taxes associated with the IRP.

Columbia requests accounting authority to: (1) continue accounting for the deferral of depreciation expense on all investment between the date the property is placed into service and the date recovery of the investment commences; (2) to continue deferring property taxes on all investment between the dates the property is placed into service and the date recovery of the investment commences; and (3) to continue deferral of post-in-service carrying costs on all investment between the dates the property is placed into service and the date recovery of the investment commences. Deferred expenses such as deferred depreciation, deferred property taxes, and deferred PISCC are amortized over the life of the associated assets using the current depreciation rate. Amortization does not begin until Columbia starts recovering the associated expense through rates.

1.2.4.2. Customer Education Expenses

Consistent with the treatment provided in Columbia's prior alternative rate cases, Columbia is requesting authority to continue accruing customer education expenses to FERC 182, Other Regulatory Assets for recovery through the IRP.

1.2.4.3. O&M Savings Associated with the AMRP

Columbia is proposing to continue guaranteeing minimum AMRP O&M savings of $2.00 million per year, which will be shown as a line item reduction in the annual revenue requirement calculation to be credited to customers in future

Rider IRP adjustment proceedings. Columbia will continue to guarantee to pass back the greater of the actual O&M savings or $2.00 million per year.

Columbia proposes to continue calculating actual O&M savings by comparing savings from avoided leak inspection, leak repair, and general/other, and half of the savings from supervision and engineering, to Columbia's actual expenses incurred in each of those four categories during the baseline twelve-month period ending in December 31, 2021.

1.2.5. Process for Establishing Rider IRP Rates

Columbia proposes to submit an application to adjust the Rider IRP rate in an annual proceeding that is separate and distinct from Columbia's Rider DSM adjustment proceeding. Columbia proposes to continue filing a pre-filing notice by each November 30 containing partially estimated (9 months of actual, 3 months of estimated calendar year data) Rider IRP schedules for the charge to become effective by Unit 1 billing the following May. By the following February 28, Columbia will file an updated application with schedules based on actual incurred costs through December 31. Each annual application will continue to true-up authorized revenues to those actually collected from customers. And audit costs charged to Columbia will be recovered through the rider and will be exempt from any associated cap. And, if Columbia files a general rate case before the end of the authorized term, the cumulative IRP investments and adjusted operating expenses will again be included in base rates and Rider IRP will again be reset to zero.

1.2.6. Monthly Rider IRP Rate Caps

In its application to increase base rates, Columbia is proposing to include the cumulative IRP investments and adjusted operating expenses as of March 31, 2021, in base rates and to reset Rider IRP to zero. Here, Columbia is proposing new annual maximum rates for its monthly Rider IRP charge for Columbia's SGS, SGTS, and FRSGTS customers ("SGS Class"). Columbia's proposed maximum rates reflect the projected capital Columbia intends to spend in the next five years. Additionally, Columbia has included a 10% adder to build flexibility into the budget. This will provide Columbia the ability to continue the twenty-five year pace of the Infrastructure Replacement Program. Columbia proposes that the SGS Class Rider IRP charge based on investments in Calendar Years 2021-2026 not exceed:

2021	2022	2023	2024	2025	2026
$1.51/month	$3.25/month	$5.01/month	$6.79/month	$8.62 /month	$10.87/ month

Columbia also proposes to continue deferring any costs in excess of the monthly rate limits, with carrying charges at Columbia's long-term debt rate, for recovery in any subsequent Rider IRP application during the five-year period of this extended IRP (so long as recovery would not cause Columbia to exceed the applicable maximum rate).

1.2.7. The Calendar Year 2021 Rider IRP Adjustment

For the Rider IRP Investments for calendar year 2021, Columbia will file its Rider Adjustment Application utilizing the previously granted authority in Case No. 16-2422-GA-ALT until Columbia's base rate proceeding, and its associated rates, go into effect. When Columbia's proposed base rates increase goes into effect, Columbia will then adjust the Rider IRP rate to the levels proposed in this Application for the latter nine months of calendar year 2021. For example, in February 2022, Columbia will file a Rider IRP Adjustment Application with twelve months of data from calendar year 2021. If the Commission approves an SGS rate of $14.95, which is the corresponding SGS rate cap for Rider IRP for calendar year 2021 investment, then Columbia would put that rate into effect with Unit 1 of May Billing. Likewise, if the Commission approved Columbia's new proposed base rate and Rider IRP rate effective with Unit 1 of July 2022 billing, the Columbia's base rates would increase from $16.75 to $46.31 and Columbia's Rider IRP rate would decrease from $14.95 to $1.51.

2. Capital Expenditure Program

2.1. Background

2.1.1. Case No. 11-5351-GA-UNC

In 2011, Columbia filed an application to implement a capital expenditure program ("CEP") from October 1, 2011, to December 31, 2012, and to modify its accounting procedures to provide for capitalization of post-in-service carrying costs ("PISCC"), and deferral of depreciation expense and property taxes, directly attributable to CEP assets placed into service but not reflected in rates as plant in service ("CEP Deferral").[52] Columbia originally identified six categories of capital projects that would be included in the CEP:

> a) **Replacement/Public Improvement/Betterment** – Replacement of facilities for * * *: (1) physical deterioration; (2) meeting the requirements of governmental authorities related to street and highway construction; (3) accommodating existing customer requests for facility relocation; and, (4) improving system operating conditions and ensuring adequate distribution system capacity and/or system reliability. * * *
>
> b) **Acquisitions –** Costs related to purchase of gas transmission, distribution, or storage facilities. * * *
>
> c) **Growth** – Facilities required to provide service to new customers or to provide increased load capacity to existing customers. * * *
>
> d) **Support Services** – Capital expenditures that are not directly related to gas facilities * * *.
>
> e) **Information Technology –** Capital expenditures related to technology and communications infrastructure. * * *
>
> f) **Distribution Integrity Management Plan Implementation –** Capital expenditures identified as necessary to implement a Distribution Integrity Management Plan process that may fall into any or all of the categories described above. * * * [53]

The Commission approved the application, with modifications and clarifications, in August 2012.[54] The Commission directed Columbia to "offset the monthly regulatory asset amount charged to the CEP by those revenues generated from the assets included in the CEP[,]" and to maintain records sufficient to allow Staff to verify Columbia's compliance with that requirement.[55] The Commission

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[52] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval to Implement a Capital Expenditure Program*, Case Nos. 11-5351-GA-UNC, *et al.* ("*2011 CEP Case*"), Application Not For An Increase in Rates for Approval of a Capital Expenditure Program and for Approval to Change Accounting Methods (Oct. 3, 2011).

[53] *Id.* at 2-4.

[54] *2011 CEP Case*, Finding and Order (Aug. 29, 2012).

[55] *Id.*

also authorized Columbia to accrue CEP deferrals only so long as the rates to recover these deferred expenses for the Small General Service ("SGS") class would be less than $1.50 per month.[56] And, it directed Columbia to make a filing by April 30 each year that detailed its monthly CEP investments, estimated "the effect that the proposed deferrals would have on customer bills, if they were to be included in rates[,]"and provided "a capital budget for the upcoming year."[57]

2.1.2. Case No. 12-3221-GA-UNC

In December 2012, Columbia filed an application to continue its approved CEP Deferral beyond December 31, 2012, pursuant to the same conditions imposed in the prior CEP proceeding, up to the point where the accrued deferrals, if included in rates, would cause SGS class customers' rates to increase by more than $1.50 per month.[58] In that application, Columbia clarified that its CEP would not include two of the categories of capital projects identified in its prior application: Acquisition, and Distribution Integrity Management Plan Implementation.[59] Columbia also clarified that costs included in the CEP would include, where applicable, "Supervisory, Engineering, General, and Administrative Overheads, and an Allowance for Funds Used During Construction, * * * net of any contributions, deposits, or other aid to construction." And it explained that the CEP would not include costs included in Columbia's IRP or CHOICE/SSO Reconciliation Rider.[60]

The Commission approved the application in 2013.[61] The Commission's order modified Columbia's annual CEP informational filing process to allow for the filing of comments and reply comments and (if necessary) further review of the information filing, but did not otherwise modify the CEP.[62]

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[56] *Id.* at 12-13.

[57] *Id.* at 12.

[58] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval to Implement a Capital Expenditure Program*, Case Nos. 12-3221-GA-UNC, *et al.* ("*2012 CEP Case*"), Application Not For An Increase in Rates of Columbia Gas of Ohio, Inc. for Approval of a Capital Expenditure Program and for Approval to Change Accounting Methods (Dec. 24, 2012).

[59] *See id.* at 3-4.

[60] *Id.* at 4.

[61] *2012 CEP Case*, Finding and Order (Oct. 9, 2013).

[62] *Id.* at 5-6.

2.1.3. Case No. 17-2202-GA-ALT

In December 2017, Columbia filed an application to establish a new CEP Rider to recover the CEP Deferral and the CEP assets to which those expenses were directly attributable (the "CEP Investment").[63] The following October, Columbia filed a stipulation and recommendation, which the Commission approved and adopted in its entirety.[64]

The approved stipulation authorized Columbia to continue its previously authorized CEP Deferral and to establish a CEP Rider to recover the CEP Deferral and "provide for a return on and of the [CEP] assets" corresponding to the expenditures in the CEP Deferral.[65] Columbia agreed to "an immediate adjustment to CEP Investment in the form of a depreciation offset of $289.9 million, for the period October 2011 through December 31, 2017[,]" which Columbia's annual CEP Rider revenue requirement filings are required to reflect until the Commission resets Columbia's CEP Rider in its 2021 base rate case.[66] To reflect the effects of the Tax Cuts and Jobs Act of 2017 ("TCJA"), Columbia also agreed to a pre-tax rate of return for the CEP Investment of 9.52%, "unless and until the Commission modifies the rate of return in Columbia's 2021 base rate case," and a reduction to its base rates.[67]

The approved stipulation also set up a process to "adjust the CEP Rider rates each year to collect from customers the prior calendar year's CEP Investment and related deferrals."[68] Each year, by February 28, Columbia is required to file an application that reflects actual data for the prior calendar year and a rate of return "based on the capital structure and cost of capital authorized by the Commission in Columbia's most recent base rate case" and also "true[s] up revenues collected with revenues estimated in future filings."[69] If Staff finds the application just and reasonable and no intervenor files an objection (or any objections are resolved by July 31), the new CEP Rider rate goes into effect on September 1.

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[63] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval of an Alternative Form of Regulation*, Case No. 17-2202-GA-ALT ("*2017 CEP Case*"), Application of Columbia Gas of Ohio, Inc. (Dec. 1, 2017).

[64] *2017 CEP Case*, Opinion and Order (Nov. 28, 2018).

[65] *Id.* at 13.

[66] *Id.* at 15.

[67] *Id.* at 20.

[68] *Id.* at 16.

[69] *Id.* at 16-17.

As part of the 2017 case, Blue Ridge audited Columbia's CEP Investment from October 2011 through December 31, 2017, and found it to be necessary, prudent, and reasonable, with the exception of a small disallowance. Consequently, under the stipulation, "the baseline for the plant in service necessity, prudency, and reasonableness review will begin with the plant balances as of December 31, 2017[,]" though OCC reserved the right to challenge pre-2018 plant in service.[70]

The stipulation also established the initial CEP Rider charge for the first billing cycle of 2019, along with caps on the CEP Rider charge and on Columbia's capital expense deferral authority through the next rate case:[71]

Rate Effective Date	Nov. 28, 2018	Sept. 1, 2019	Sept. 1, 2020	Sept. 1, 2021	Sept. 1, 2022
SGS Rate	$3.51	$4.56	$5.61	$6.66	$7.71
GS Rate	$29.29	$38.83	$48.05	$57.41	$66.91
LGS Rate	$566.69	$740.96	$918.00	$1,098.12	$1,281.45
CEP Assets Recovered	Oct. 2011 – Dec. 2017	Oct. 2011 – Dec. 2018	Oct. 2011 – Dec. 2019	Oct. 2011 – Dec. 2020	Oct. 2011 – Dec. 2021
Base Rate Depreciation Offset	Oct. 2011 – Dec. 2017	Oct. 2011 – Dec. 2018	Oct. 2011 – Dec. 2019	Oct. 2011 – Dec. 2020	Oct. 2011 – Dec. 2021

Additionally, Columbia agreed to "include specific annual rate caps and annual audits" if it filed an application for an alternative rate plan to continue the CEP Rider for CEP Investment in 2022 and beyond.[72] The signatory parties agreed that Columbia could continue its CEP Deferral "for assets placed in service beginning January 1, 2022, and beyond so long as Columbia meets its rate case filing commitment."[73]

[70] *Id.* at 14-15 and n.7.
[71] *Id.* at 18-19.
[72] *Id.* at 18.
[73] *Id.* at 24.

2.2. Columbia's Proposed Plan for the CEP

Columbia now seeks approval to continue the CEP and CEP Rider, under the scope and procedures currently applicable to both, with investment through calendar year 2026, with updated CEP Rider rates effective Unit 1 of September 2022 through September 2027.

2.2.1. CEP Investments and CEP Deferral Assets

The CEP Rider would continue to provide for a return on and of the CEP Investment. As indicated above, the CEP Investment includes four categories of capital investment:

a. **Replacement/Public Improvement/Betterment** – Replacement of facilities for any of the following reasons: (1) physical deterioration; (2) meeting the requirements of governmental authorities related to street and highway construction; (3) accommodating existing customer requests for facility relocation; and, (4) improving system operating conditions and ensuring adequate distribution system capacity and/or system reliability. This Replacement/Public Improvement/Betterment category may include, but is not limited to, costs related to installation of and/or improvements to mains and service lines, measuring and regulation stations, district regulator stations, excess pressure measuring stations, meters, meter sets, AMR devices, house regulators, and any associated buildings, land or land rights.

b. **Growth** – Facilities required to provide service to new customers or to provide increased load capacity to existing customers. This category may include, but is not limited to, costs associated with the installation of and/or improvement to mains and services (including service line installations to new customers served by existing mains), district regulator stations, excess pressure measuring stations, meters, meter sets, AMR devices, house regulators, and any associated land or land rights.

c. **Support Services** – Capital expenditures that are not directly related to gas facilities fall into this category, which may include, but is not limited to, costs associated with the purchase of and/or improvements to buildings and structures (including associated land and land rights), environmental remediation at company-owned facilities, office furniture and equipment, motorized equipment and trailers, power-operated equipment, and other miscellaneous equipment.

d. **Information Technology** – Capital expenditures related to technology and communications infrastructure. This category may include, but is not limited to, costs associated with the purchase and installation of communications equipment (including associated buildings, land, or land rights), data processing equipment, data processing software, and software licenses.

For all of these categories, the costs include (where applicable) supervisory, engineering, general, and administrative overheads and an Allowance for Funds Used During Construction, which are net of any contributions, deposits, or other aid to construction. None of the capital expenditures in the categories described above include costs targeted for inclusion in Columbia's IRP.

Columbia adheres to the FERC Unified System of Accounts prescribed for Natural Gas Companies and Generally Accepted Accounting Principles when accounting for the actual cost of capital projects. Pursuant to the FERC Unified System of Accounts, all amounts included are just and reasonable. Projects that are deemed "used and useful" in serving the needs of Columbia's customers are reported as in service in these categories. Columbia also keeps detailed gas plant account records to permit identification, analysis, and verification of capitalized costs deferred.

2.2.2. Calculation of the CEP Deferral

Columbia requests continuing accounting authority, to the extent necessary, to continue accounting for the deferral of depreciation expense, and deferring property taxes and PISCC, on all investment between the dates the property is placed into service and the date recovery of the investment commences through the CEP Rider. Deferred expenses such as depreciation, property taxes, and PISCC will be amortized over the life of the associated assets using the depreciation rate determined in the base rate case filed in conjunction with this Application. Amortization will not begin until Columbia starts recovering the associated expense through the CEP Rider.

Columbia proposes to apply the following calculation for the CEP Deferral:

Total Monthly Deferral = (PISCC) + (Depreciation Expense) + (Property Tax Expense)

Where:

PISCC = [(Previous Month's Cumulative Gross Plant Additions) – (Previous Month's Accumulated Depreciation) – (Previous Month's Cumulative Retirements)] *[(Long-Term Debt Rate) / (12 Months)]

Depreciation Expense = [(Previous Month's Cumulative Gross Plant Additions) – (Previous Month's Cumulative Retirements) + (½ Current Month's Plant Additions) – (½ Current Month's Retirements)] * [(Depreciation Rate) / (12 Months)]

Property Tax Expense = [(Previous Year-End Cumulative Gross Plant Additions) – (Previous Year-End Cumulative Retirements)] * (Percent Good Adjustment) * Valuation Percentage * [(Effective Property Tax Rate) / (12 Months)]

2.2.3. Process for Establishing CEP Rider

Columbia is proposing to include its cumulative CEP investments and adjusted operating expenses as of March 31, 2021, in base rates and reset the CEP Rider to zero. As before, the CEP Rider will be a fixed monthly charge, which will be adjusted each year to collect from customers the prior calendar year's CEP Investment and CEP Deferral. Annually, by the last day of February (beginning in 2022 for the latter nine months of 2021, which are not captured in base rates by the March 31, 2021 date certain), Columbia will file an application to adjust its CEP Rider rates to collect from customers the CEP Investment and related deferrals through December of the prior calendar year. Each year's application will contain schedules based on twelve months of actual data for the prior calendar year. The rate of return used to develop the revenue requirement in each such application will be based on the capital structure and cost of capital authorized by the Commission in Case No. 21-637-GA-AIR.

Staff will review the CEP Investment for the prior calendar year and file a report by June 25 of each year. Any audit costs charged to Columbia will be recovered through the rider and will be exempt from any associated cap. The new CEP Rider rate will become effective by September 1 following the February filing unless Staff finds Columbia's filing to be unjust and unreasonable, or any other party granted intervention by the Commission files an objection to the Staff Report, that is not resolved by Columbia by July 31 of each year. If Staff finds that Columbia's application is unjust or unreasonable, or any other party granted intervention by the Commission files an objection to Columbia's annual filing or Staff's review that is not resolved by July 31, Columbia will propose an expedited hearing process in order to effectuate the implementation of the CEP Rider rates by September 1, or the first billing cycle of the revenue month following the Commission's decision. Each application to revise the CEP Rider rates through the use of this process will true-up revenues collected with revenues estimated in future filings.

2.2.4. CEP Budgets

In the Stipulation and Recommendation that the Commission adopted in Case No. 17-2202-GA-ALT, Columbia agreed to provide budgets for the CEP capital for calendar years 2021, 2022, and 2023 in this Application. Columbia's budget for the CEP capital for those three years is as follows:

Calendar Year	Budget for CEP Capital (Millions)
2021	$301.1
2022	$344.7
2023	$366.9

2.2.5. Revenue Requirement Components and Rider Caps

In Columbia's base rate case application, Columbia is proposing to absorb the balance of the CEP Investment and the CEP Deferral as of March 31, 2021, into rate base and reset the CEP Rider to $0. On February 28, 2022, Columbia will file an application to set new CEP Rider rates to begin with Unit 1 of September, 2022 billing, based on the latter nine months' CEP Investment and CEP Deferral as of December 31, 2021, pursuant to the authority granted in Case No. 17-2202-GA-ALT. Starting with calendar year 2022 CEP Investment, Columbia will seek to recover its incremental CEP Deferral and CEP Investment on a calendar-year basis. These revenue requirements would provide for a return on the CEP Investment of 9.32% (a 7.85% rate of return plus a 1.27% tax gross-up factor) and the return of all CEP costs. Total CEP Rider investment will be valued at the Investment Date (the date on which the underlying asset was placed in service) and the Deferral Date (the date on which deferrals are included in the CEP Rider revenue requirement for recovery). Cumulative gross plant additions will be capitalized at Columbia's actual cost of replacement and shown as an adjustment to the Net CEP Investment as projects are placed in service. PISCC are calculated at Columbia's weighted long-term cost of debt. Cumulative deferred depreciation expense is calculated at the applicable, Commission-approved depreciation rate. Cumulative deferred property taxes are calculated at the estimated composite property tax rate. As before, deferred expenses such as deferred depreciation, property taxes, and PISCC will be amortized over the life of the associated assets using the depreciation rate approved in this case. Amortization will not begin until Columbia starts recovering the associated expense through the CEP Rider.

Columbia is requesting a change to the method by which the CEP Rider is calculated. In Case No. 17-2202-GA-ALT, Columbia agreed to offset its CEP Plant-in-Service by the depreciation expense for capital in Columbia's base rates. With this proceeding, the rate base depreciation offset is no longer needed as Columbia is adjusting its rates to reflect the depreciation expense embedded in base rates set in Columbia's last rate case, Case No. 08-72-GA-AIR, *et al.* Therefore, Columbia is requesting this change to its CEP Rider Revenue Requirement.

In an effort to mitigate the impact of the CEP Rider charges to customers, Columbia is proposing new annual maximum rates for its monthly CEP Rider charge for Columbia's SGS Class. Columbia's proposed maximum rates reflect the projected capital Columbia intends to spend in the next five years. Additionally, Columbia has included a 15% adder to build flexibility into the budget as proposed. Columbia proposes the following rate limits:

Rate Effective Date	Sept. 2022	Sept.2023	Sept. 2024	Sept. 2025	Sept. 2026	Sept. 2027
SGS Rate	$1.78	$4.31	$6.96	$10.54	$13.14	$15.89
CEP Assets Recovered	Apr. 2021 – Dec. 2021	Apr. 2021 – Dec. 2022	Apr. 2021 – Dec. 2023	Apr. 2021 – Dec. 2024	Apr. 2021 – Dec. 2025	Apr. 2021 – Dec. 2026

Columbia also proposes to continue deferring any costs in excess of the monthly rate limits, with carrying charges at Columbia's long-term debt rate, for recovery in any subsequent CEP Rider application during the five-year period of this extended CEP (so long as recovery would not cause Columbia to exceed the applicable maximum rate). Columbia also requests to continue deferring expenses associated with CEP investments placed in service after December 31, 2026, until Columbia requests recovery in a separate proceeding. Pursuant to the authority granted in Case Nos. 12-3221-GA-UNC, et al., Columbia also will continue to defer eligible expenses associated with CEP investments not recovered through the CEP Rider until such time as Columbia recovers them through a separate proceeding.

2.2.6. The Calendar Year 2021 CEP Rider Adjustment

For the CEP Rider Investments for calendar year 2021, Columbia will file its Rider Adjustment Application utilizing the previously granted authority in Case No. 17-2202-GA-ALT until Columbia's base rate proceeding and its associated rates go into effect. When Columbia's proposed base rates increase goes into effect, Columbia will then adjust the CEP Rider rate to the levels proposed in this application for the latter nine months of calendar year 2021. For example, in February 2022, Columbia will file a CEP Rider Adjustment Application with twelve months of data from calendar year 2021. If the Commission approves an SGS rate of $7.71 (the corresponding SGS rate cap for CEP Rider for calendar year 2021 investment), then Columbia would put that rate into effect with Unit 1 of September Billing. Likewise, if the Commission subsequently approved Columbia's proposed base rate and Rider IRP rate effective with Unit 1 of December 2022 billing, the Columbia's base rates would increase from $16.75 to $46.31 and Columbia's Rider IRP rate would decrease from $7.71 to $1.78.

3. Federally Mandated Investment Rider

As part of its Application, Columbia is proposing a new Federally Mandated Investment (FMI) Rider. The FMI Rider will be a monthly charge for customers in all rate classes to allow Columbia to recover incremental costs, both capital and O&M, associated with federally and state-mandated investments in plant, including investments to comply with the Pipeline and Hazardous Materials Safety Administration ("PHMSA") "Mega Rule." The Mega Rule, which was published on October 1, 2019, and became effective on July 1, 2020, enhances safety regulations for onshore gas transmission pipelines and establishes required actions by pipeline operators.[74] In particular, it sets requirements for maximum allowable operating pressure (MAOP) reconfirmation and verification of pipeline materials; includes enhanced repair requirements for high consequence areas (HCAs) and non-HCAs; and includes new requirements for emergencies, enhancing PHMSA's authority to issue emergency orders and address imminent hazards.

3.1.1. FMI Investments and FMI Deferral Assets

The FMI Rider would provide for a return on and of the FMI spend. This includes any capital spend and O&M associated with federally mandated or state mandated government investment. Initially, Columbia is planning to include the company's investment (both capital and O&M) to comply with the Mega Rule. For all of categories of FMI spend, the costs include (where applicable) supervisory, engineering, general and administrative overheads, and an Allowance for Funds Used During Construction. None of the capital expenditures in the FMI Rider include costs targeted for inclusion in Columbia's IRP.

Columbia adheres to the FERC Unified System of Accounts prescribed for Natural Gas Companies and Generally Accepted Accounting Principles when accounting for the actual cost of capital projects. Pursuant to the FERC Unified System of Accounts, all amounts included are just and reasonable. Projects that are deemed "used and useful" in serving the needs of Columbia's customers are reported as in service. Columbia also keeps detailed gas plant account records to permit identification, analysis, and verification of capitalized costs deferred. Columbia proposes that any and all costs related to the FMI be deferred until Columbia files the application described in 3.1.2 below.

3.1.2. Process for Establishing FMI Rider

The FMI Rider will be a fixed monthly charge, which will be adjusted each year to collect from customers the prior calendar year's FMI spend and FMI Deferral. Annually, by the last day of February (beginning in 2023 for calendar year 2022 FMI spend), Columbia will file an application to adjust its FMI Rider rates to collect from customers the FMI spend and related deferrals through December of the prior calendar year. Each year's application will contain schedules based on

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[74] Pipeline Safety: Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments, 84 Fed. Reg. 52,180 (Oct. 1, 2019) (to be codified at 49 CFR Part 191 and Part 192).

twelve months of actual data for the prior calendar year. The rate of return used in development of the revenue requirement in each such application will be based on the capital structure and cost of capital authorized by the Commission in Case No. 21-637-GA-AIR.

Staff will perform a review of Columbia's annual filing of the FMI spend for the prior calendar year and file a report by June 25 of each year. Any audit costs charged to Columbia will be recovered through the rider and will be exempt from any associated rate cap. The new FMI Rider rate will become effective Unit 1 of September billing following the February filing unless Staff finds Columbia's filing to be unjust and unreasonable, or any other party granted intervention by the Commission files an objection to the Staff Report that is not resolved by Columbia by July 31 of each year. If Staff finds that Columbia's application is unjust or unreasonable, or any other party granted intervention by the Commission files an objection to Columbia's annual filing or Staff's review that is not resolved by July 31, Columbia will propose an expedited hearing process in order to effectuate the implementation of the FMI Rider rates by Unit 1 of September billing, or the first billing cycle of the revenue month following the Commission's decision. Each application to revise the FMI Rider rates through the use of this process will true-up revenues collected with revenues estimated in future filings.

3.1.3. Revenue Requirement Components and Rider Caps

On February 28, 2023, Columbia will file an application to set new FMI Rider rates to begin with Unit 1 of September 2023 billing, based on the calendar year FMI spend as of December 31, 2022. Each year thereafter, Columbia will continue to seek to recover its incremental FMI spend on a calendar-year basis. These revenue requirements would provide for a return on the FMI spend of 9.32% (a 7.85% rate of return plus a 1.27% tax gross-up factor) and the return of all FMI spend. Total FMI Rider investment will be valued at the Investment Date (the date on which the underlying asset was placed in service) and the Deferral Date (the date on which deferrals are included in the FMI Rider revenue requirement for recovery). Cumulative gross plant additions will be capitalized at Columbia's actual cost of replacement and shown as an adjustment to the Net FMI Investment as projects are placed in service. PISCC are calculated at Columbia's weighted long-term cost of debt. Cumulative deferred depreciation expense is calculated at the applicable, Commission-approved depreciation rate. Cumulative deferred property taxes are calculated at the estimated composite property tax rate. As before, deferred expenses such as deferred depreciation, property taxes, and PISCC will be amortized over the life of the associated assets using the depreciation rate approved in this case. Amortization will not begin until Columbia starts recovering the associated expense through the FMI Rider.

In an effort to mitigate the impact of the FMI Rider charges to customers, Columbia is proposing annual maximum rates for its monthly FMI Rider charge for Columbia's SGS Class. Columbia's proposed maximum rates reflect the projected capital Columbia intends to spend in the next five years. Additionally, Columbia has included a 25% adder to build flexibility into the budget as proposed. Columbia proposes the following rate limits:

Rate Effective Date	Sept. 2023	Sept. 2024	Sept. 2025	Sept. 2026	Sept. 2027
SGS Rate	$0.52	$2.07	$3.47	$5.28	$7.00
FMI Recovered	Jan. 2022 – Dec. 2022	Jan. 2022 – Dec. 2023	Jan. 2022 – Dec. 2024	Jan. 2022 – Dec. 2025	Jan. 2022 – Dec. 2026

Columbia also proposes to continue deferring any costs in excess of the monthly rate limits, with carrying charges at Columbia's long-term debt rate, for recovery in any subsequent FMI Rider application during the five-year period of this extended FMI (so long as recovery would not cause Columbia to exceed the applicable maximum rate). Columbia also requests to continue deferring expenses associated with FMI investments placed in service after December 31, 2026, until Columbia files another alternative rate plan or requests recovery in a separate proceeding.

Alternative Rate Plan Exhibit B
Ohio Adm.Code 4901:1-19-06(C)(2)(b)
Authorized Exempted Services

As required by Ohio Adm.Code 4901:1-19-06(C)(2)(b), the following is a list of the services the Commission has authorized Columbia to exempt and the case number(s) authorizing those exemptions:

Approved exempted services:	natural gas commodity sales services; ancillary services
Case numbers:	08-1344-GA-EXM 12-2637-GA-EXM

As further required by Ohio Adm.Code 4901:1-19-06(C)(2)(b), a copy of Columbia's approved Standards of Conduct (First Revised Tariff Sheet No. 22, Section VII) is attached to this Exhibit B. Columbia did not file a separation plan, for the reasons provided in its original exemption application (*see* Application Exhibit V, Case No. 08-1344-GA-EXM (Jan. 30, 2009)).

SECTION VII
PART 22 - STANDARDS OF CONDUCT

22.1 Standards of Conduct

In operation of the Company Customer CHOICE^{SM} Program, the Company will adhere to the following Standards of Conduct for Marketing Affiliates and Internal Merchant Operations:

1) Company must apply any tariff provision relating to transportation services in the same manner to the same or similarly situated persons if there is discretion in the application of the provision.

2) Company must strictly enforce a tariff provision for which there is no discretion in the application of the provision.

3) Company may not, through a tariff provision or otherwise, give any Retail Natural Gas Supplier or Governmental Aggregator or any Retail Natural Gas Supplier's or Governmental Aggregator's customers preference in matters, rates, information, or charges relating to transportation service including, but not limited to, scheduling, balancing, metering, storage, Backup Service or curtailment policy. For purposes of Company's Customer CHOICE^{SM} Program, any ancillary service provided by Company, e.g. billing and envelope service, that is not tariffed will be priced uniformly for all Retail Natural Gas Suppliers or Governmental Aggregators and available to all equally.

4) Company must process all similar requests for transportation in the same manner and within the same approximate period of time.

5) Company shall not disclose to anyone other than a Columbia Gas of Ohio employee, or employee of NiSource performing services for Columbia Gas of Ohio, any information regarding an existing or proposed gas transportation arrangement, which Company receives from the following sources:

   a) a customer or Retail Natural Gas Supplier or Governmental Aggregator
   b) a potential customer or Retail Natural Gas Supplier or Governmental Aggregator
   c) any agent of such customer or potential customer, or
   d) a Retail Natural Gas Supplier, Governmental Aggregator or other entity seeking to supply gas to a customer or potential customer, unless such customer, agent, or Retail Natural Gas Supplier or Governmental Aggregator authorizes disclosure of such information.

6) If a customer requests information about Retail Natural Gas Suppliers, Company should provide a list of all Retail Natural Gas Suppliers operating on its system and currently enrolling Customers, but shall not endorse any Retail Natural Gas Supplier nor indicate that any Retail Natural Gas Supplier will receive a preference.

7) To the maximum extent practicable, Company's operating employees and the operating employees of its marketing affiliate must function independently of each other. This includes complete separation of the Company's procurement activities from the affiliated marketing company's procurement activities.

SECTION VII
PART 22 - STANDARDS OF CONDUCT

8) Company shall not condition or tie its agreements for gas supply or for the release of interstate pipeline capacity to any agreement by a Retail Natural Gas Supplier, customer or other third party in which its marketing affiliate is involved.

9) Company and its marketing affiliate shall keep separate books of accounts and records.

10) Neither Company nor its marketing affiliate personnel shall communicate to any customer, Retail Natural Gas Supplier or third party the idea that any advantage might accrue for such customer, Retail Natural Gas Supplier or third party in the use of Company's service as a result of that customer's, Retail Natural Gas Supplier's or other third party's dealing with its marketing affiliate.

11) Company shall establish a complaint procedure for issues concerning compliance with these standards of conduct. All complaints, whether written or verbal, shall be referred to Columbia's General Counsel or his/her designee. The General Counsel or his/her designee shall orally acknowledge the complaint to the complainant within five (5) working days of receipt. The General Counsel or his/her designee shall prepare a written statement of the complaint which shall contain the name of the complainant and a detailed factual report of the complaint, including all relevant dates, companies involved, employees involved, and specific claim. The General Counsel or his/her designee shall communicate the results of the preliminary investigation to the complainant in writing within thirty (30) days after the complaint was received including a description of any course of action, which was taken. The General Counsel or his/her designee shall keep a file with all such complaint statements for a period of not less than three years.

12) If Company offers any Retail Natural Gas Supplier or any Retail Natural Gas Supplier's customers a discount or fee waiver for transportation services, balancing, meters or meter installation, storage or any other service offered to Retail Natural Gas Suppliers. Company must, upon request, prospectively offer such discounts or fee waivers to all similarly situated Retail Natural Gas Suppliers or Retail Natural Gas Suppliers' customers under similar terms and conditions.

13) Columbia Gas of Ohio's name or logo will not be used in its marketing affiliate's promotional material, unless the promotional material discloses in plain, legible or audible language, on the first page or at the first point where Columbia Gas of Ohio's name or logo appears, that its marketing affiliate is not the same company as Columbia Gas of Ohio. Columbia Gas of Ohio is also prohibited from participating in exclusive joint activities with its marketing affiliate including advertising, marketing, sales calls or joint proposals to any existing or potential customers.

Alternative Rate Plan Exhibit C
Ohio Adm.Code 4901:1-19-06(C)(2)(c)
Cross-Subsidization of Services

As required by Ohio Adm.Code 4901:1-19-06(C)(2)(c), Columbia states that it does not expect cross-subsidization of services to occur under its Alternative Rate Plan. Extending Rider IRP and the CEP Rider and imposing the new proposed fixed-charge FMI Rider, along with Columbia's monthly delivery charge rate design, will continue to reduce the subsidization of lower-use customers that would result from a rate design based on volumetric rates for recovery of fixed distribution service costs.

Alternative Rate Plan Exhibit D
Ohio Adm.Code 4901:1-19-06(C)(2)(d)
Compliance with R.C. 4905.35 and 4929.02, and
Demonstration that Plan is Just and Reasonable

R.C. 4905.35

Columbia complies with R.C. 4905.35. Columbia's public utility services are available on a comparable and nondiscriminatory basis. Columbia does not presently offer any bundled regulated and unregulated services. Columbia does not base the availability of any regulated services or goods, or the availability of a discounted rate or improved quality, price, term, or condition for any regulated services or goods, on the identity of the supplier of any other services or goods or on the purchase of any unregulated services or goods from Columbia. Columbia offers its regulated services or goods to all similarly situated customers, including any persons with which it is affiliated or which it controls, under comparable terms and conditions.

Additionally, Columbia's approved Standard of Conduct (First Revised Tariff Sheet No. 22, Section VII) (attached in Exhibit B) requires Columbia to administer its CHOICE® program, and its tariffs more generally, in a nondiscriminatory and non-preferential manner, making all untariffed services equally available to all.

R.C. 4929.02

Section 4929.02 of the Ohio Revised Code sets forth the state's policy regarding natural gas services and goods. Columbia substantially complies with those policies. Columbia's Gas Transportation Service Program and CHOICE® Program both offer unbundled and comparable natural gas services and goods alternatives that allow customers to choose the supplier, price, terms, and other conditions that meet their needs. Those programs promote diversity of natural gas supplies and suppliers, by giving consumers effective control over the selection of those supplies and suppliers. And Columbia's Demand Side Management (DSM) Program promotes an alignment of Columbia's interests with consumer interest in energy efficiency and energy conservation.

Extending Columbia's Rider IRP and CEP Rider, and adopting the proposed FMI Rider, will further advance Ohio's policies. By ensuring Columbia can continue to timely recover its investments in replacing and repairing aging infrastructure, along with its other capital investments, the plan will enhance Columbia's ability to continue offering adequate, reliable, and reasonably priced natural gas goods and services. As described in the plan, the Commission will review and approve the Rider IRP, CEP Rider, and FMI Rider charges, so those charges will remain reasonable. Like Columbia's base monthly delivery charge, the fixed monthly charge of Rider IRP, the CEP Rider, and the FMI Rider continues the alignment of natural gas company interests with consumer interest in energy efficiency and energy conservation, pursuant to R.C. 4929.02(A)(12), by continuing to remove a financial incentive for Columbia through increased throughput. Finally, implementing these proposals, along with Columbia's existing service programs, will ensure continued and enhanced compliance with the policies contained in R.C. 4905.35 and 4929.02.

Justness and Reasonableness of Columbia's Alternative Rate Plan

In its recent Advisory Bulletin, the Pipeline and Hazardous Materials Safety Administration ("PHMSA") reminded the owners and operators of gas pipeline facilities that a new Act signed into law in December 2020, the "Protecting our Infrastructure of Pipelines and Enhancing Safety [PIPES] Act of 2020," requires pipeline operators' inspection and maintenance plans "to address the replacement or remediation of pipelines that are known to leak due to their material (including cast iron, unprotected steel, wrought iron, and historic plastics with known issues), design, or past operating and maintenance history * * * ."[75] Columbia's long-running IRP meets this requirement and Columbia's IRP will continue to improve the safety and reliability of service, leading to reduced leakage.

Because Columbia does not collect the costs of these infrastructure investments from customers immediately as Columbia makes its investments, but rather spreads those costs over the useful life of the investments, Rider IRP moderates the impact on customers' bills. As of May 2021, the monthly Rider IRP rate for customers served under Columbia's Small General Service Rate Schedule is less

[75] Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Pipeline Safety: Statutory Mandate to Update Inspection and Maintenance Plans to Address Eliminating Hazardous Leaks and Minimizing Releases of Natural Gas from Pipeline Facilities, at 3 (June 7, 2021) (citing 49 U.S.C. 60108(a)(2)(E)) (available at https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2021-06/PHMSA%20Advisory%20Bulletin%20-%20PIPES%202020%20Section-114_0.pdf).

than $12.00 per month, reflecting approximately $1.8 billion of cumulative investment made by Columbia through calendar year 2020. And Columbia plans to spend an estimated additional $1.6 billion on the IRP between 2021 and 2026. Again, this investment will be recovered from customers over the useful life of the assets.

Columbia's proposal to continue its CEP Rider also is just and reasonable, because it allows for the timely recovery of Columbia's CEP Deferral and the underlying investments to which the CEP Deferral relates, reducing the need to defer PISCC expenses associated with those investments. The Commission previously concluded that the CEP and CEP Rider better allow Columbia "to timely recover its capital investments, which will encourage and promote investment in the distribution system for new and existing customers * * * [for] a safer, more reliable distribution system."[76]

Finally, Columbia's proposal to implement a new FMI Rider is just and reasonable, because the expenses that Columbia seeks to recover under the FMI Rider are required to comply with PHMSA's "Mega Rule." The Rider is also designed to allow Columbia to recover any additional costs required to comply with new requirements imposed under state or federal law. Recovery of legally mandated expenses necessary to provide natural gas distribution and transportation services is just and reasonable.

[76] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval of an Alternative Form of Regulation to Establish a Capital Expenditure Program Rider Mechanism*, Case No. 17-2202-GA-ALT, Opinion and Order at 28 (Nov. 28, 2018).

Alternative Rate Plan Exhibit E
Ohio Adm.Code 4901:1-19-06(C)(2)(e)
List of Witnesses

Columbia provides the following list of witnesses in support of its alternative rate application and the corresponding exhibits each is sponsoring:

Name of Witness	**Issues Covered**	**Exhibits**
Melissa Thompson	• Columbia's Application • Columbia existing IRP and CEP • support for the proposed FMI • the various requirements in the Ohio Revised Code and Ohio Administrative Code that specifically relate to alternative rate filings • the justness and reasonableness of Columbia's request to continue its IRP and CEP • Columbia's proposed changes to the IRP and CEP	A through E
Eric Slowbe	• the components of the IRP • the progress of the AMRP • Columbia's reasons for continuing the IRP • the IRP's benefits to customers • Columbia's proposed changes to the IRP	A
Connor McGrath	• Columbia's capital execution • projected capital costs	A

Because Columbia is filing this alternative rate plan application in conjunction with a base rate increase application, each witness's testimony will be filed fourteen days following the filing of this Application.

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval of a Demand Side Management Program for its Residential and Commercial Customers.	)))))	Case No. 21-639-GA-UNC
In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval to Change Accounting Methods.	)))	Case No. 21-640-GA-AAM

APPLICATION OF COLUMBIA GAS OF OHIO, INC.
TO CONTINUE ITS DEMAND SIDE MANAGEMENT PROGRAM

1. Introduction

In this Application, Columbia Gas of Ohio, Inc. ("Columbia") seeks approval to continue the Demand Side Management ("DSM") Program approved by the Public Utilities Commission of Ohio ("Commission") in Case Nos. 08-833-GA-UNC ("2008 DSM Case"), 11-5028-GA-UNC and 11-5029-GA-AAM ("2011 Extension"), and 16-1309-GA-UNC and 16-1310-GA-AAM ("2016 Extension.") Columbia is a national, regional, and state leader among natural gas utilities in the development and implementation of innovative energy efficiency and weatherization programs for its customers. Columbia seeks to continue this leadership through the continuation of its DSM Program. Columbia proposes to invest an average of approximately $30.9 million annually in the proposed programs for calendar years 2023 through 2027.[77] Prior to filing this Application to continue its DSM Program, Columbia presented an overview of the proposed DSM Program to Columbia's DSM Stakeholder Group.

[77] The budget will increase annually by approximately 2% to account for inflation.

Columbia primarily recovers the costs of its DSM Program through Columbia's Rider DSM.[78] Columbia's Rider DSM is adjusted effective May each year to enable Columbia to recover the DSM costs incurred during the prior calendar year. Columbia proposes to continue currently approved procedures to review and adjust Rider DSM, except to separate out the review of Rider DSM from Rider IRP, and proposes to maintain its shared savings mechanism, which is detailed below.

Columbia is committed to helping its customers use natural gas more efficiently by effectively implementing its DSM Program. The key purposes of the DSM Program are to:

- Provide cost-effective, customer-oriented energy efficiency services for Columbia's residential and commercial customers
- Improve customer health, safety, comfort, and productivity
- Reduce wasteful and inefficient use of natural gas and other resources, such as water and electricity
- Increase customers' financial resources by reducing natural gas bills
- Lower customers' carbon dioxide emissions
- Support job creation and economic development
- Help the Commission comply with R.C. 4929.02 and R.C. 4905.70

The DSM Program provides Columbia's customers and society with multiple benefits beyond energy and utility bill savings. For instance, lifetime carbon dioxide reduction for Columbia's proposed DSM Program is estimated to be over 3,400,000 tons, the equivalent of taking 675,000 automobiles off the road for one year or planting more than 3,800,000 acres of trees.

Columbia's DSM Program also creates numerous non-natural gas and non-energy benefits ("NEBs"), including:

- Lower water, sewer, and electric bills
- Avoided CO_2 emissions
- Direct economic benefits from jobs created by DSM programs
- Secondary economic (multiplier) benefits
- Lower customer arrearages and bad debt
- Increased tax revenue to state and local government

[78] In addition to the funding received through Rider DSM, Columbia currently receives $7.1 million for WarmChoice® through base rates, which Columbia has proposed to maintain at $7.1 million in its base rate case application.

- Improvements in health and safety

2. Background

Columbia has been providing energy-efficiency programs and services to its customers for thirty-eight years, beginning with Operation HomeCheck. The energy efficiency measures undertaken through Columbia's DSM programs since the inception of the WarmChoice® program in 1987, and the creation of the first DSM Program in 2008, will save customers over 113.1 Bcf of natural gas over the life of the measures. This equates to an estimated total savings of approximately $780 million. In addition to the natural gas savings created by Columbia's programs, several of the programs create electricity savings through reduced use of air conditioning after insulation and air sealing measures are installed, as well as through the installation of ENERGY STAR® certified smart thermostats. Additionally, through the installation of energy efficient showerheads and faucet aerators, the programs can help customers save on their water bills.

2.1. Columbia's Original Energy Efficiency Programs

Beginning with Operation HomeCheck, Columbia has been a leader among Ohio utilities in developing energy efficiency and weatherization programs for nearly four decades. Established in 1983, Operation HomeCheck represented Columbia's first partnership with the Corporation for Ohio Appalachian Development ("COAD") and the Ohio Association of Community Action Agencies ("OACAA") – community-based, non-profit organizations – and provided income-eligible customers with innovative, computerized in-home energy audits. Operation HomeCheck developed the capacity to perform more than 11,000 home energy audits annually. Columbia and its partners further developed the energy audit program in 1986 by adding a low-cost weatherization component. The Columbia Gas of Ohio Weatherization Program provided both energy education and material installation services for eligible customers.

Columbia continued its energy efficiency partnership with the community action network in Ohio (the operators of the United States Department of Energy's Home Weatherization Assistance Program) by continuing to collaborate with COAD and OACAA, while adding Mid-Ohio Regional Planning Commission ("MORPC"), Neighborhood Housing Services of Toledo ("NHST"), and Lorain County Community Action Agency ("LCCAA"), as well as the State of Ohio's Department of Development, Office of Energy Efficiency, in a major effort that resulted in the creation of the innovative WarmChoice® program in 1987. WarmChoice® is Columbia's whole-house weatherization program for income-eligible customers. The goal of the program is to provide eligible customers with a complete set of weatherization measures, including attic, wall, floor, duct and pipe insulation, air sealing, water heater repairs and replacements, and furnace repairs and replacements, to help those customers manage their energy use and, consequently, save on utility bills. Additionally, the program focuses on health and safety to help ensure that Columbia customers who are low-income residents are insulated from the dangers of antiquated, unsafe heating equipment despite income limitations. Since its inception in 1987, WarmChoice® has served over 70,000 households. In order to achieve these results, Columbia contracts with four community-based organizations to manage and operate the program.

2.2. 2009-2011 DSM Program

Columbia expanded its weatherization efforts with its DSM Pilot Program. On January 23, 2008, the Commission issued an Opinion and Order in Case Nos. 05-221-GA-GCR, *et al.*, adopting the December 28, 2007 Joint Stipulation and Recommendation ("Stipulation"). Pursuant to the Stipulation, the parties agreed that by July 1, 2008, Columbia would file a DSM application cooperatively developed by Columbia, the Office of the Ohio Consumers' Counsel, Commission Staff and other stakeholders for approval of comprehensive energy efficiency programs for residential and commercial customers.

On July 3, 2008, Columbia filed an application in Case No. 08-833-GA-UNC requesting approval of a DSM Program for residential and commercial customers. In partnership with the DSM Stakeholder Group, Columbia developed an innovative and comprehensive portfolio of energy efficiency programs. The programs included:

- WarmChoice®.
- Home Performance Solutions, which provided low-cost diagnostic energy audits and rebates to customers to help offset the cost of energy efficiency upgrades.
- Simple Energy Solutions, which provided instant discounts on energy efficient programmable thermostats and showerheads through Columbia's online, e-store, or a rebate available through a mail-in form for items purchased at local hardware or home improvement stores.
- New Home Solutions which, in coordination with AEP Ohio, provided incentives for Ohio homebuilders to exceed the state minimum energy code.

- The Ohio Small Business Energy Saver program, which provided on-line energy audits to commercial customers through a collaboration with the Ohio Department of Development and other investor-owned utilities.
- Energy Design Solutions, through which Columbia provided continuing education seminars on how to exceed the minimum commercial building energy efficiency code.
- Innovative Energy Solutions, which provided rebates to non-profits, houses of worship, schools, and other commercial customers for energy audits and energy efficiency measures.

2.3. 2012-2016 DSM Program

Columbia continued and expanded its DSM Programs in 2011 in Case Nos. 11-5028-GA-UNC, *et al.* Columbia filed its Application to continue and expand its DSM programs for the period of 2012 to 2016 on September 9, 2011, and filed a Joint Stipulation and Recommendation ("Stipulation") on October 31, 2011. On December 14, 2011, the Commission issued an Opinion and Order adopting the October 31, 2011 Stipulation.

The Application and Stipulation included an annual budget of approximately \$20 million for the proposed energy efficiency programs and a shared savings incentive, which was capped at a cumulative total of \$3.9 million over the five-year period of the program. The programs included WarmChoice®, Home Performance Solutions, Simple Energy Solutions, Energy Design Solutions, and Innovative Energy Solutions, all described above; its Energy Efficient New Home program (formerly called New Home Solutions); and the following new programs:

- Behavior Modification/Home Energy Reports, which used peer pressure and social norms to encourage customers to take action to reduce their energy usage.
- High Efficiency Heating System Rebate program, which provided rebates to customers to encourage the installation of high-efficiency furnaces and boilers.
- Energy Efficiency Education for Students (e^3 smart), which provided teachers and students with energy education materials, and a kit of energy efficiency measures for the students to install at their home. Columbia collaborated with AEP Ohio on the e^3 smart program in areas served by both utilities.

- Online Energy Audit, which allowed customers to evaluate their own home and be linked to DSM programs that can provide them with opportunities to reduce their natural gas usage.
- Residential Energy Code Training, which provided code training to home-builders and code officials.
- US Environmental Protection Agency's Portfolio Manager, which allowed building owners to track and assess energy and water consumption in a secure online environment.

3. Columbia's Current DSM Program

Columbia continued its legacy of leadership in energy efficiency with the last extension and expansion of its DSM Program in 2016. On June 10, 2016, Columbia filed an Application to continue its DSM programs for an additional six years, through December 31, 2022, in Case Nos. 16-1309-GA-UNC, *et al.* Columbia filed a Stipulation and Recommendation ("Stipulation") on August 12, 2016. That Application, as modified by the Stipulation, was approved and modified by the Commission on December 21, 2016, and was further modified by the Commission in its Second Entry on Rehearing on April 10, 2019.

The Application, as modified by the Stipulation and Commission Opinion and Order, included an annual budget of approximately $26.7 million for the proposed energy efficiency programs, and included a shared savings incentive which was capped at a cumulative total of $4.5 million, and grossed up for taxes, over the six year period of the program. The following table lists the current programs and shows the results for the DSM Program between 2017 and 2020. The programs continue to meet and exceed customer service and natural gas reduction targets through a network of talented energy efficiency professionals and contractors who are among the best in the nation at effectively meeting the challenges of program design and implementation:

Program	Description	2017-2020 Customers Served	2017-2020 Lifetime Mcf Savings
Home Energy Audits and Rebates Program f/k/a Home Performance Solutions	In-home Energy Audit and Rebates	17,105	3,771,686
WarmChoice®	No-cost energy efficiency services to income-eligible customers	7,209	4,168,304

Program	Description	2017-2020 Customers Served	2017-2020 Lifetime Mcf Savings
Appliance Rebates f/k/a High Efficiency Furnace Rebates	Rebates on high efficiency furnaces, boilers and water heaters	25,905	6,165,647
EfficiencyCrafted℠ Homes f/k/a New Home Solutions	Incentives to home builders for homes built more energy efficient than energy code	11,464	7,600,139
Home Energy Efficiency Reports	Energy efficiency behavior modification reports to motivate customers to engage in energy efficiency actions	613,655	1,797,779
Product Rebates f/k/a Simple Energy Solutions	Online e-store and rebates on smart and programmable thermostats, energy efficient showerheads, and faucet aerators	76,589	6,670,096
e^3 smart	Energy efficiency education delivered as part of school curriculum, with a kit of energy efficiency measures for students to install in their homes	86,808	218,902
Home Energy Efficiency Checkup f/k/a Online Energy Audit	On-line energy audit that refers customers to other DSM programs that can help them save more	27,235	-
Innovative Energy Solutions	Prescriptive and custom rebates for energy audits and energy efficiency measures for nonprofits, houses of worship, schools, hospitals, government and businesses	404	12,471,229
Small Commercial Construction f/k/a Energy Design Solutions	Rebates and training for small commercial building design professionals and trade allies to construct new commercial facilities more energy efficiently than energy code	99	727,330
U.S. EPA Portfolio Manager	Automated benchmarking for commercial customers’ natural gas usage data and link to U.S. EPA's building energy benchmarking tool to determine efficiency level and next steps	163	-

3.1. Recent Best Practice Awards and Recognition

Columbia's DSM programs and team members have been recognized for their leadership in the field of energy efficiency at the state, regional, and national levels. These awards and recognition are a testament to Columbia's focus on implementing best practices to market and deliver effective programs to customers.

The current portfolio of DSM programs received 22 program awards from 2017 to 2021. Nationally, Columbia's largest programs, WarmChoice®, Home Energy Audits and Rebates, Appliance Rebates, Product Rebates and EfficiencyCrafted℠ Homes, have received awards from the American Council for an Energy Efficient Economy and the United States Environmental Protection Agency ("U.S. EPA"), leading proponents of energy efficiency as a resource for helping Americans manage energy costs and reduce greenhouse gas emissions. Additionally, Columbia's energy efficiency marketing was recognized numerous times from 2017 to 2020 on both a local and national scale from the North American SABRE Awards, PRWeek, MarCom, the Telly Awards, and Public Relations Society of America ("PRSA"). Columbia's leadership, Commission Staff, and DSM Stakeholder Group members are to be credited for giving DSM Program staff the flexibility to develop and implement these peer-leading DSM programs in Ohio. A complete list of awards and recognition since 2017 follows:

- 2021 ENERGY STAR® Partner of the Year – Sustained Excellence in Energy Efficiency Program Delivery for the following programs: EfficiencyCrafted℠ Homes, WarmChoice®, Home Energy Audits and Rebates, Product Rebates, Appliance Rebates, and EPA Portfolio Manager Automated Benchmarking
- 2020 ENERGY STAR® Partner of the Year – Sustained Excellence in Energy Efficiency Program Delivery for the following programs: EfficiencyCrafted℠ Homes, WarmChoice®, Home Energy Audits and Rebates, Product Rebates, Appliance Rebates, and EPA Portfolio Manager Automated Benchmarking
- 2020 ENERGY STAR® Certified Homes Market Leader Award, EfficiencyCrafted℠ Homes
- 2020 ENERGY STAR® Partner of the Year – Excellence Award for Data Innovation, EPA Portfolio Manager Automated Benchmarking

- 2020 North American SABRE Award – Energy and National Resources Category
- 2020 PRism Award in the Use of Data/Analytics category from PRSA Central Ohio Chapter
- 2019 ENERGY STAR® Partner of the Year – Sustained Excellence in Energy Efficiency Program Delivery for the following programs: EfficiencyCrafted℠ Homes, Home Energy Audits and Rebates, Product Rebates, and Appliance Rebates
- 2019 ENERGY STAR® Certified Homes Market Leader Award, EfficiencyCrafted℠ Homes
- 2019 Telly Award – Silver Honor – Regional TV/Public Interest and Awareness
- 2019 Telly Award – Silver Honor – Regional TV Campaign B2C
- 2019 Honorable Mention for Best in Data Insight – PRWeek Awards
- 2019 North American SABRE Awards Finalist for Energy and Natural Resources
- 2019 PRSA Bronze Anvil Award for Best Use of Data/Analytics
- 2019 PRism for Use of Data/Analytics from PRSA Central Ohio Chapter
- 2018 ENERGY STAR® Partner of the Year – Sustained Excellence in Energy Efficiency Program Delivery for the following programs: EfficiencyCrafted℠ Homes, Home Energy Audits and Rebates, Product Rebates, and Appliance Rebates
- 2018 ENERGY STAR® Certified Homes Market Leader Award, EfficiencyCrafted℠ Homes
- 2018 MarCom Platinum award in the Video/Audit | Television (Broadcast & Cable) Promotion category
- 2018 Finalist for Best in Data Insight - PRWeek Awards
- 2018 North American SABRE Awards - Diamond SABRE in the Measurement and Evaluation category
- 2018 Exemplary Energy Efficiency Program, Low-Income: Natural Gas Utility in ACEEE's Fourth National Review, WarmChoice®
- 2017 ENERGY STAR® Partner of the Year – Sustained Excellence in Energy Efficiency Program Delivery for the following programs: EfficiencyCrafted℠ Homes and Appliance Rebates

- 2017 ENERGY STAR® Certified Homes Market Leader Award, EfficiencyCrafted℠ Homes

3.2. Collaborative Partnerships and Community Engagement

Throughout its history in DSM, Columbia has worked collaboratively with many partners and stakeholders, from non-profit and governmental organizations to fellow natural gas and electric utilities, to determine the best ways to prudently use ratepayer funds to save energy and reduce bills for customers. The public-private partnerships enhance service delivery and customer satisfaction by reducing confusion about programs in the marketplace and offering streamlined, efficient service delivery methods to reach customers.

Since 1987, Columbia has used Ohio's exemplary community-based weatherization network to deliver Columbia's WarmChoice® program jointly with other services for income-eligible households, including state and federally funded energy efficiency and home repair programs and other energy-efficiency services. Partnering with this network creates additional public value by offering the program as a resource to shared customers utilizing other available services such as Utility Bill Assistance, Meals on Wheels, Head Start, Health Services, Child Care, Food and Clothing and many other social services that can help improve customers' lives.

Another example of Columbia's effective partnerships is Columbia's relationship with the Ohio Hospital Association, which uses U.S. EPA's Portfolio Manager Tool to benchmark energy usage in hospitals to help target those facilities for energy efficiency improvements.

3.3. DSM Stakeholder Group Process

Throughout the current DSM Program implementation period, Columbia met with its DSM Stakeholder Group annually in 2017 and 2018, and biannually in 2019 and 2020. At these meetings, the DSM Stakeholder Group discussed DSM Program performance. At its biannual meetings in 2019 and 2020, Columbia shared updates on marketing and outreach efforts to make more customers aware of its WarmChoice program. At its May 14, 2021 stakeholder group meeting, Columbia informed the stakeholder group that it will be filing for an extension of its DSM Program on June 30, 2021.

4. Columbia's Proposed 2023-2027 DSM Program

Columbia believes it is in the continued best interest of its customers to continue to provide DSM services through programs that promote the installation and implementation of energy efficiency measures and technologies in a cost-effective manner. For many of Columbia's customers, there are numerous barriers to the adoption of efficient technology, including higher incremental costs for high efficiency equipment, lack of customer education, lack of contractor trade ally training, lack of monetary resources, and fear of change. Accordingly, Columbia believes that it can continue to play an important role in promoting and encouraging energy efficiency, economic development, and job creation in Ohio. Utility companies in the nation are in a unique position to bring energy efficiency to scale, which would be absent without these investments.

Specifically, Columbia takes a leadership role promoting energy efficiency because of Columbia's existing relationship with its customers, who often view Columbia as their primary source of energy information. Columbia's unique relationship with customers and stakeholders allows it to continue to meet customers' needs for DSM services through technology, education, and incentives to help remove market barriers and speed the adoption of more efficient technologies.

Residential and commercial customers continue to benefit from these proposed energy efficiency programs by having ready access to energy-saving measures and services that will directly reduce natural gas usage throughout the life of the energy efficiency measures, improving the affordability of natural gas service. Additionally, customers benefit through improved safety and reliability of their heating equipment, better efficiency and comfort, as well as electricity and water savings.

Non-participating customers likewise benefit from the NEBs previously identified. Non-participating customers also benefit through the establishment of a network of trained providers and an enhanced marketplace, with better access and availability to state-of-the-art energy efficiency techniques promoted by these DSM programs. Moreover, non-participating customers may benefit from the price-dampening effects of energy efficiency and from the positive environmental impacts of the programs, as well as other societal benefits.

4.1. The Proposed Portfolio of Programs

This DSM Program, Columbia's fourth since 2008, continues Columbia's current, successful programs and provides program enhancements to continue that success and deliver more savings to customers.

Columbia is proposing to continue its portfolio of DSM programs, which offers a wide range of services to its residential and commercial customers. The overall DSM Program has been determined to be cost-effective, as shown in Appendix A. While Columbia will continue to effectively administer its DSM Program, the programs will be implemented primarily by third-party consultants (vendors). Columbia proposes to continue offering these programs from January 1, 2023, through December 31, 2027. Columbia has also proposed budgets for each program, based on estimated projections of potential customer participation rates and activity within each program, which are also shown in Appendix A.

Based upon the work of Columbia's team and evaluation consultant, Columbia proposes to continue offering the following DSM programs:

Program	Program Description
Home Energy Audits and Rebates Program	Low-cost home energy audits and rebates/discounts
WarmChoice®	No-cost energy efficiency services to income-eligible customers
EfficiencyCrafted℠ Homes	Incentives for homes built more energy efficient than energy code
Product Rebates	Energy efficient smart and programmable thermostat, showerhead, and faucet aerator rebates
Home Energy Efficiency Reports	Energy usage comparison reports, recommendations
Appliance Rebates	Rebates for energy efficient furnaces, boilers, and water heaters
e^3 smart	Student education program and kit of materials
Innovative Energy Solutions	Rebates on energy audits and measures for non-profits and businesses
Small Commercial Construction	New commercial building above energy code education and incentives

Program	Program Description
EPA Portfolio Manager	Online energy use benchmarking for commercial buildings

Columbia believes that maintaining the success of its DSM Program requires very few adjustments. Nonetheless, in thoroughly reviewing its programs Columbia identified opportunities for three pilot programs, and enhancements and changes to strengthen the programmatic reach for customers and enable Columbia to enhance customers' opportunities for implementing energy efficient measures. The programs, and Columbia's proposed enhancements and changes to each program, are discussed below.

4.1.1. Home Energy Audits and Rebates (formerly known as Home Performance Solutions)

Columbia proposes to continue its highly successful Home Energy Audits and Rebates program, which will provide low-cost, comprehensive, computerized and diagnostic in-home energy audits, combustion and gas leakage safety inspections, and energy efficiency measure rebates to residential buildings. The program will continue to provide tiers to offer higher rebates to customers with lower incomes, but who may be above income guidelines for WarmChoice®.

Columbia is proposing to shift the tiers from Area Median Income-based to Federal Poverty Guideline-based to better align with WarmChoice®. Additionally, Columbia will create a health and safety pilot for customers who qualify for the assisted tier of the Home Energy Audits and Rebates program to help correct some health and safety issues identified during the audit and to help remove barriers to the installation of the recommended energy efficiency measures.

4.1.2. WarmChoice® Program (Income-eligible Weatherization Service)

The WarmChoice® program provides whole house weatherization services to natural gas heating customers with household incomes at or below 150% of the federal poverty guidelines. Columbia proposes to increase the income guidelines to allow the program to serve customers with incomes at or below 200% of these guidelines. The program targets high use customers, Home Energy Assistance Program and Percentage of Income Payment Program ("PIPP Plus") customers.

The program is delivered through a community-based weatherization service delivery network. The network brings a comprehensive approach to the WarmChoice® program that combines it with the federal Home Weatherization Assistance Program (HWAP), home repair programs, and other critical social services to maximize efficiency and benefits to customers.

4.1.3. EfficiencyCrafted℠ Homes (Energy Efficient New Homes)

Columbia will continue its EfficiencyCrafted℠ Homes program, which offers incentives to home builders to build homes that exceed state energy code minimum levels. Participating homebuilders will continue to provide Ohio homebuyers with ENERGY STAR® certified homes or EfficiencyCrafted℠ Homes that score 70 or lower on the Home Energy Rating System scale. Both standard market and affordable housing market homebuilders will be encouraged to participate in the program. The program will also provide builders and home energy raters with training and technical assistance.

4.1.4. Product Rebates

Columbia will continue its Product Rebates program (formerly called Simple Energy Solutions program) offering rebates for standard programmable and ENERGY STAR® certified smart thermostats, energy-efficient showerheads and faucet aerators. Eligible products will be available online through Columbia's e-store. Customers will also be able to use a post-purchase rebate form to apply for a rebate on qualifying products purchased at local hardware or home improvement stores or other sources.

4.1.5. Home Energy Efficiency Reports (Behavior Modification)

The Home Energy Efficiency Report program will continue to provide customers with motivational information to help them take action to reduce their energy use. This is accomplished by comparing the participant's energy use with similar homes, and then using peer pressure and social norms to encourage customers to take action. The program provides treatment customers with reports that anonymously compare the customer's energy usage to that of their neighbors of similar size homes, tapping into the behavioral science insight that social pressure is a driving factor in motivating behavioral change around energy usage. This program approach has proven to be a successful way to engage customers in the energy efficiency discussion in a way that results in them taking action to lower their energy use. Columbia hopes to create new treatment waves to retain customer participation levels due to attrition.

4.1.6. Appliance Rebate Program

The current Appliance Rebate program provides rebates to landlords and customers to incentivize them to install high-efficiency natural gas furnaces, boilers and water heaters, rather than the minimum low-efficiency products that are currently available. Enhancements to the program include:

- Expand the Annual Fuel Utilization Efficiency ("AFUE") requirements to create a tiered rebate structure to encourage customers to increase the thermal efficiency of their heating unit above current code standards.
- Pilot expanding products eligible for rebates through the program to allow for instant rebates on smart and programmable thermostats that are installed at the time of heating system replacement to receive an instant rebate rather than applying via the post-purchase program.

4.1.7. e^3 smart Program (Student Energy Efficiency Education)

Teachers participating in the e^3 smart program educate elementary, middle school, and high schools students about natural gas energy efficiency through energy education materials that Columbia provides as a formal part of the school's science curriculum, culminating with a kit of energy efficiency materials that is provided to students to install at their home. The curriculum complies with State of Ohio, Department of Education requirements.

4.1.8. Innovative Energy Solutions (Non-Profit and Business Energy Efficiency)

Columbia will continue its Innovative Energy Solutions program, which provides prescriptive rebates for certain energy efficiency measures as well as rebates for energy audits and custom energy efficiency measures for non-profits, schools, hospitals, houses of worship, municipal buildings, and other commercial and industrial customers. All natural gas energy saving measures and technologies are eligible for consideration through the current energy audit or energy engineering estimation process used to determine natural gas savings.

4.1.9. Small Commercial Construction Program (Energy Efficient New Buildings)

To help move the commercial building market forward, Columbia proposes to continue its Small Commercial Construction program (formerly called Energy Design Solutions) to provide education and training to building industry professionals and owners on the benefits of constructing energy efficient new buildings. The program will continue to provide incentives to newly constructed facilities, including schools, non-profits, and municipals buildings, to increase the energy efficiency of the facility above current Ohio energy code.

4.1.10. U.S. EPA Portfolio Manager (Building Benchmarking)

Columbia will also continue to promote the use of the U.S. Environmental Protection Agency's Portfolio Manager, an interactive energy management tool that allows building owners to track and assess energy and water consumption in a secure on-line environment. U.S. EPA Portfolio Manager can help building owners set investment priorities, identify under-performing buildings, verify efficiency improvements, and receive U.S. EPA recognition for superior energy performance. Columbia proposes to continue to provide commercial and industrial customers with a tool to help them track their natural gas usage over time and upload into Portfolio Manager.

4.1.11. Sustainable Energy Pilot

Columbia is proposing to create a Sustainable Energy Pilot that will provide Columbia the opportunity to pilot new and emerging natural gas sustainability and energy efficiency technology, which may include natural gas fuel cells and natural gas heat pumps for heating and water heating.

4.2. Shared Savings Performance Incentive

Columbia proposes to continue the shared savings incentive mechanism approved by the Commission in the 2016 Extension. The mechanism gathers and tracks data for energy efficiency measures installed through each DSM program. Columbia uses this data, with limited exceptions, to calculate the projected natural gas savings using the formulas identified in the State of Ohio Energy Efficiency Technical Reference Manual ("TRM"), or for measures not identified in the Ohio TRM, TRM resources from nearby states are utilized. The other exceptions are the WarmChoice® program, where historic billing analysis is used; the Home Energy

Efficiency Reports program, where contract savings with adjustments for measured actual savings are used; and the Innovative Energy Solutions and Small Commercial Construction programs, where the energy audit or building modeling software projected natural gas savings are used. Using the energy efficiency measure lifetime identified in the TRM, Columbia calculates the projected lifetime natural gas savings and the value of the natural gas savings for all of its DSM programs.

The shared savings mechanism is based on Columbia earning a share of the net benefits as calculated under the Utility Cost Test ("UCT"). Shared savings are computed on the difference between the net present value of Portfolio lifetime energy savings minus the program costs calculated from the UCT.

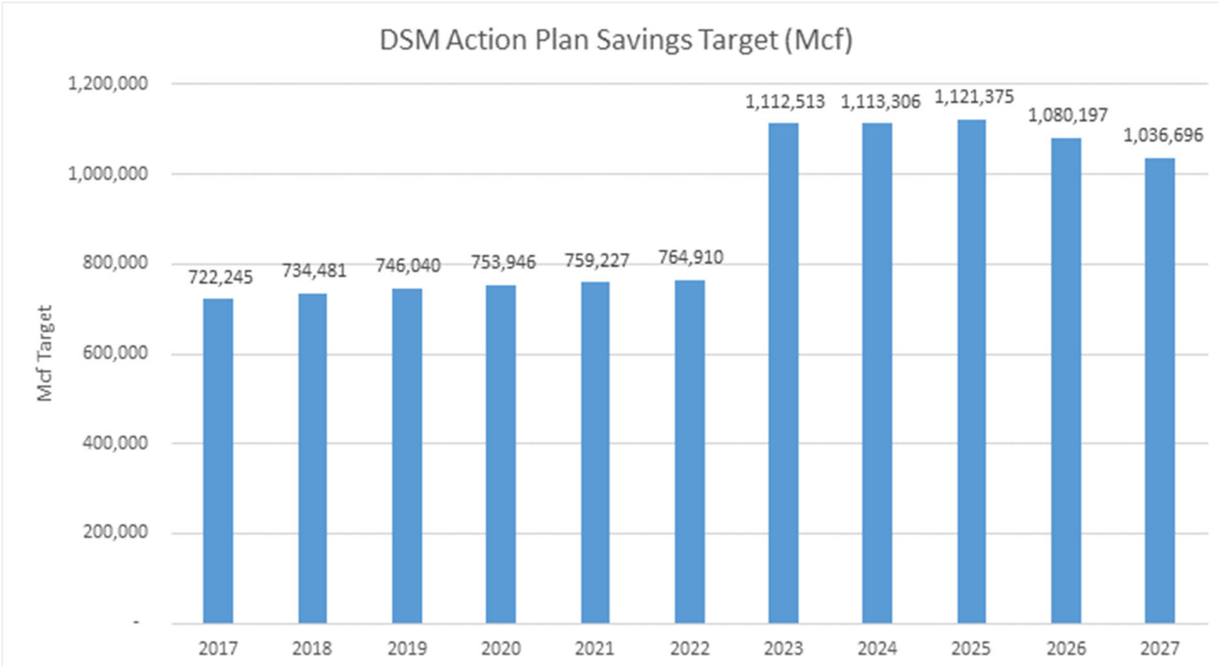
The recovery of the shared savings performance incentive, grossed up for taxes, will be based on the following tiered levels of program achievement:

Percent of Mcf Savings Targets Minimum	Percent of Mcf Savings Targets Maximum	Corresponding Shared Savings Percentage
100%	< 105%	5%
≥ 105%	< 110%	6%
≥ 110%	< 115%	7%
≥ 115%	< 120%	8%
≥ 120%	< 125%	9%
≥ 125%		10%

The shared savings incentive potential is the equivalent of a return of approximately 2.5% to 6.5% on the investment.[79]

[79] The 2.5% to 6.5% is based on $3,875,018 (shared savings amount at 5%) divided by $154,290,165 (total DSM budget) and $10,000,000 (shared savings amount at proposed cap) divided by $154,290,165 (total DSM budget).

This shared savings incentive mechanism is further supported by Columbia increasing the DSM program annual Mcf savings targets for 2023-2027 by over 40%, on average, as shown in the figure below:



Columbia proposes to cap the shared savings incentive, over the entire term of the DSM Program ending on December 31, 2027, at $10 million plus a gross up for taxes.

This shared savings approach provides Columbia incentives for effectively and efficiently managing the programs and for meeting the ambitious program participation and impact goals. In its Second Entry on Rehearing approving the Stipulation and Recommendation for the 2016 Extension, the Commission held that "the shared savings provision advances the state policy set forth in R.C. 4929.02(A)(12)" and found it "to be a reasonable balance of the benefits of the DSM Program to Columbia's customers and for Columbia, to incent the Company to deliver quality energy efficiency programs."[80]

[80] *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval of a Demand Side Management Program for its Residential and Commercial Customers, Case Nos.* 16-1309-GA-UNC and 16-1310-GA-AAM, Second Entry on Rehearing at ¶56 (April 10, 2019).

5. Recovery of Costs Related to DSM

In the 2011 case, Columbia and other stakeholders agreed that Columbia would continue filing annually to adjust the Rider DSM rate to allow for the review and recovery of DSM costs incurred and shared savings realized during the prior calendar year. Columbia and stakeholders further agreed that Columbia was authorized to continue deferring the difference between actual DSM program expenses (including carrying costs) and Columbia's portion of shared savings. In its 2016 Application, Columbia sought authority to continue its accounting treatment to defer DSM program expenses resulting from the expansion and continuation of the programs approved by the Commission and requested continuing the recovery mechanism approved by the Commission in the 2011 case. The Commission approved the 2016 Extension Stipulation authorizing Columbia to continue the same accounting treatment and recovery mechanisms.

Here, Columbia seeks authority to continue its accounting treatment to defer DSM program expenses resulting from the expansion and continuation of the programs approved by the Commission in the 2011 Extension, the 2016 Extension, and the current Application. Columbia also requests authority to continue the recovery mechanism approved by the Commission in the 2011 Extension and the 2016 Extension. However, Columbia proposes to submit the application to adjust the Rider DSM rate in a proceeding that is separate and distinct from Columbia's Rider IRP adjustment proceeding.

R.C. 4905.13 authorizes the Commission to establish systems of accounts to be kept by Ohio's public utilities and to prescribe the manner in which these accounts shall be kept. Pursuant to Ohio Adm.Code 4901:1-13-13, the Commission adopted the Uniform System of Accounts ("USOA") for gas utilities established by the Federal Energy Regulatory Commission ("FERC") for use in Ohio. The Commission may modify the USOA prescribed by FERC as it applies to utilities within the state of Ohio.

Columbia will defer expenses in special sub-accounts of Account 182-Other Regulatory Assets for recovery through Rider DSM. DSM expenses eligible for deferral will include all expenses incurred through implementation of the comprehensive, ratepayer-funded, cost-effective, energy efficiency portfolio. Consistent with its current program and the Commission's Opinion and Order in Case Nos. 08-72-GA-AIR, *et al.*, Rider DSM will further include carrying costs to be computed at Columbia's current cost of long-term debt and any incentives approved by the Commission. Columbia's portion of shared savings during each calendar year will be calculated and supported through an annual report based on actual data for the previous calendar year. Columbia will submit this report to Commission Staff no later than June 30 of the subsequent calendar year.

6. Other DSM Considerations

6.1. DSM Program Funding Levels

Columbia will monitor and evaluate the level of success of all of its DSM programs. If, through program analysis, it is determined that a particular program design is not likely to invest all of the resources available to it, Columbia retains the flexibility to shift funding between and within programs without Commission approval in order to maximize program performance and customer benefits.

6.2. DSM Program Time Frames

The proposed time frame for DSM implementation is January 1, 2023, to December 31, 2027. If, for any reason, a Commission decision on Columbia's application is not issued before December 31, 2022, Columbia requests that the Commission extend Columbia's current DSM program, on a temporary basis, to ensure Columbia is able to continue providing valuable DSM services to Ohio consumers.

7. Conclusion

Columbia hereby respectfully requests the Commission approve the Application to continue its DSM Program and accounting methods as described in the instant Application to: (1) continue its DSM Program for an additional five years; (2) include additional programmatic changes proposed by Columbia; (3) increase the annual DSM funding level by approximately 2% each calendar year thereafter for the balance of the five-year period for inflation; (4) continue its shared savings mechanism with increased Mcf targets, and an overall shared savings incentive cap; (5) continue Rider DSM for the five-year period, as previously approved in Case Nos. 11-5028-GA-UNC and 16-1309-GA-UNC; and (6) continue the accounting treatment of the DSM Program expenses as previously approved in the 2011 and 2016 Extensions.

Respectfully submitted,

/s/ Joseph M. Clark

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APPENDIX A

1. Columbia DSM Program Cost Effectiveness Test Results

Program	SCT	TRC	UCT
Home Energy Audits and Rebates	1.14	0.99	1.09
Product Rebates	2.26	1.96	2.55
EfficiencyCrafted Homes	6.02	5.55	2.62
E3 Smart	5.55	5.43	0.63
Home Energy Efficiency Reports	1.47	1.24	1.24
Appliance Rebates	2.23	1.88	3.50
WarmChoice			
Small Commercial Construction	1.63	1.37	1.87
Innovative Energy Solutions	3.70	3.19	5.31
EPA Portfolio Manager	-	-	-
Sustainable Energy Pilot	-	-	-
Total Portfolio*	**2.89**	**2.57**	**2.37**
Total Portfolio Including WarmChoice	**2.11**	**1.87**	**1.52**

*Total Portfolio Cost Effectiveness Test Results do not include WarmChoice (Low Income)

2. Columbia DSM Program Natural Gas Savings Projections

Program	2023	2024	2025	2026	2027	Total
Home Energy Audits and Rebates	62,151	62,151	62,151	62,151	62,151	310,756
Product Rebates	104,947	99,252	93,557	87,862	82,167	467,785
EfficiencyCrafted Homes	96,500	96,500	96,500	87,750	87,750	465,000
E3 Smart	7,061	7,061	7,061	7,061	7,061	35,307
Home Energy Efficiency Reports	443,826	450,314	464,078	437,345	399,539	2,195,102
Appliance Rebates	171,811	171,811	171,811	171,811	171,811	859,054
WarmChoice	61,217	61,217	61,217	61,217	61,217	306,083
Small Commercial Construction	15,000	15,000	15,000	15,000	15,000	75,000
Innovative Energy Solutions	150,000	150,000	150,000	150,000	150,000	750,000
EPA Portfolio Manager	-	-	-	-	-	-
Sustainable Energy Pilot	-	-	-	-	-	-
Total	**1,112,513**	**1,113,306**	**1,121,375**	**1,080,197**	**1,036,696**	**5,464,086**

3. Columbia DSM Program Projected Budgets

Program	2023	2024	2025	2026	2027	Total
Home Energy Audits and Rebates	$ 5,084,208	$ 5,177,982	$ 5,324,569	$ 5,374,054	$ 5,476,523	$ 26,437,336
Product Rebates	$ 2,281,402	$ 2,198,620	$ 2,136,475	$ 2,074,986	$ 2,014,172	$ 10,705,654
EfficiencyCrafted Homes	$ 4,007,660	$ 4,042,390	$ 4,128,162	$ 3,970,675	$ 3,947,595	$ 20,096,481
E3 Smart	$ 390,492	$ 399,356	$ 408,486	$ 417,890	$ 427,576	$ 2,043,800
Home Energy Efficiency Reports	$ 2,124,366	$ 1,945,203	$ 2,089,604	$ 1,994,544	$ 1,909,126	$ 10,062,844
Appliance Rebates	$ 4,006,558	$ 4,038,415	$ 4,071,227	$ 4,105,024	$ 4,139,834	$ 20,361,058
WarmChoice	$ 8,067,041	$ 8,521,752	$ 8,990,105	$ 9,472,508	$ 9,969,383	$ 45,020,790
Small Commercial Construction	$ 589,080	$ 599,703	$ 610,644	$ 621,913	$ 633,520	$ 3,054,859
Innovative Energy Solutions	$ 2,210,022	$ 2,231,022	$ 2,252,653	$ 2,274,933	$ 2,297,881	$ 11,266,510
EPA Portfolio Manager	$ 216,968	$ 223,177	$ 229,572	$ 236,159	$ 242,944	$ 1,148,820
Program Administration	$ 676,572	$ 696,869	$ 717,775	$ 739,308	$ 761,488	$ 3,592,012
Sustainable Energy Pilot	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 500,000
Total Budget	**$ 29,754,369**	**$ 30,174,489**	**$ 31,059,272**	**$ 31,381,993**	**$ 31,920,042**	**$ 154,290,165**
WarmChoice Base Rate Funding	$ 7,100,000	$ 7,100,000	$ 7,100,000	$ 7,100,000	$ 7,100,000	$ 35,500,000
Total Budget with WarmChoice Base	**$ 36,854,369**	**$ 37,274,489**	**$ 38,159,272**	**$ 38,481,993**	**$ 39,020,042**	**$ 189,790,165**

CERTIFICATE OF SERVICE

The Public Utilities Commission of Ohio's e-filing system will electronically serve notice of the filing of this document on the parties referenced on the service list of the docket cards who have electronically subscribed to the cases. In addition, the undersigned hereby certifies that a copy of the foregoing document is also being served via electronic mail on the 30th day of June, 2021, upon the following parties to Columbia Gas of Ohio, Inc.'s two prior alternative rate plan proceedings, Case Nos. 16-2422-GA-ALT and 17-2202-GA-ALT:

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