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October 16, 2020

VIA ELECTRONIC FILING

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
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400 North Street, 2nd Floor North
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Harrisburg, PA 17105-3265

**Re: PA Public Utility Commission v. Columbia Gas of Pennsylvania, Inc.
Docket No. R-2020-3018835**

Dear Secretary Chiavetta:

Attached for filing please find the Main Brief of Columbia Gas of Pennsylvania, Inc. (Public and HIGHLY CONFIDENTIAL versions) in connection with the above-referenced proceeding. The HIGHLY CONFIDENTIAL version will be provided in accordance with the Protective Order issued in this proceeding.

Respectfully submitted,



Lindsay A. Berkstresser

LAB/jl
Enclosures

cc: Honorable Katrina L. Dunderdale (*via email; w/enclosures*)
Certificate of Service

**CERTIFICATE OF SERVICE
(R-2020-3018835)**

I hereby certify that a true and correct copy of the foregoing has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant.)

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Date: October 16, 2020

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PUBLIC VERSION

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

| | | |
|--|---|----------------|
| Pennsylvania Public Utility Commission | : | R-2020-3018835 |
| Officer of Consumer Advocate | : | C-2020-3019702 |
| Office of Small Business Advocate | : | C-2020-3019714 |
| Columbia Industrial Intervenors | : | C-2020-3020105 |
| Dr. Richard Collins | : | C-2020-3020207 |
| Ionut R. Ilie | : | C-2020-3020498 |
| Pennsylvania State University | : | C-2020-3020666 |
| | : | |
| v. | : | |
| | : | |
| Columbia Gas of Pennsylvania, Inc. | : | |

MAIN BRIEF OF COLUMBIA GAS OF PENNSYLVANIA, INC.

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TABLE OF CONTENTS

Table of Contents

| | Page |
|--|-------------|
| I. INTRODUCTION | 1 |
| A. COLUMBIA GAS OF PENNSYLVANIA, INC. | 1 |
| B. HISTORY OF THE PROCEEDINGS..... | 2 |
| II. SUMMARY OF ARGUMENT | 6 |
| III. OVERALL POSITION ON RATE INCREASE..... | 15 |
| A. COLUMBIA’S POSITION ON RATE INCREASE..... | 15 |
| B. OCA’S AND OTHER PARTIES’ CONTENTIONS THAT THE COMMISSION CAN AND SHOULD REJECT THE ENTIRETY OF COLUMBIA’S PROPOSED RATE INCREASE BECAUSE OF COVID-19 MUST BE REJECTED..... | 16 |
| 1. Introduction..... | 16 |
| 2. The Complete Denial of Columbia’s Proposed Increase in Response to COVID-19 Violates Statutory and Constitutional Standards | 18 |
| 3. Denial of Columbia’s Proposed Rate Increase on the Basis of COVID-19 is not in the Interests of Customers..... | 21 |
| 4. The Solution to COVID-19 Issues Is the Enhanced Programs to Assist Customers Implemented by Columbia..... | 25 |
| C. CONCLUSION..... | 30 |
| IV. RATE BASE..... | 30 |
| A. PLANT IN SERVICE FPFTY PLANT ADDITIONS - OCA’S PROPOSED ADJUSTMENT SHOULD BE REJECTED. | 31 |
| B. CLOUD-BASED COMPUTING..... | 35 |
| C. ACCRUED DEPRECIATION | 36 |
| D. ADIT | 36 |

| | | |
|-------|--|----|
| V. | REVENUES..... | 36 |
| VI. | EXPENSES..... | 37 |
| | A. LABOR EXPENSE | 39 |
| | 1. Annualization Adjustment | 39 |
| | 2. Employee Complement..... | 40 |
| | B. OTHER EMPLOYEE BENEFITS | 42 |
| | C. INCENTIVE COMPENSATION AND STOCK REWARDS..... | 43 |
| | 1. Incentive Compensation..... | 43 |
| | 2. Stock Rewards | 45 |
| | D. PUC, OCA, OSBA FEES | 47 |
| | E. RATE CASE EXPENSE | 48 |
| | F. OUTSIDE SERVICES..... | 49 |
| | G. OTHER ADJUSTMENTS..... | 51 |
| | 1. Safety Initiatives | 51 |
| | a. Cross Bore Identification Program | 52 |
| | b. Gas Qualification Specialists | 54 |
| | c. Legacy Service Line Record Enhancement | 55 |
| | d. Field-Assembled Riser Replacement..... | 56 |
| | 2. Compensation Adjustments | 58 |
| | H. DEPRECIATION EXPENSE..... | 59 |
| VII. | TAXES..... | 59 |
| | A. TAXES OTHER THAN INCOME TAXES..... | 59 |
| | B. INCOME TAXES | 60 |
| VIII. | RATE OF RETURN..... | 60 |
| | A. INTRODUCTION | 60 |

| | | |
|----|---|----|
| 1. | Rate of Return Standards | 62 |
| 2. | Rate of return components | 64 |
| B. | CAPITAL STRUCTURE RATIOS | 65 |
| 1. | Columbia’s Capital Structure..... | 65 |
| 2. | OCA’s Hypothetical Capital Structure is Unjustified and Should be Rejected..... | 66 |
| a. | Applicable Legal Standards | 66 |
| b. | OCA has Failed to Demonstrate that Columbia’s Proposed Capital Structure is Atypical..... | 67 |
| 3. | Conclusion as to Capital Structure..... | 69 |
| C. | DEBT COST RATE | 69 |
| D. | RETURN ON COMMON EQUITY | 69 |
| 1. | Columbia’s Cost Rate for Common Equity Capital | 70 |
| a. | Barometer Group | 72 |
| b. | DCF..... | 74 |
| c. | Risk Premium..... | 80 |
| d. | CAPM..... | 82 |
| e. | Comparable Earnings..... | 84 |
| f. | Cost of Equity Should Include an Increment for Management Performance | 85 |
| 2. | Opposing Parties Common Equity Cost Rate Recommendations Must be Rejected..... | 85 |
| a. | I&E’s Return on Common Equity Recommendation is Understated | 86 |
| b. | OCA’s Recommended Cost of Equity is Flawed and Should be Rejected..... | 88 |
| c. | OSBA’s Return on Equity Observations Should be Given No Weight..... | 91 |

| | | |
|-----|---|-----|
| 3. | Increment for Management Effectiveness | 92 |
| a. | Evidence of Columbia’s management effectiveness | 93 |
| b. | Other parties’ arguments against any allowance for management effectiveness should be rejected | 96 |
| E. | CONCLUSION AS TO RATE OF RETURN | 97 |
| IX. | MISCELLANEOUS ISSUES | 98 |
| A. | LOW-INCOME CUSTOMER ISSUES | 98 |
| B. | PIPELINE REPLACEMENT ISSUES | 114 |
| 1. | DIMP | 114 |
| 2. | Pipeline Replacement | 117 |
| 3. | Pipeline Replacement Costs | 119 |
| 4. | Leaks/Risk Reduction | 123 |
| X. | RATE STRUCTURE | 127 |
| A. | INTRODUCTION | 127 |
| B. | COST OF SERVICE | 127 |
| 1. | Allocated Cost of Service Principles | 127 |
| 2. | Allocated Cost of Service Studies | 129 |
| 3. | Customer Charge Studies | 136 |
| C. | REVENUE ALLOCATION | 137 |
| 1. | Proposed Revenue Allocation and Alternatives | 137 |
| a) | Columbia’s Proposed Revenue Allocation | 137 |
| b) | Other Parties’ Revenue Allocation Proposals | 140 |
| 2. | Flex Customers | 141 |
| a) | OSBA’s Challenge to Columbia’s Flex Rate Discounts is Without Merit and Should be Rejected | 141 |

| | | |
|-----|---|-----|
| b) | I&E’s Request for a Competitive Alternative Analysis Should be Rejected..... | 146 |
| 3. | Allocation of Universal Service Costs..... | 147 |
| D. | RATE DESIGN | 148 |
| 1. | Residential Rate Design..... | 149 |
| a) | Columbia’s Proposed Increase to the Residential Customer Charge Should be Approved..... | 149 |
| b) | Columbia’s Proposal to Remove the 3% Deadband from the Weather Normalization Adjustment Should be Approved | 153 |
| c) | Columbia’s Proposal to Implement the Revenue Normalization Adjustment Should be Approved..... | 156 |
| 2. | Small C&I Customer Rate Design..... | 164 |
| 3. | Large C&I Customer Rate Design..... | 165 |
| 4. | Gas Procurement Charge Rider | 167 |
| E. | BILL IMPACTS | 167 |
| XI. | CONCLUSION..... | 169 |

TABLE OF AUTHORITIES

Page(s)

Federal Court Decisions

| | |
|--|--------|
| <i>Bluefield Water Works and Improvement Co. v. Public Service Comm’n.</i> 262 U.S. 679 | 62 |
| <i>Bluefield Water Works v. Public Service Commission,</i> 262 US 668 (1982)..... | 84 |
| <i>Duquesne Light Co. v. Barasch,</i> 488 U.S. 299 (1989)..... | 20, 63 |
| <i>Federal Power Comm’n v. Hope Natural Gas Co.,</i> 320 U.S. 591 (1944)..... | 63 |
| <i>Ohio Bell Telephone Co. v. Pub. Util. Comm. of Ohio,</i> 301 U.S. 292 (1937)..... | 63 |

Pennsylvania Court Decisions

| | |
|--|---------------|
| <i>Butler Township v. Pa. PUC,</i> 473 A.2d 219 (Pa. Cmwlth. Ct. 1984) | 45, 111 |
| <i>Carnegie National Gas Co. v. Pa. PUC,</i> 433 A.2d 938 (Pa. Cmwlth. 1981) | 66 |
| <i>City of Pittsburgh v. Pa. P.U.C.,</i> 182 Pa. Super. 376, 126 A.2d 777 (1956)..... | 62 |
| <i>Lloyd v. Pa. P.U.C.,</i> 904 A.2d 1010 (Pa. Cmwlth. 2006) <i>appeal denied</i> , 591 Pa. 676, 916 A.2d 1104 (2007)..... | 127, 140, 141 |
| <i>Lower Paxton Twp. v. Pa. P.U.C.,</i> 13 Pa. Cmwlth. 135, 317 A.2d 917 (1974) | 62, 63 |
| <i>McCloskey v. Pa. PUC</i> , 225 A.3d 192, (Pa. Cmwlth. 2020)..... | 30, 34 |
| <i>Met-Ed Indus. Users Group v. Pa. PUC,</i> 960 A.2d 189 (Pa. Cmwlth. 2008)..... | 146 |
| <i>Octoraro Water Co. v. Pa. P.U.C.</i> , 391 A.2d 1129 (Pa. Cmwlth. 1978)..... | 63 |

| | |
|---|---------|
| <i>Pa. Associated Builders & Contrs., Inc. v. Commonwealth Dep't of Gen. Servs.</i> , 996 A.2d 576 (Pa. Cmwlt. 2010) | 156 |
| <i>Pa. P.U.C. v. Pennsylvania Gas and Water Co. - Water Division</i> , 341 A.2d 239 (Pa. Cmwlt. 1975)..... | 63 |
| <i>Popowsky v. Pa. P.U.C.</i> , 868 A.2d 606 (Pa. Cmwlt. 2004) | 75, 77 |
| <i>R.M. v. Pennsylvania Hous. Fin. Agency</i> , 740 A.2d 302 (Pa. Cmwlt. 1999) | 156 |
| <i>Riverton Consolidated Water Co. v. Pa. P.U.C.</i> , 140 A.2d 114 (Pa. Super. 1958)..... | 62 |
| <i>T.W. Phillips Gas and Oil Co. v. Pa. P.U.C.</i> , 474 A.2d 355 (Pa. Cmwlt. 1984)..... | 45, 111 |
| <i>United States Steel Corp. v. Pa. P.U.C.</i> , 390 A.2d 849 (Pa. Cmwlt. 1978) | 63 |

Pennsylvania Administrative Agency Decisions

| | |
|---|----------|
| <i>2019 Amendments to Policy Statement on Customer Assistance Program, Final Policy Statement Order, Docket No. M-2019-3012599</i> | 99 |
| <i>Pa. P.U.C. v. ALLTEL Pa., Inc.</i> , Docket No. R-942710 et al., 491, 1985 Pa. PUC LEXIS 53, *106 - *107 (Order entered May 24, 1985)..... | 66 |
| <i>Pa. Publ. Util. Comm'n v. Aqua Pennsylvania, Inc.</i> , Docket No. R-00038805, 2004 Pa. PUC LEXIS 39, 236 P.U.R.4th 218 (August 5, 2004) | 75, 77 |
| <i>Pa. Publ. Util. Comm'n, et al. v. PPL Electric Utilities Corporation</i> , Docket Nos. R-00049255, et al., 2007 Pa. PUC LEXIS 55 (Order on Remand entered July 25, 2007) | 127 |
| <i>Pa. P.U.C. v. West Penn Power Co.</i> , Docket Nos. R-901609, et al., 1990 Pa. PUC LEXIS 142 (Order dated Dec. 13, 1990) | 127 |
| <i>Pa. P.U.C. v. West Penn Power Co.</i> , Docket Nos. R-00942986, et al. (Order dated Dec. 29, 1994)..... | 92 |
| <i>Fixed Utility Distribution Rates Policy Statement, Final Policy Statement Order</i> , Docket No. M-2015-2518883 | 156 |
| <i>Joint Petition for Generic Investigation or Rulemaking Regarding “Gas-On-Gas” Competition Between Jurisdictional Natural Gas Distribution Companies</i> , Docket Nos. P-2011-277868 and I-2012-2320323 (Order entered June 13, 2019) | 143 |
| <i>Pa. P.U.C. v. Pennsylvania Power & Light Co.</i> , 55 PUR 4th 185, 249 | 127, 128 |

| | |
|--|----------------|
| <i>Pa. P.U.C. v. Aqua Pa., Inc.</i> , Docket No. R-00072711, 2008 Pa. PUC LEXIS 50 (Order dated July 17, 2008) | <i>passim</i> |
| <i>Pa. P.U.C. v. Duquesne Light Co.</i> , 63 Pa. PUC 337, 1987 Pa. PUC LEXIS 342 (Order dated March 10, 1987)..... | 46 |
| <i>Pa. P.U.C. v. PPL Electric Utilities Corp.</i> , Docket No. R-2012-2290597, 2012 Pa. PUC LEXIS 1757..... | <i>passim</i> |
| <i>Pa. P.U.C. v. Philadelphia Gas Works</i> , Docket No. R-2008-2073938, 2008 Pa. PUC LEXIS 32 (Order dated Dec. 19, 2008) | 46 |
| <i>Pa. P.U.C. v. West Penn Power Co.</i> , Docket No. R-00942986, et al., 1994 Pa. PUC LEXIS 144, *147 (Order dated Dec. 29, 1994)..... | 92 |
| <i>Pa. P.U.C. v. West Penn Power Co.</i> , Docket No. R-901609, et al., 1990 Pa. PUC LEXIS 142, 73 Pa. PUC 454, 119 P.U.R.4th 110 (Order dated Dec. 13, 1990)..... | 127 |
| <i>Pa. Pub. Util. Comm’n, v. City of Lancaster Bureau of Water</i> , Docket Nos. R-2010-2179103 (Order dated July 14, 2011)..... | 78 |
| <i>Pa. Pub. Util. Comm’n v. PPL Electric Utilities Corp.</i> , Docket No. R-00049255 (Order dated Dec. 6, 2004)..... | 75, 76, 77 |
| <i>Pa. Pub. Util. Comm’n v. PPL Gas Utilities Corp.</i> , Docket No. R-00061398 (Order dated Feb. 8, 2007) | 75, 77 |
| <i>Pa. Pub. Util. Comm’n v. Pa. American Water Co.</i> , Docket No. R-0001639 (Order dated Jan. 10, 2012) | 75, 76, 77, 79 |
| <i>Pa. Publ. Util. Comm'n, et al. v. PPL Electric Utilities Corporation</i> , Docket Nos. R-00049255..... | 127 |
| <i>Pa. PUC v. City of Bethlehem</i> , 84 Pa. P.U.C. 275 (1995) | 66 |
| <i>Pa. PUC v. City of Lancaster – Water</i> , 1999 Pa. PUC Lexis 37 | 66, 79 |
| <i>Pa. PUC v. Columbia Gas of Pennsylvania, Inc.</i> , Docket No. R-2018-2647577 et al. (Order entered December 6, 2018)..... | 56 |
| <i>Pa. PUC v. Columbia Gas of Pennsylvania, Inc.</i> , Docket No. R-2020-3018835 (Order entered August 20, 2020) | 166, 167 |

| | |
|---|---------------|
| <i>Pa. PUC v. Peoples Natural Gas Company LLC,</i> Docket Nos. R-2018-30068183006818 et al. (Order entered October 3, 2019)..... | 143 |
| <i>Pa. PUC v. UGI Utilities, Inc. – Electric Division,</i> Docket No. R-2017-2640058 (Order entered October 25, 2018) | <i>passim</i> |
| <i>Pa. PUC v. The York Water Company,</i> 62 Pa. PUC 459 (1986) | 88 |
| <i>Petition of Columbia Gas of Pennsylvania, Inc., for Approval of a Major Modification to its Existing Long-Term Infrastructure Improvement Plan and Approval of its Second Long-Term Infrastructure Improvement Plan,</i> Docket No. P-2017-2602917 (Order entered September 21, 2017) | 31, 116 |
| <i>Petition of Columbia Gas of Pennsylvania, Inc. for Approval of its Long-Term Infrastructure Improvement Plan,</i> Docket No. P-2012-2338282 (Order entered March 14, 2013) | 116 |
| <i>Petition of Columbia Gas of Pennsylvania, Inc. For Approval to Use Penalty Credit and Refund Proceeds for Its Residential Hardship Fund,</i> Docket No. P-2018-3000160 (Order entered June 14, 2018) | 112 |
| <i>Petition of Philadelphia Gas Works for a Statement of Policy on the Application of Philadelphia Gas Works' Cash Flow Ratemaking Method,</i> 2009 Pa. PUC LEXIS 2018 (December 30, 2009) | 156 |
| <i>Philadelphia Suburban Water Company v. Pa. Pub. Util. Comm'n,</i> 808 A.2d 1044, 1060 (Pa Cmwlth. 2002) | 127 |
| <i>TUS Report on the Quarterly Earnings of Jurisdictional Companies for the Year ended March 31, 2020, Docket No. M-2020-3020940, Attachment G (August 6, 2020)</i> | 72 |

Pennsylvania Statutes and Regulations

| | |
|-------------------------------------|--------------|
| 66 Pa.C.S. §§ 102 and 2202..... | 1 |
| 66 Pa.C.S. § 523(a) | 92 |
| 66 Pa.C.S. § 1301 Section 1301..... | 18, 19 |
| 66 Pa. C.S. §§ 1330(b)..... | 14, 155, 156 |
| 66 Pa. C.S. § 1351, 1352..... | 117 |
| 66 Pa. C.S. § 1352(b) | 117 |

| | |
|------------------------------------|-----|
| 66 Pa. C.S. § 2203(5)..... | 147 |
| 52 Pa. Code § 53.52(b)(2)..... | 6 |
| 52 Pa. Code § 56.92 (2) | 100 |
| 52 Pa. Code § 56.100 | 100 |
| 52 Pa. Code § 56.111 | 100 |
| 52 Pa. Code § 69.265 | 99 |
| 52 Pa. Code § 121.4(e)(4)..... | 117 |
| 52 Pa. Code § 121.5 | 117 |
| 52 Pa. Code § 121.7(b)(2)..... | 117 |
| 52 Pa. Code § 1231.4(a), (c) | 117 |

Other Authorities

| | |
|---|-----|
| Report on 2018 Universal Service Programs & Collections Performance (published December 2019), available at http://www.puc.state.pa.us/General/publications_reports/pdf/EDC_NGDC_Un iServ_Rpt2018.pdf | 101 |
|---|-----|

I. INTRODUCTION

A. COLUMBIA GAS OF PENNSYLVANIA, INC.

Columbia Gas of Pennsylvania, Inc. (“Columbia” or the “Company”) is a “public utility” and “natural gas distribution company” (“NGDC”) as those terms are defined in Sections 102 and 2202 of the Public Utility Code, 66 Pa.C.S. §§ 102 and 2202. Columbia provides natural gas sales, transportation, and/or supplier of last resort services to approximately 433,000 retail customers in portions of 26 counties of Pennsylvania, primarily in the western half of the state, but also including parts of Northwest Southern and Central Pennsylvania.

In this proceeding, Columbia requests Pennsylvania Public Utility Commission (“Commission”) approval of a base rate increase, with an anticipated effective date of rates on or before January 23, 2021.¹ The requested increase is based upon a Fully Projected Future Test Year (“FPFTY”) ending December 31, 2021, and is designed to provide the Company an opportunity to earn an 8.00% overall rate of return on a claimed rate base of \$2.401 Billion. Columbia Ex. KKM-1R, p. 1. Columbia last increased its base rates effective December 2018. Since that time, Columbia has continued its accelerated main replacement program, which is the overwhelming reason why its rate base is projected to increase by nearly \$551 Million since November 30, 2019. The return and depreciation on that rate base represents most of the \$100.4 Million increase in this case. A further large contributing factor to the rate increase is the Company’s increased expenses on a variety of safety initiatives, including repairs to be undertaken on customer-owned pipes. Absent rate relief, Columbia’s overall rate of return on its FPFTY rate base will be a grossly inadequate 4.88%, which barely exceeds Columbia’s embedded debt cost rate. Thus, the need for relief is clear.

¹ As explained in Section I.B and Section X.E of this brief, the suspension period for proposed rates has been extended to February 25, 2021, but upon approval of compliance rates by the Commission, rates will become effective January 23, 2021.

Columbia is aware of the challenges faced by many customers as a result of COVID-19 and the resulting recession. However, the appropriate response is not to disallow proper rate relief. Instead, the response is to institute programs that enable customers to maintain service through targeted relief efforts such as waiver of late fees and penalties, and expansion of customer assistance efforts. Columbia has already implemented these efforts, and will continue to examine and propose further programs.

For the reasons explained below and in its filing, Columbia's proposed distribution rate increase is just and reasonable, and should be approved by the Commission.

B. HISTORY OF THE PROCEEDINGS

On April 24, 2020, Columbia filed Supplement No. 307 to Tariff Gas Pa. P.U.C. No. 9 at Docket No. R-2020-3018835, with an effective date of January 23, 2021. Columbia proposed to increase overall rates by approximately \$100.4 million per year, based upon data for a FPPTY ending December 31, 2021. The filing was made in compliance with the Commission's regulations, and contains all supporting data and testimony required to be submitted in conjunction with a tariff change seeking a general rate increase.

On April 27, 2020, the Commission's Bureau of Investigation and Enforcement ("I&E") filed a Notice of Appearance. The Office of Small Business Advocate ("OSBA") and the Office of Consumer Advocate ("OCA") filed Formal Complaints on May 4, 2020 and May 5, 2020, respectively. The Community Action Association of Pennsylvania ("CAAP") and the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania ("CAUSE-PA") filed Petitions to Intervene. Columbia Industrial Intervenors ("CII"), the Pennsylvania State

University (“PSU”) and two individuals, Ionut R. Ilie and Dr. Richard Collins, also filed complaints.²

On May 21, 2020, the Commission issued an Order suspending Columbia’s Supplement No. 307 by operation of law until January 23, 2021.

On May 22, 2020, the Office of Administrative Law Judge (“OALJ”) issued a Prehearing Conference Order, scheduling a prehearing conference for June 3, 2020. The case was assigned to Administrative Law Judge Katrina L. Dunderdale (the “ALJ”)

On May 29, 2020, I&E filed an Expedited Motion of the Bureau of Investigation and Enforcement to Extend the Statutory Suspension Period During the Emergency Interruption of Normal Operations of the Pennsylvania Public Utility Commission (“Expedited Motion”). In its Expedited Motion, I&E requested the Commission issue an order granting an extension of the statutory suspension period from January 23, 2021 until February 4, 2021, citing the interruption of normal operations of the Commission due to the COVID-19 pandemic.

On June 3, 2020, the ALJ convened a call-in telephonic prehearing conference with Chief ALJ Rainey present in addition to counsel for the parties. Prior to discussing procedural matters, Chief ALJ Rainey listened to oral arguments from the parties on I&E’s motion. Chief ALJ Rainey orally informed the parties he found I&E’s request was reasonable under the circumstances and granted I&E’s request to extend the statutory suspension period by twelve (12) days, or until February 4, 2021. On June 3, 2020, Chief ALJ Rainey issued his ruling in an Order which was served on the parties and reiterated the oral ruling made at the prehearing conference.

² Mr. Ilie’s Complaint was subsequently withdrawn. Tr. at 181.

On Friday, June 12, 2020, the ALJ issued the Prehearing Order which memorialized the matters discussed by the parties during the prehearing conference on June 3, 2020 and which established the litigation schedule.

On June 23, 2020, Columbia Gas filed a Petition for Reconsideration from Staff Action (Petition for Reconsideration) and sought a reversal by the Commission of the June 3, 2020 Order issued by Chief ALJ Rainey, insofar as it extended the effective date of new rates beyond January 23, 2021. Columbia did not oppose the extension of the procedural schedule. Responses to the Petition for Reconsideration were received from I&E, OCA, OSBA.

At the Public Meeting on August 6, 2020, the Commissioners considered the Petition for Reconsideration, which was denied in part and granted in part. Vice Chairman David W. Sweet sponsored a motion which was affirmed by all Commissioners. Pursuant to the Motion, the Commissioners denied the Company's Petition for Reconsideration in that they affirmed the decision of Chief ALJ Rainey to grant I&E's Petition for Extension filed June 3, 2020. However, the Company's Petition for Reconsideration was granted in that the effective date for new base rates remained January 23, 2021. In addition, the OALJ was directed to issue a Recommended Decision in this matter on or before November 20, 2020. The Commission's Order was entered August 20, 2020.

On August 7, 2020, the ALJ issued the First Interim Order which amended the litigation schedule to reflect the shortened time frame, as required under the Motion.

On August 11, 2020, the parties notified the ALJ via email that an agreement had been reached by the parties which would extend the suspension date to February 25, 2021, maintain the effective date of rates at January 23, 2021, as outlined in the motion, and move the due date for the Recommended Decision from November 20, 2020 to December 6, 2020. This agreement

would enable the original litigation schedule to be maintained. On August 12, 2020, Columbia Gas filed Supplement No. 315 to Tariff Gas – Pa. P.U.C. No. 9, which further extended the suspension date to February 25, 2021.

On August 13, 2020, the ALJ issued the Second Interim Order, which reinstated the original litigation schedule.

On July 8, 2020, a telephonic public input hearing was held. At the public input hearing, Columbia orally objected to the testimony and exhibits of Mr. Richard Culbertson, one of the two witnesses who appeared, contending that the person was not a current customer of Columbia nor a party, and thus not qualified to offer testimony. On July 15, 2020, Columbia filed written objections to the written testimony and exhibits of Mr. Culbertson. By Third Interim Order entered August 13, 2020, the ALJ denied Columbia's objections to the written testimony and exhibits presented by Mr. Culbertson at the public input hearing.

In accordance with the procedural schedule, other parties' direct testimony was served on July 28, 2020. Written rebuttal testimony was served on August 26, 2020. Written surrebuttal testimony was served on September 16, 2020. Written rejoinder testimony was served on September 21, 2020.

All parties to the proceeding reached agreement to waive cross examination of each other's witnesses, and agreed to the submission of testimony by stipulation. Columbia and I&E agreed to a stipulation to place into the record Columbia Ex. NJDK-1RJ. In addition, Columbia and PSU reached an agreement not to submit certain testimony into the record, and to submit redacted testimony. The redacted testimony was provided for the record. On September 24, 2020, a hearing was held for the receipt of evidence. By Order dated September 25, 2020, the record was closed.

II. SUMMARY OF ARGUMENT

Columbia's request for rate relief of \$100.4 Million is based upon data for a FPFTY ending December 31, 2021. Columbia's last filing for a general rate increase was based upon a FPFTY ended December 31, 2019. Thus, it has been approximately two years since Columbia filed for a base rate case. The magnitude of the increase is consistent with the approximately \$50 Million increases sought by Columbia on an annual basis from 2014 through 2016. As explained briefly below, and in greater detail in later Sections of the brief, these increases are driven primarily by the needed replacement of aging infrastructure.

On February 19, 2020, Columbia notified the Commission and parties of its intent to file its general rate increase on or about March 20, 2020. Several weeks later, the Governor issued a Proclamation of Disaster Emergency ("Executive Order") with respect to the emerging COVID-19 pandemic. Within two weeks, the Governor's office issued orders closing various state offices and nonlife-sustaining businesses.³ In response to the Governor's directives, the Commission adopted its own Emergency Order and various electronic procedures to allow the Commission to continue to operate.

Due to the then-emerging COVID-19 crisis, Columbia decided to voluntarily request a delay to the filing of its general rate case. On March 24, 2020, Columbia filed for a waiver of 52 Pa. Code § 53.52(b)(2) and requested a thirty-day extension granting the Company authority to file data in support of a proposed increase in base rates based upon an historic test year ended November 30, 2019 on or before April 28, 2020. By Secretarial letter dated March 27, 2020, the Commission granted Columbia's request.

³ Since that time, the Governor has allowed businesses and government locations to reopen through a series of progressively less-restrictive reopening protocols.

On April 24, 2020, approximately five weeks after its original intended filing date, Columbia filed this base rate case. The effect of the delay was to postpone, for five weeks, the effective date of rates, after full statutory extension, until January 23, 2021.⁴ As a result, Columbia voluntarily lost the opportunity for increased revenues in the middle of the peak revenue heating season. Based upon the Company's claim in this case, Columbia's decision to voluntarily postpone the rate filing cost the Company approximately \$16.1 Million in revenues. Columbia St. No. 1, p. 11. During that initial period of delay, and subsequently, Columbia adopted a variety of measures designed to assist customers with payment difficulties resulting from the recession caused by COVID-19, which are described in detail in Section III of this brief.

Continued indefinite delay of the rate filing, however, was not feasible, because of the substantial need for rate relief driven in major measure by the need to provide safe and reliable service to customers. The single largest safety driver of the need for rate relief is the Company's main replacement program. This program began for Columbia in 2007. Since that time, and through 2019, Columbia has retired approximately 5,691,000 feet of bare steel, wrought iron and cast iron pipe from its system. However, substantial pipeline replacements remain. As relevant to this proceeding, Columbia's rate base is projected to increase by over \$550,000,000 from December 31, 2019 through December 31, 2021, the vast majority of which is for replacement of infrastructure. Columbia Ex. 108, p. 3; Columbia St. No. 14, p. 15.

Infrastructure replacement is not the only safety related driver of the need for rate relief. Columbia is implementing a Safety Management System ("SMS"), with a focus on identifying and mitigating potential risks while continually assessing and improving process and procedures.

⁴ December 20, 2020 would have been the effective date of rates after full statutory suspension had Columbia filed its general rate increase on March 20, 2020 as it originally intended.

SMS is a proactive and systematic approach to managing safety, which includes the structures, policies and procedures an organization uses to direct and control activities. SMS involves a commitment by the Company to identify and mitigate risk. Columbia St. No. 1, pp. 14-16. Consistent with its commitments to safety under the SMS, Columbia is proposing to undertake increased spending on a number of safety initiatives, including:

- Underground well inspections, in accordance with Federal regulations
- Documentation of Maximum Allowable Operating Pressure on the Company's facilities, in accordance with Federal regulations
- Increased corrosion remediation
- Further expansion of the use of Global Positioning System to locate new and replacement facilities
- Improved leak detection, through the use of the new Picarro leak detection platform system
- Accelerated inspection for cross bores, which have been identified as a high risk in Columbia's Distribution Integrity Management Plan ("DIMP"), to halve the time for completing cross bore remediation
- Accelerated replacement of field assembled risers, including customer-owned risers, which have also been identified as a high risk in Columbia's DIMP
- Accelerated program to review and correct legacy service line records
- Increase staff for employee training

These additional safety initiatives represent over \$5.5 Million of the proposed rate increase.

Several parties, in particular OCA, argue for an unprecedented rejection of the entire rate increase. This proposal is not based upon an analysis that the increase is not supported by the record, but rather is based upon an assertion that the Commission should conclude that any increase at this time would be unjust and unreasonable, based upon the financial impact of COVID-19 on certain customers. In Section III of this brief, Columbia explains that such proposal violates statutory and constitutional standards governing rate regulation. Section III

further explains the short-term and long-term disastrous consequences such a proposal, if adopted, would have on the ability of all Pennsylvania utilities to continue to provide safe and adequate service at a reasonable cost. Some may contend that Columbia should be satisfied with grossly inadequate returns, as various competitive businesses have. However, unlike other businesses, Columbia does not have the option to scale back its business operations and lay off staff. As part of the Regulatory Compact, Columbia must continue to provide service to customers. Section III further explains that the solution is not the adoption of an unconstitutional response to the COVID-19 driven recession, but the use of targeted mechanisms that provide appropriate relief to enable customers to maintain service. Columbia notes that, to its credit, I&E does not endorse this extreme proposal, but focuses on traditional ratemaking procedures.

OCA has presented an alternative calculation of revenue requirement, based upon a more traditional rate base/rate of return analysis. However, even under this more traditional approach, OCA derives a woefully inadequate rate increase of \$31.5 Million. In contrast, I&E recommends an increase of \$79.5 Million. Although Columbia disagrees with I&E's recommendation, and is not endorsing it as an appropriate outcome, it does demonstrate the unreasonableness of OCA's alternative proposal. Many of OCA's unjustified adjustments are directly aimed at the safety initiatives highlighted above.

Rate Base. With respect to rate base, OCA proposes to disallow over \$72.3 Million in FPFTY plant additions, amounting to approximately 21% of Columbia's FPFTY plant additions. OCA offers no evidence to contend that Columbia will not in fact undertake these additions. In fact, the evidence demonstrates conclusively that Columbia is diligent in spending its capital budget, and more. Instead, OCA simply takes an historic 3-year average of spending to conclude that Columbia's FPFTY spending is higher. Of course, this is not surprising, as Columbia

continues to accelerate its spending on mains replacement. OCA's proposal is little different from prior proposals to disallow half of projected FPFTY plant additions. As those proposals have been rejected, so also should OCA's proposal here be rejected.

Expenses. OCA takes further unreasonable positions to disallow virtually all of the increases in expenses designed to address safety concerns, as listed above. These proposed disallowances are not supported by the record and will only impair Columbia's ability to maintain a safe system.

OCA and I&E have also supported several other expense adjustments opposed by Columbia. Several of these adjustments are highlighted here.

With respect to labor expense, I&E proposes to disallow annualization of FPFTY wage increases. This proposal has been rejected by the Commission in *Pa. PUC v. UGI Utilities, Inc. – Electric Division*, Docket No. R-2017-2640058, Order entered October 25, 2018, and should similarly be rejected here. OCA and I&E further propose to disallow a portion of labor expense, based upon the calculation of a "vacancy" adjustment. However, both parties fail to recognize that Columbia's budget process offsets the increase in full time employee equivalents with reduced overtime expense. When that is accounted for, Columbia's FPFTY labor expense is barely unchanged from the normalized HTY level of labor expense.

I&E and OCA develop different calculations to disallow a portion of incentive compensation. However, these proposals improperly are derived from a single HTY ratio of incentive compensation payout to payroll. However, incentive compensation varies year to year as attainment of goals change each year. It is more appropriate to measure the reasonableness of budgeted incentive compensation by a ratio of payout to payroll over a period of years. When properly measured, Columbia's projected incentive compensation is consistent with an average

payout ratio. OCA further would disallow stock rewards, on the basis that only shareholders, and not customers, benefit from this form of incentive compensation. However, as the record demonstrates, Columbia revised its stock reward criteria several years ago, and now has included achievement of customer value goals in the award process. Under established precedent, the stock rewards are a proper expense to be recovered for ratemaking purposes.

Rate of Return. The most important, and generally the most controversial and difficult issue in a base rate proceeding is determining rate of return. This issue is of particular importance in this proceeding. Columbia, like most other major utilities in Pennsylvania, is in the midst of a major infrastructure improvement program, which is critically important to maintaining safe and reliable service to customers. To successfully execute its infrastructure replacement program, Columbia must have reasonable access to capital markets. Supportive regulation, and, in particular, a compensatory cost of common equity are critical for Columbia to continue to attract capital investment. Investors have a range of choices of where to invest. As such, the investment community will carefully examine this outcome to determine if the Commission intends to continue to be supportive for investment.

OCA has presented several unreasonable proposals that would be most detrimental to supportive regulation. First, OCA has proposed the adoption of a hypothetical capital structure, which is a substantial reduction from the actual capital structure proposed by Columbia. Columbia's capital structure is squarely within the range of capital structures of the barometer groups offered in this case. Clear precedent holds that a hypothetical capital structure should not be used unless the actual structure is atypical. OCA's hypothetical capital structure should be rejected.

Columbia has presented extensive data and analyses to support its 10.95% return on common equity. OCA's proposed 8.5% rate of return is clearly deficient. OCA supports this recommendation through the use of a completely improper Discounted Cash Flow ("DCF") calculation, that relies upon a retained earnings approach to deriving growth. This approach has been rejected by the Commission before and should continue to be rejected as flawed. If the retained earnings methodology were removed from OCA's growth rate calculation, the resulting DCF calculation would be in line with Columbia's return on common equity recommendation. I&E's recommended return on common equity is 9.86%. This result is incorrectly computed because I&E's witness improperly removed one growth rate data point that he deemed too high, but leaving in two other data points, for the same barometer group company, that are demonstrably too low. This introduces bias into the concept of a using a barometer group to develop an appropriate cost of common equity recommendation. If this improper adjustment were corrected, I&E's recommendation would also be in line with Columbia's recommendation in this case. Moreover, both I&E and OCA fail to recognize the evidence of strong management performance provided by Columbia.

Low Income Customer Issues. Columbia has in place a number of programs designed to provide assistance to low-income customers. These programs are reviewed and approved as part of the Company's Universal Service and Energy Conservation Plan ("USECP") filings with the Commission. Several parties have proposed modifications to aspects of the Company's Universal Service programs. As explained in Section IX.A of this brief, these modifications are unnecessary, in many instances duplicative of program designs already in place, and inappropriate.

Pipeline Replacement Issues. I&E identified several pipeline replacement issues in its testimony. As explained above, pipeline safety matters are highly important to Columbia, and Columbia is always prepared to listen to recommendations that can help improve safety. As explained in Section X.B of this brief, Columbia has either already implemented, is in the process of implementing, or has made proposals in this case to implement most of the recommendations of I&E.

Revenue Allocation and Rate Design. Columbia's proposed allocation of the increase reflects an analysis of three allocated cost of service studies. The three studies reflect the range of accepted cost allocation methodologies. Based upon the results of these studies, the Company developed an allocation designed to move classes toward cost of service, while recognizing appropriate principles such as gradualism and value of service.

Columbia's proposed rate design to recover the costs allocated to the various customer classes reflects a balanced approach of increases to both customer charges and commodity distribution charges. Columbia's proposed customer charges are supported by the results of two separate customer cost studies. In particular, Columbia's proposed increase to its residential customer charge is supported by a customer cost study that excludes any customer component of mains. Customer charges should reflect customer costs, and therefore an increase to the residential customer charge should be adopted.

OSBA has proposed that Columbia bear the cost of rate discounts provided to certain flex rate customers with competitive alternatives. Columbia only provides rate discounts in instances where it concludes that it likely would lose a customer to an alternative supply without negotiating a discounted rate. Columbia takes into account a variety of information and factors in agreeing to a discount and is always seeking to provide the minimum discount needed to retain

the customer. When contracts expire, the Company undertakes a further analysis and negotiations before agreeing to continued flex rates. Columbia's success in moving customers off discounted rates is documented. Columbia's flex rates are justified and maximize the revenues that Columbia can obtain from these customers. Therefore, OSBA's proposal must be rejected.

Another important issue presented by certain parties is the proposal to charge universal service costs to customer classes other than the residential class. This proposal, on top of proposals by other parties to charge a higher proportion of the rate increase to these other classes, would violate principles of gradualism in increasing rates. This proposal is not justified on a cost causation basis, as the costs are not incurred to serve non-residential customer classes, non-residential customer classes are not eligible for the universal service programs, and the non-residential classes receive no direct benefit from the programs. Further, no other utilities in Columbia service territory are recovering universal service costs from non-residential customers. Requiring Columbia to charge universal service costs to non-residential customers in that circumstance will place Columbia in a distinct competitive disadvantage for new business, and will result in further rate discounting to current flex rate customers. Rather than implement this change in the context of Columbia's rate case, the Commission should undertake a generic proceeding to implement this change for all utilities.

Columbia currently has in place a Weather Normalization Adjustment ("WNA") mechanism. The current WNA has a 3% deadband in place. The deadband means that if the temperature in a month is between 97% and 103% of normal temperature. No weather normalization adjustment is made. Columbia has proposed to eliminate this deadband. The WNA accounts for all weather variances in the formula but applies the deadband only to the net

monthly variance. Columbia proposes that the WNA not be constrained to net variances beyond the deadband, but instead operate to capture all variances. In this way, the mechanism will truly eliminate weather as a factor in over or under recovery of non-gas costs.

Columbia also proposes a Revenue Normalization Adjustment (“RNA”). The RNA is designed to promote revenue stability by “breaking the link” between Residential non-gas revenue received by the Company and gas consumed by non-CAP Residential customers. The RNA is a revenue de-coupling mechanism specifically authorized by Section 1330(b)(1)(i) of the Public Utility Code. The RNA is calculated every six months, based upon a comparison of the benchmark distribution revenue established in this case to actual billed distribution revenue. The RNA is exactly the type of alternative rate mechanism envisioned by the Legislature and should be approved.

For reasons explained below, Columbia’s request for rate relief and proposals set forth in its filing should be approved.

III. OVERALL POSITION ON RATE INCREASE

A. COLUMBIA’S POSITION ON RATE INCREASE

Columbia’s position is that it should receive an increase of \$100.4 Million, based upon the long-standing ratemaking process used in Pennsylvania, which reflects the formula of expenses, plus (rate base x rate of return) plus taxes. Columbia appreciates and empathizes with the concerns of various parties about the ability of some customers to pay an increase to their utility bills due to the recession brought on by the COVID-19 pandemic. However, denying Columbia rate relief will only impair Columbia’s ability to invest in the construction and maintenance of a safe utility system. Supporting Columbia’s robust Commission-approved main

replacement program also will assist the Commonwealth as it works out of the current recession, by providing employment and supporting jobs for thousands of Pennsylvanians.

As explained in Section III.B of this brief, the best response to increased payment difficulties brought on by the pandemic-induced recession is enhanced programs to assist customers with payment difficulties, as implemented by Columbia, and not to adopt an unprecedented and unconstitutional proposal to disregard traditional ratemaking concepts and disallow any rate increase.

B. OCA’S AND OTHER PARTIES’ CONTENTIONS THAT THE COMMISSION CAN AND SHOULD REJECT THE ENTIRETY OF COLUMBIA’S PROPOSED RATE INCREASE BECAUSE OF COVID-19 MUST BE REJECTED

1. Introduction

OCA has presented testimony of Mr. Scott Rubin which attempts to justify a rejection of Columbia’s entire proposed rate increase as a response to the effects of COVID-19 on Columbia’s customers. Mr. Rubin’s contention is that the Commission has the power to, and should, conclude that any increase in Columbia’s rates in early 2021 would be unjust and unreasonable, based on the effects of COVID-19. OCA St. No. 1, pp. 22-23. Other parties have offered similar positions, although with little or no supporting analysis. CAUSE-PA St. No. 1, p. 8; CAAP St. No. 1, p. 3; CII St. No. 1, p.8.

Columbia has presented the testimony of Mr. James Cawley and other Columbia witnesses to explain the multiple errors in Mr. Rubin’s contentions. Mr. Cawley is a former Chairman of this Commission and, unlike Mr. Rubin, has participated with other Commissioners in making the final decision on many proposed rate increases. As explained by Chairman Cawley, there are two fundamental errors in Mr. Rubin’s proposal. First, both constitutional and statutory law requires the Commission to make a determination of the just and reasonable rates

based on the ratemaking formula which provides for recovery of prudently incurred costs and provides the utility the opportunity to recover a return of, and on, its investment to provide service to customers. Columbia St. No. 16-R, pp. 23-28. Simply concluding that some group of customers may have difficulty paying the determined rates and denying a rate increase based on Mr. Rubin's position does not meet these constitutional and statutory standards.

Second, adopting Mr. Rubin's proposed rate increase denial would be extremely poor policy and ultimately harm both Columbia's customers and those of all other investor-owned utilities in the Commonwealth. Moreover, as discussed below, a rate increase denial would negatively impact the economic benefits to Columbia's customers and communities in which they live and work that stem from the Company's construction and related programs.

Utility regulation has been characterized as a Regulatory Compact. Utilities are provided by government with an exclusive service territory in which to provide service in exchange for the obligation to serve that territory and to charge rates determined by the Commission on the basis of cost of service. The setting of rates on this basis provides utility investors with a reasonable opportunity to recover costs which, in turn, has allowed utilities to raise capital in all economic circumstances to build the facilities necessary to provide safe and reliable service to customers.⁵ Mr. Rubin urges the Commission to break the Regulatory Compact, without any apparent concern for the consequences of doing so. Once broken, the consequences will be higher capital costs and the potential for unavailability of capital in a future economic downturn. In fact, the record in this proceeding unequivocally demonstrates that a rate increase in this proceeding is required to provide a return on and of the Company's planned 2020 and 2021 plant replacements.

⁵ "First, in return for a monopoly franchise, utilities accepted an obligation to serve all comers. Second, in return for agreeing to commit capital to the business, utilities were assured a fair opportunity to earn a reasonable return on that capital." Charles F. Philips, Jr., *THE REGULATION OF PUBLIC UTILITIES* (1993) 21 (quoting Irwin M. Stelzer, *The Utilities of the 1990s*, *THE WALL STREET JOURNAL*, Jan. 7, 1987, 20).

And, as further explained herein, Columbia's witness Mr. Toby Bishop (Columbia St. No. 17-R) has demonstrated the substantial employment benefits of Columbia's construction program that will be threatened if Mr. Rubin's proposal were adopted.

Finally, Mr. Rubin's proposal to deny any rate increase to any customer is over broad, as even his estimates show that the incomes of 50% of customers are unaffected by COVID-19. Therefore, a more focused solution to the real problem of customers losing income is the expanded customer assistance programs that the Company already has designed and implemented to assist affected customers.

2. The Complete Denial of Columbia's Proposed Increase in Response to COVID-19 Violates Statutory and Constitutional Standards

The Pennsylvania Public Utility Code requires as follows:

Every rate made, demanded, or received by any public utility, or by two or more public utilities jointly, shall be just and reasonable, and in conformance with regulations or orders of the commission.

Section 1301, 66 Pa.C.S. § 1301.

As noted by Chairman Cawley, the Commission has set forth specific regulations that require each utility proposing a rate increase to provide data by test years for the Commission to determine the rate increase allowed pursuant to a specific ratemaking formula. Columbia St. No. 16-R, p. 23. By applying this formula, the Commission meets its duty to set just and reasonable rates under Section 1301 of the Public Utility Code and in adherence to federal constitutional standards that have been developed to review such rate determinations.

The federal constitutional standards applicable to setting public utility rates are expressed in two well known cases. These cases are cited in the testimony of OCA's rate of return witness, Mr. Kevin W. O'Donnell, and quoted as follows:

Q. PLEASE EXPLAIN THE SIGNIFICANCE OF THE SUPREME COURT'S HOPE AND BLUEFIELD DECISIONS.

- A. Regulatory law and policy recognize that utilities compete with other firms in the market for investor capital. The United States Supreme Court set the guidelines for a fair, just, and reasonable rate of return in two often-cited cases: *Bluefield Water Works and Improvement Co. v. Public Service Comm'n.* 262 U.S. 679; and the *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944).

In the *Bluefield* case, the U.S. Supreme Court stated:

A public utility is entitled to such rates as will permit it to earn a return upon the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit, and enable it to raise the money necessary for the proper discharge of its public duties. (262 U.S. at 692)

In the above finding, the Court found that utilities are entitled to earn a return on investments of comparable risks and that corresponding return should be sufficient enough to support credit activities and to raise funds to carry out its mission.

In *Federal Power Commission v. Hope Natural Gas Company*, 320 U.S. 591 (1944), the U.S. Supreme Court recognized that utilities compete with other firms in the market for investor capital. Historically, this case has provided legal and policy guidance concerning the return which public utilities should be allowed to earn. In *Hope Natural Gas*, the U.S. Supreme Court stated that the return to equity owners (or shareholders) of a regulated public utility should be commensurate to returns on investments in other enterprises whose risks correspond to those of the utility being examined:

[T]he return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That

return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise so as to maintain credit and attract capital. (320 U.S. at 603)

OCA St. No. 3, pp. 19-20.

OCA's rate of return witness then makes a recommendation of a rate of return, which combined with testimony from other OCA witnesses, would result in a proposed \$31.5 million increase in rates for Columbia. OCA St. No. 3, pp. 19-20; OCA St. No. 2, p. 4. While Columbia contends that OCA's proposed rate of return is grossly inadequate and its various proposed disallowances are improper, the testimony of OCA's own witnesses demonstrate that an increase in rates is required by the Commission's formula for setting rates under Section 1301 of the Public Utility Code and the above-referenced minimum federal constitutional standards. Because Mr. Rubin did not use the ratemaking formula and made no attempt to address the constitutional standards, Mr. Rubin's no increase proposal meets neither standard, and it must be rejected.⁶

There are other constitutional infirmities in Mr. Rubin's proposal, which were summarized by Chairman Cawley in explaining the last utility constitutional law case decided by the United States Supreme Court, *Duquesne Light Co. v. Barasch*, 488 U.S. 299 (1989):

As described by the Court, "a State's decision to arbitrarily switch back and forth between methodologies in a way which required investors to bear the risk of bad investments at some times while denying them the benefit of good investments at others would raise serious constitutional questions."

Mr. Rubin's suggested switch from traditional to "affordability" ratemaking is just such an arbitrary change of ratemaking methodology. In fact, his proposal is even more arbitrary. Rather

⁶ Mr. Rubin states that there will be many companies that would earn a return less than Columbia would earn without a rate increase. OCA St. 1, p. 24. This statement does not provide a basis to meet the constitutional standard because it fails to provide expected returns of companies that have comparable risk and responsibilities to Columbia. Columbia St. No. 16-R, p. 20.

than making investors bear only the risk of bad investments while denying them the benefit of good ones, his method gives Columbia no opportunity to prove its case, which (without meaning to offer a legal opinion) surely has grave constitutional implications. That is playing a regulatory game of heads-the-customer-wins, tails-Columbia loses.

Columbia St. No. 16-R, pp. 27-28; 488 U.S. at 315.

In addition, Chairman Cawley explained that Mr. Rubin's method of determining whether there should be a rate increase raises substantial constitutional concerns because of its lack of standards on when a rate increase will be allowed:

... Mr. Rubin's approach must fail for lack of adequate standards. How large must the proposed rate increase be before it becomes unaffordable? For what percentage of the customer base? When and to what extent are economic conditions sufficiently debilitating as to justify the prohibition of rate increases? Under what conditions is normalcy restored? Mr. Rubin's testimony provides no standards to decide these and other pertinent questions. Based on the variability of the economy, his proposed ratemaking by polls and surveys would result in unpredictable, perhaps wildly fluctuating rates.

What is predictable is that such a system would be unacceptable to the investors that have historically provided capital to Pennsylvania utilities with the result that capital will become more expensive and potentially not available in difficult economic circumstances.

Columbia St. No. 16-R, pp. 16-17.

3. Denial of Columbia's Proposed Rate Increase on the Basis of COVID-19 is not in the Interests of Customers.

Chairman Cawley also explained why denial of Columbia's rate increase in its entirety, due to COVID-19, would be poor public policy and contrary to the long-term interests of customers.

Q. WOULD IT BE FAIR TO APPLY MR. RUBIN'S PROPOSED "AFFORDABILITY" RATEMAKING METHOD TO COLUMBIA?

A. Mr. Rubin’s ratemaking method and his resulting recommendation to deny the required increase entirely would be unfair to Columbia and unwise because of the long-term effect on Columbia’s customers. The same is true of Mr. Rubin’s recommendation “if the economic situation worsens significantly and cash flow becomes a concern for Columbia” that Columbia defer construction projects “that are not needed to ensure the current provision of safe and reliable service to existing customers,” such as “growth-related projects or system rehabilitation activities that are longer-term in nature (that is, projects that are not needed to ensure current levels of service within the next six to 12 months).”

Q. WHY WOULD THE APPLICATION OF MR. RUBIN’S METHOD BE UNFAIR TO COLUMBIA?

A. It would be particularly unfair to Columbia because of its leadership in accelerating its replacement of cast iron, wrought iron, and unprotected bare steel mains in Pennsylvania, and especially so because Columbia has not paid dividends to its parent company and retained earnings to do so.

When I returned to the Commission in 2005, the Commission was very concerned about the urgent need for natural gas distribution companies to replace these types of aging mains. We began encouraging NGDCs to accelerate their replacement efforts, and we stepped up our legislative advocacy for enactment of a mechanism for natural gas infrastructure improvements. This advocacy eventually led to enactment of Act 11 of 2012 which expanded the water utility-only Distribution System Improvement Charge to NGDCs and other jurisdictional fixed utilities and added a [Fully Projected Future Test Year] FPPTY.

Meanwhile, Columbia did not wait for the expansion of the DSIC to NGDCs. As the testimony of Columbia witness Robert M. Kitchell (Columbia St. No. 14) relates in detail, Columbia began an accelerated replacement of bare steel, wrought iron, and cast iron pipe in 2007 and has since retired 5,699,833 feet of such mains. During that time, the cost of main replacement has gone from \$81.25 per foot in 2008 to \$235.00 per foot today. As part of its Distribution Integrity Management Program (“DIMP”), Columbia plans to spend \$265 million annually in capital expenditures in the period 2020-2024.

With regular, rational rate increases, usually by approving negotiated settlements, the Commission, with my concurrence, has supported these replacement efforts.

Columbia St. No. 16-R, pp. 9-11.

The denial of Columbia's proposed rate increase would deny Columbia a fair return on investments planned for 2021. Further, it would effectively deny Columbia the ability to even roll into base rates the revenue requirement for plant replacements made in 2020, thereby causing Columbia to hit the DSIC rate cap by the final quarter of DSIC recovery in 2020. Columbia St. No. 9-R, pp 3-4. Thus, the DSIC would not even provide a mechanism to recover return and depreciation on all of Columbia's 2020 plant investments, or any recovery of 2021 investments. This would create a significant disincentive to continued investment to improve the safety of Columbia's facilities and a reversal of the Commission's steadfast commitment to replacing such facilities. In addition, such an action would deliver a chilling message to the investment markets which have provided capital for this endeavor. Columbia St. No. 16-R, p. 12.

It also is to be noted that the effects of reducing or eliminating capital investment on aging gas distribution mains not only will increase safety concerns, but also have real negative economic effects on Columbia's customers and the communities in which they live and work. Mr. Toby Bishop presented testimony analyzing the economic benefits of Columbia's construction and related programs. He concludes as follows:

Q. Please summarize the key conclusions of your rebuttal testimony.

A. Based on an independent analysis of the economic impacts of the Company's proposed Capital Projects on the local economy, I conclude the following:

- While witnesses Rubin, Mierzwa, Miller and Moore recommend that now is not the time for a rate increase based on difficult economic circumstances, they have not considered the economic benefits associated with the Company's proposed Capital Projects, although Ms. Moore and Mr. Miller acknowledge the benefits associated with other spending

activity by the Company, including funding of low-income assistance programs.

- The proposed Capital Projects represent a substantial injection of investment dollars into the local economies in the Company's service territory that will promote economic activity, support jobs and generate tax revenues, thus providing important economic stimulus to Pennsylvania communities that have been negatively impacted by the pandemic, and help mitigate the unemployment and other concerns raised by witnesses Rubin, Mierzwa, Miller, Moore and Plank. The majority of the proposed investment dollars in 2020 and 2021 (*i.e.*, a total of \$561.1 million) relate to required pipe replacement and betterment projects associated with the Company's program of accelerated replacement of older pipe to enhance the safety and reliability of service to the Company's customers.
- The economic benefits that the Capital Project spending would produce within the Company's service territory specifically, and to Pennsylvania more generally, are wide-ranging and substantial. Specifically, on a combined basis for 2020 and 2021:
 - The Company's investments associated with the Capital Projects are expected to generate \$922.8 million in overall economic activity in the Company's service territory, with an incremental \$65.3 million elsewhere in Pennsylvania.
 - This economic activity generated by the Capital Projects would create approximately \$476.5 million in incremental gross regional product in the service territory, and an additional \$34.5 million elsewhere in Pennsylvania.
 - This economic activity also includes \$35.8 million in additional state and municipal tax revenue for local communities within the Company's service territory over the two years.
 - Furthermore, the economic activity associated with the Capital Projects is expected to support 3,683 jobs in 2020 and 4,247 jobs in 2021 within the Company's service territory.

- These economic benefits are especially important to consider during this period when the economy has been negatively impacted by the pandemic and has begun the process of reopening.

Columbia St. No. 17-R, pp. 5-6.

Mr. Bishop also explained that other Company expenditures benefit the economy and customers in its service territory:

Q. Do witnesses Rubin, Mierzwa, Miller, Moore or Plank recognize economic benefits associated with the Company's spending?

A. Yes. While these witnesses do not quantify the benefits associated with the Company's capital spending program, Ms. Moore notes in her testimony the benefits from expanding the Low Income Usage Reduction Program ("LIURP") for weatherization services, as does Mr. Miller. In addition, another OCA witness, Roger D. Colton, also acknowledges the positive economic effects on low-income customers of the Company's Customer Assistance Program ("CAP") and other assistance programs. Mr. Colton states that these programs provide customers with more dollars to spend in the local economies that helps, "drive additional job creation, income generation, and economic activity."

Columbia St. No. 17-R, p. 7.

Granting of a significant rate increase in this proceeding is clearly to the long-term benefit of customers.

4. The Solution to COVID-19 Issues Is the Enhanced Programs to Assist Customers Implemented by Columbia.

As noted by Chairman Cawley, the solution to COVID-19 issues faced by customers is enhanced customer assistance programs.

Q. WHAT DO YOU RECOMMEND AS ALTERNATIVES TO MR. RUBIN'S PROPOSED METHOD AND RECOMMENDATION?

A. My recommendation is that the Commission, once again, responsibly grant Columbia needed revenue increases so that it may continue its remarkable main replacement achievements, and

that customers who cannot afford the increase should be helped with all available financial assistance, i.e., customer assistance programs like those Columbia maintains in its Commission-approved Universal Service and Energy Conservation Plan (“USECP”). Please also refer to the Rebuttal Testimony of Columbia witness Andrew S. Tubbs (Columbia St. No. 1-R) and of Columbia witness Deborah Davis (Columbia St. No. 13-R).⁷

Mr. Andrew Tubbs, Columbia’s Vice President, External and Customer Affairs, summarized the updated and expanded programs that the Company already has implemented.

First, as to Education and Outreach, Mr. Tubbs explained as follows:

Columbia is using several different resources to educate customers regarding the Company’s current collection practices and available assistance programs.

Examples include:

- Social media posts on Facebook and Twitter;
- Targeted outbound calls for Low Income Home Energy Assistance Program (“LIHEAP”) recovery CRISIS program;
- E-mails to customers that may be eligible for the LIHEAP recovery CRISIS program;
- E-mails to customers regarding current collection practices;
- Updated information on its website that the Company suspended all terminations for non-payment;
- Bill inserts; and
- Customer Newsletters.

Please see Exhibit AST 1-R for samples of these materials.

Q. Please provide an additional example of Columbia’s proactive outreach measures.

A. In response to decreased call volumes in our Customer Care Center in Smithfield, Pennsylvania, the Company decided to reverse the

⁷ Indeed, as Chairman Cawley pointed out in testimony, customer assistance plans are exactly what Mr. Rubin proposed in the Colony Water case. Columbia St. No. 16-R, pp. 17-18, Ex. No. JHC-2.

calls. That is, our customer service representatives began to make outbound calls to customers who previously were eligible for LIHEAP assistance, but according to Columbia's records, did not appear to have sought LIHEAP assistance currently. The purpose of the calls was to obtain permission to apply to the LIHEAP program on their behalf. In addition, Columbia continues to send out applications to customers upon request.

- Q. Has Columbia's outreach to these customers been successful?
- A. Yes. To date, the Company has assisted 1,376 customers in receiving \$405,142 in LIHEAP Recovery CRISIS assistance, primarily as a result of outreach efforts made by company representatives to customers. To determine customer eligibility for assistance, the Company's Universal Services team manually reviewed 7,048 accounts that initially met eligibility criteria. As a result of this review, the Company attempted to contact the 4,544 customers identified as eligible, based on prior grant amounts and arrears. Of the 1,376 customers that received assistance, Columbia processed applications on behalf of 947 customers at the customer's request.

Further details regarding Columbia's universal service program offerings and outreach efforts are explained in Section IX.A of this brief.

Mr. Tubbs further described the Company's actions and plans with respect to termination and flexible alternative payment arrangements for customers:

- Q. Is the Company currently terminating service to its customers?
- A. No. Columbia ceased performing customer shut-offs for all customers on March 13, 2020, and consistent with the Pennsylvania Public Utility Commission's ("Commission") Order at Docket M-2020-3019244, Columbia continues to suspend customer shut-offs.
- Q. What are the Company's plans regarding service terminations once the Commission decides to lift the moratorium on utility shut-offs?
- A. The Company has voluntarily developed a two-phased plan for collection activity that complies with the customer protection regulation in the Pennsylvania Public Utility Code. First, prior to restarting shut-offs, Columbia will

send reminder letters to customers advising them that they are in arrears, and informing them of their current account balances. The letter will also inform the customers that the Company is offering flexible payment arrangements, and will refer customers to energy assistance programs. During the second phase, which will not commence until after the Commission lifts the moratorium, the Company will resume termination notices with the intent to shut off for nonpayment starting with a new 10 day termination notice. As part of this phase, the Company will prioritize collections for those customers with high balances.

Q. What types of payment arrangements is Columbia offering?

A. For residential customers, the Company is offering two options. In addition to Columbia's normal budget plus payment plan offered to its customers based on financial information and household size, Columbia is providing customers the option of a six month payment plan that allows customers to pay their current bills, plus 1/6 of their arrears. The timing of this option during the non-heating season is beneficial to customers, as it is likely that paying their current bill plus 1/6 of their arrears would be lesser than the standard budget amount, which represents an average 12 month usage.

Commercial customers with arrears of more than \$90 and less than \$600 are also being offered a 6 month payment plan. This payment plan option is intended for customers who are normally not payment troubled and financial information is not required for enrollment in this plan.

Q. How do customers enroll in the alternative payment plans?

A. Customers can enroll in these alternative payment plans via Columbia's website or by contacting our customer call center. We have shared this information via bill messaging, website notices, reminder letters, and customer representatives at the Company's Customer Care Centers, along with the Company proactively reaching out to individual customers by phone. To date, 225 residential customers and 33 commercial customers have signed up for this payment plan.

Mr. Tubbs also explained changes to the Company's assistance programs:

Q. What changes has the Company made to CAP, or to other programs, as a result of the pandemic?

A. The Company has made the following changes to the CAP program as a result of the pandemic:

- As noted above, customers are not being removed from CAP.
- The additional \$600 per week from Unemployment Compensation is not/was not being counted as income in the determination of CAP eligibility since the income is short term.
- Any “stimulus” income received by customers is not being counted as income.
- Proof of income is not required at this time for CAP customers who are unable to verify income.

The Company has also made changes to its existing Hardship Fund guidelines in order to assist customers during the pandemic. The Hardship Fund is a fund of last resort that assists customers in maintaining or restoring their service with a maximum grant of \$500 and is available to customers who are at or below 200% of poverty and have arrears. In response to hardship caused by the pandemic, the Company is waiving the requirement of a sincere payment effort and, therefore, no payment is required in order to be eligible for hardship funds. Second, all low income customers are eligible regardless of CAP status so long as they have arrears on their account.

Q. Are there other assistance programs that Columbia developed as a result of the COVID 19 pandemic?

A. Yes. On April 24, 2020, concomitant with this proceeding, the Company filed a petition for approval of a temporary customer grant program called the Reduced Income Grant Program (“RIGP”) for residential customers who are not eligible for Columbia’s low income customer programs. The RIGP would have provided customers with grants up to \$400 to reduce arrears and offer credit counseling. This petition was denied by the Commission on July 16, 2020.

Mr. Tubbs also noted that the Company delayed its rate filing by five (5) weeks resulting in the permanent loss of \$16.1 million of the full amount of the proposed rate increase. Columbia St. No. 1-R, p. 11. He also explained that the Company has waived all late payment and reconnect fees. Columbia St. No. 1-R, pp. 12–13. These are additional efforts by Columbia to assist customers during the recession brought about by COVID-19.

C. CONCLUSION

Constitutional and statutory norms should not be disregarded because of the economic effects of the pandemic upon some customers. Columbia’s responsibilities to provide safe and reliable service continue, and it would be to the current and long-term detriment of Columbia and its customers to upend traditional ratemaking procedures at this time. The correct response, as Columbia has done, is to focus efforts on the needs of customers who are having difficulties paying their gas bills, through targeted programs.

IV. RATE BASE

The Company’s claimed rate base reflects the projected balance as of the end of the FPFTY of \$2,401,427,019. Columbia Ex. 108, p. 3; Columbia Ex. KKM-1R, p. 1. The balance reflects Plant in Service, Depreciation Reserve, Working Capital, Deferred Income Taxes, Customer Deposits and Customer Advances projected as of December 31, 2021. Columbia Ex. 108, p. 3. The presentation of rate base as of the end of the FPFTY is in accordance with the Commission’s decision in *Pa. PUC v. UGI Utilities, Inc. – Electric Division*, Docket No. R-2017-2640058, Order entered October 25, 2018, (“*UGI Electric*”) affirmed *McCloskey v. Pa. PUC*, 225 A.3d 192, (Pa. Cmwlth. 2020) (“*McCloskey*”).

OCA proposes to reduce rate base for the FPFTY by \$72,303,000, or by approximately 21% of the net \$345,414,762 in FPFTY rate base additions claimed by Columbia. Columbia Ex. 108, p. 3, column 4. The adjustment is derived by averaging recent historic plant additions.

OCA St. No. 2, p. 7. OCA's adjustment is without merit, will hamper the Company's ongoing at-risk pipeline replacement program and should be rejected.

A. PLANT IN SERVICE FPFTY PLANT ADDITIONS - OCA'S PROPOSED ADJUSTMENT SHOULD BE REJECTED.

Columbia's FPFTY plant additions are derived from the Company's forecasted capital budget. Columbia St. No. 6, p. 4. Detailed plant additions and retirements, by month, are provided in Columbia Ex. 108, Sch. 1. The Company's FPFTY net plant additions are \$338.559 Million.

OCA's witness Mr. Effron calculated his proposed rate base adjustment by deriving a three-year average of historic (2018 and 2019) and projected (calendar year 2020) net plant additions, equaling \$261.776 Million. He deducted that amount from the Company's FPFTY net plant additions of \$338.559 Million to derive an adjustment to FPFTY plant additions of \$76.783 Million. He then applied the ratio of his disallowance (\$76.783 Million) to FPFTY net plant additions (\$338.559 Million), to reduce the Company's FPFTY depreciation reserve and accumulated deferred income taxes ("ADIT"), to produce a net rate base adjustment of \$72.303 Million. Mr. Effron's sole stated basis for his adjustment is that the forecasted net plant additions are significantly higher than the average for the prior three years. OCA St. No. 1, p. 6. Critically, at no point does OCA contend that Columbia's FPFTY net plant additions are imprudent or unnecessary. Further, at no point does OCA assert that its adjustment is based upon any historic experience that Columbia has underspent its budgeted plant additions. I&E did not challenge Columbia's rate base claim. OCA's adjustment is without merit and should be rejected.

Columbia has a demonstrated track record of meeting and exceeding its projected capital additions. As the Commission observed in its Order approving Columbia's Second Long-Term

Infrastructure Improvement Program: “Columbia has consistently exceeded its pipeline replacement goals in its first LTIP, as evidenced in its AAOPs.”⁸ That track record has continued since Columbia’s First LTIP. As demonstrated by Columbia’s Vice President of Construction Services, Mr. Kitchell, Columbia’s actual net plant additions for the period 2016-2019 slightly exceeded its projected plant additions for that period. Columbia St. No. 14-R, p. 8.⁹ Thus, Columbia is accurate in its projections of plant additions.

The driver of Columbia’s increasing plant spend is safety; specifically, the replacement of aging infrastructure. Approximately \$289 Million of projected 2021 plant additions are LTIP-eligible construction, and over \$258 Million of that spending is infrastructure replacement. Columbia St. No. 14-R, p. 6.¹⁰ See also *Second LTIP Order*, p. 18 (projected LTIP spending of \$286.7 Million for 2021). Columbia has already identified a preliminary roster of 2021 projects. Columbia St. No. 14-R, p. 6. Thus, Columbia cannot cut back 2021 capital construction without delaying safety improvements.

One of the primary flaws in OCA’s use of an historic average is that it effectively assumes Columbia’s LTIP spending is at a flat rate from year to year. This assumption is wrong. Columbia safety investments consistently trend upward, as shown by this chart from the Commission’s *Second LTIP Order*:

⁸ *Petition of Columbia Gas of Pennsylvania, Inc., for Approval of a Major Modification to its Existing Long-Term Infrastructure Improvement Plan and Approval of its Second Long-Term Infrastructure Improvement Plan*, Docket No. P-2017-2602917, et al., Order entered September 21, 2017, Order at pp. 19-20 (“*Second LTIP Order*”). Columbia’s First LTIP covered the period 2013-2017.

⁹ Columbia’s net plant additions for 2018 were less than projections as resources were redirected to assist Columbia Gas of Massachusetts. However, Columbia substantially increased its net plant additions in 2019 to make up the shortfall. Columbia St. No. 14-R, p. 8.

¹⁰ The remaining non-DSIC eligible spending includes small amounts for required facility locations, Information Technology and new construction. Columbia St. No. 14-R, p. 7.

| Year | LTIP Expenditures |
|--------------|--------------------------|
| 2018 | \$250,200,000 |
| 2019 | \$252,750,000 |
| 2020 | \$273,495,000 |
| 2021 | \$286,695,000 |
| 2022 | \$295,455,000 |
| TOTAL | \$1,358,595,000 |

Second LTIP Order at pp 16-17.

In an effort to deflect criticism that its unsupported disallowance will affect safety spending, OCA asserts in surrebuttal that disallowed amounts can always be recovered by an early implementation of the Distribution System Improvement Charge (“DSIC”). OCA St. No. 2-S, p. 4. OCA asserts that if Columbia’s actual additions do not match forecasts, then customers will pay for the difference, but if OCA’s adjustment is accepted and the Company’s actual spending meets its forecast, then it may use the DSIC. OCA St. No. 2-5R, p. 5. However, this is just a slightly rephrased proposal that FPFTY rate base be set at something less than the test year end balances. This proposal was rejected by the Commission in *UGI Electric*. In *UGI Electric*, OCA sought to disallow half of UGI Electric’s FPFTY plant additions, arguing that an average rate base should be used. The Commission concluded that FPFTY end-of-year balances are to be used for base rate case purposes. *UGI Electric*, pp. 23-26.

With respect to OCA’s contention that its adjustment provides protection in the event Columbia’s projections are overstated, there are two responses. First, OCA has offered no evidence that Columbia has overstated its FPFTY net plant additions, as explained above.

Second, the Commission in *UGI Electric* rejected this exact same argument presented as a basis to support an average FPFTY rate base. The Commission stated:

Regarding the concerns that UGI's projections may be overstated if plant is not completed, we agree with the ALJs that this issue is addressed through some of the available protections that the Commission may invoke, including requiring verification through a subsequent rate filing and ordering an audit when appropriate. In our *Implementation Order*, we expressed an interest in back testing prior projections through subsequent rate filings. "[A]lthough there is no reconciliation of revenue and expenses between base rate cases, we expect that in subsequent base rate cases, the utility will be prepared to address the accuracy of the fully projected [future] test year projections made in its prior base rate case." *Implementation Order* at 7.

Furthermore, the legislature has addressed the concerns of overstated plant projections in Section 315(e) of the Code, which authorizes a Commission audit of the FPFTY results after the fact to determine whether they were accurate and an adjustment of rates to reflect material differences. Section 315(e) provides in pertinent part:

...Whenever a utility utilizes a...fully projected future test year in any rate proceeding and such...fully projected test year forms a substantive basis for the final rate determination of the commission, the utility shall provide, as specified by the commission in its final order, appropriate data evidencing the accuracy of the estimates contained in the...fully projected future test year, and the commission may after reasonable notice and hearing, in its discretion, adjust the utility's rates on the basis of such data...

66 Pa. C.S. § 315(e).

UGI Electric at p. 26. See also *McCloskey*, 225 A.3d at 197.

OCA has offered no valid basis to arbitrarily reduce Columbia's FPFTY net plant additions by 21%. OCA's proposed adjustment should be rejected.

B. CLOUD-BASED COMPUTING

In this case, Columbia seeks permission to revise its accounting for Cloud Based Computing investments. No party opposed this request.

Columbia witness Ms. Shultz described the relatively recent emergence of Cloud Based Computing:

Cloud Based Computing is an arrangement where the IT provider (e.g., SAP, PeopleSoft) maintains the software and data on their own hardware and the user (e.g., Columbia) accesses the IT providers system to perform work functions. This is a growing trend in the Information Technology space and differs from traditional arrangements where the IT user loaded the software on its own hardware.

Columbia St. No. 6, p. 11.

Cloud-based services offer various advantages over traditional on-premises software, including greater flexibility for the workforce, improved productivity and lower costs. Columbia began to invest in cloud-based arrangements in 2018.

The accounting for Cloud Computing has been evolving and recent FERC guidance has resulted in Columbia seeking Commission approval for a change in accounting for Cloud-based services. As Columbia explained:

Prior to 2020, Columbia recorded the investment costs associated with Cloud Computing in Account 165-Prepayments. The costs were amortized to O&M expense based on the life of the Cloud Computing arrangement; generally 5 years. Based on FERC guidance issued on December 20, 2019 at Docket No. AI20-1-000 (Attachment NMS-1), Columbia will be changing the accounting to record the investments as Plant Property & Equipment accounts in 2020. The in-service assets will be included in Account 303 – Intangible plant, and the costs incurred but not yet in-Service will be included in Account 107 – Construction Work in Progress. Additionally, the amortization expense related to the in-service investments will be charged to Account 404 – Amortization of Limited-Term Gas Plant.

Columbia St. No. 6, pp. 11-12. Columbia's presentation in this case reflects the new FERC guidance. Columbia St. No. 6, p. 12. Columbia notes that accounting for Cloud-Based Computing as a capital asset was approved as part of a partial Stipulation in *UGI Electric*, p. 36. Duquesne Light Company also was permitted to include cloud-based information systems in its rate base as part of a settlement of its base rate case at Docket No. R-2018-30000124.

As no party has opposed this proposed accounting for Cloud-Based Assets, Columbia respectfully requests that it be approved.

C. ACCRUED DEPRECIATION

The only proposed adjustment to Columbia's Accrued Depreciation Reserve is with respect to OCA's proposal to reduce FPFTY net plant additions. As the adjustment to net plant additions is improper, as explained in Section IV.A above, so also is Mr. Effron's proposed adjustment to Columbia's Accrued Depreciation Reserve.¹¹

D. ADIT

The only proposed adjustment to ADIT is with respect to OCA's proposal to reduce FPFTY net plant additions. As the adjustment to net plant additions is improper, as explained in Section IV.A above, so also is OCA's proposed adjustment to ADIT.

V. REVENUES

Columbia's FPFTY pro forma revenues at present rates, inclusive of purchased gas cost revenues, riders, late payment fees, Gas Procurement Charge revenues, Merchant Function Charge revenues and miscellaneous revenues, are \$572,769,574, as detailed in Columbia Ex. 103, p. 15, and associated exhibits, as sponsored by Columbia witness Bell. No party proposed any adjustment to Columbia's FPFTY revenues at present rates. Columbia does note that OSBA

¹¹ Columbia's depreciation expert, Mr. John Spanos, also explained that Mr. Effron oversimplified the process of computing depreciation accrual and the accrued depreciation reserve, in part because proper depreciation accounting requires a determination of plant in service and reserve at a n account level, because different assets have different depreciation rates. Columbia St. No. 5-R, pp. 2-4.

witness Knecht has proposed to allocate the cost of certain flex rate revenues in a manner that would result in Columbia bearing the cost of the rate flexes. Columbia responds to Mr. Knecht's proposal in Section X.C.2 of this brief.

VI. EXPENSES

Columbia's pro forma expense claim reflects an annualized and normalized level of expenses for the FPFTY ended December 31, 2021. In accordance with the Commission's *UGI Electric* decision and traditional ratemaking procedures, these expenses are annualized to test year end.

The basis for Columbia's forecasted Operations and Maintenance Expense ("O&M expense") is the Company's most recent O&M budget for the Twelve Months Ended December 31, 2021, as adjusted for ratemaking purposes.¹² Columbia's State Finance Director, Ms. Krajovic, explained:

The O&M budget for Columbia is based on a grass roots concept in which individuals who are responsible for approving expenditures are also responsible for budgeting the expenditures. The process generally follows organizational responsibility. Department heads are responsible for overseeing the development of O&M budgets for all cost centers under their control. Budgets originate in operating center locations in the field and other departments representing Columbia's major business functions; these budgets are then combined with a corporate-level budget to arrive at a total company budget. I will discuss the corporate-level budget later in my testimony.

Annually, the Company's O&M budget is developed by department and by cost element, with the assistance of the NCSC Financial Planning department. Each department's budget is reviewed with and approved by the NCSC Chief Financial Officer ("CFO") and Chief Executive Officer ("CEO"). This review includes a comparison of a series of data points based on most

¹² Columbia budgets by cost category, rather than by FERC account. Budgeting by cost categories recognizes, for example, that Columbia's labor expense may change by account from year to year as different maintenance needs arise. Certain O&M expenses claims for ratemaking purposes, such as rate case expense, uncollectible accounts expense and universal service costs, are not based upon budget cost elements. Columbia St. No. 9, p. 7.

recent experience. Specifically, the proposed O&M budget is compared to the most recent year's O&M budget as well as compared to the prior year's actual, experienced amounts. These comparisons help identify trends and allow for measurement against the Company and parent company management's expectations. Once finalized, the departmental O&M expense budget is incorporated into the business unit's operating plan.

Q. Does that conclude the development of the O&M expense budgeting process?

A. No. Upon agreement and sign-off on the departmental O&M expense budget, the current year O&M budget is then developed in more detail (i.e., at the individual cost center level) beginning in the preceding fourth quarter for the current year. The process concludes in January.

The current year detailed O&M budget is reviewed against actual results each month throughout the year to determine the reasons for variances and to take appropriate action. If known variances are the result of timing that will be resolved within the year, then those variances are monitored closely but no further action is taken, unless it is deemed, at some point during the year, that the variance will result in a true budget variance at the end of the year. When the review of monthly budget versus actual reveals variances that are expected to last throughout the year, the Financial Planning department and NCSC CFO will work with Columbia management to determine the drivers of the variances and steps to be taken to reduce the variance to the overall budget. In certain cases, budget variances will occur to address or take advantage of unforeseen general or operational conditions. In cases where a variance is driven by unforeseen general or operational conditions, the variance may not be reduced or mitigated, but may result in a departmental overrun. In this case, documentation of the drivers of the variance is maintained and evaluated in future planning cycles to ensure proper consideration of new and developing forecast items.

Columbia St. No. 9, pp. 4-5.

As shown on Columbia Ex. NJDK-1, this robust process has resulted in accurate, and to a degree conservative, projections of actual expenses. Columbia's budget variance to actual has

been within 5% in eight of the past eleven years. Further in eight of those eleven years, actual O&M expense was greater than the original O&M budget. Columbia St. No. 9, pp. 6-7.

Certain expenses have been challenged by I&E and OCA, and those challenged expenses are explained in this section of Columbia's brief.

A. LABOR EXPENSE

Columbia's FPFTY labor expense is \$39,474,022. Columbia Ex. KKM-4R, page 1, line 7. This amount reflects a slight increase, of less than 1%, over the Company's normalized HTY labor expense of \$39,142,312. Columbia Ex. NJDK-5R, p. 3. The Company's final claimed budgeted Company labor expense for the FPFTY reflects modifications to projected merit increases made during the course of this proceeding, including the decision to forego merit increases in 2020 for non-union exempt employees in director and above positions, and a reduction from 3% to 2.3% to merit increases in 2020 for non-union, exempt employees in manager positions and below. Columbia St. No. 15-R, pp. 2-3.

I&E and OCA have proposed several adjustments to Columbia's FPFTY labor expense. Those adjustments should be rejected.

1. Annualization Adjustment

I&E proposes to disallow the Company's entire claimed annualization of FPFTY labor expense, in the amount of \$546,602. Columbia's annualization adjustment reflects the base rate pay of Columbia's employees as of December 31, 2021, annualized for the full year. Columbia St. No. 4, pp. 9, 34; Columbia St. No. 11-R, p. 7.

I&E asserts that the annualization adjustment is improper because it would recover an expense amount that is greater than actual FPFTY labor expense. I&E St. No. 1, pp. 9-10.

The basis for I&E's adjustment to Columbia's annualization of FPFTY payroll has been directly addressed and rejected by the Commission in *UGI Electric*. Therein, the Commission stated:

I&E argued against allowance of FPFTY end-of-year salaries and wages, on the basis that an accurate representation of expenses actually incurred in that twelve-month period would not include anticipated FPFTY end-of-year pay increases. I&E M.B. at 46; I&E St. No. 1 at 16; I&E St. No. 1-SR at 12.

I&E rejected UGI's year-end methodology, which annualizes the anticipated expenses the Company will pay across the twelve months that make up the FPFTY. I&E maintained that annualization of the end-of-year salaries and wages, that include all increases would allow the Company to recover in rates more than it requires for the test year utilized. I&E St. No. 1-SR at 13; I&E M.B. at 15-24, I&E St. No. 3 at 3-13.

d. Disposition

We agree with the ALJs' recommendation on this issue, approving UGI's end-of-year methodology and providing for an annualization adjustment to recoup costs incurred over the course of the FPFTY. We are likewise persuaded by UGI's argument that the FPFTY should reflect end-of-the-year conditions.

UGI Electric at pp. 61-62.

I&E has offered no reason to reject the Commission's analysis in *UGI Electric*, which is based upon the determination that a FPFTY should reflect end-of-year conditions. I&E's proposed disallowance of Columbia's labor annualization adjustment should be rejected.

2. Employee Complement

I&E and OCA have made separate adjustments to Columbia's FPFTY labor expense with respect to the projected complement of Company employees reflected in the budget. I&E's proposed labor adjustment related to employee complement is \$2,506,926. I&E St. No. 1-SR, p.

12. OCA's proposed labor adjustment is \$773,000. OCA St. No. 2-S, Sch. C-1.1.¹³ Both I&E's and OCA's witnesses contend that an adjustment to pro forma labor expense is necessary because the Company's pro forma labor expense assumes a full complement of employees and fails to reflect vacant positions. I&E St. No. 1, p. 11; OCA St. No. 2, p. 9. These adjustments fail to understand the Columbia labor budgeting process and should be rejected.

As explained by Columbia witness Ms. Krajovic, the Company's labor budget is driven largely by its Field Operations Work Plan, which identifies the work to be undertaken in the calendar budget year. Columbia St. No. 9-R, pp. 9-10. The budget assumes that all Full Time Employee Equivalents ("FTEs") will be used to perform the work, and budgets part-time labor and outside services accordingly. As explained by Ms. Krajovic:

Budgeted Labor expense is largely driven by the Field Operations Work Plan and to the extent that vacancies do impact available FTEs the work will be accomplished via overtime or the use of contracted labor recorded in Outside Services. Stated otherwise, Mr. Zalesky's proposed adjustment assumes that if a position is vacant, work will not be performed. That is incorrect. The work will be performed, either by overtime or contracted labor. As stated on page 8 of my direct testimony, labor expense is based on projected headcount. The development of the Work Plan assumes that level of internal resources is available and balances the projections of overtime and contracted labor in Outside Services expense accordingly.

Columbia St. No. 9-R, p. 19.

The record reinforces Ms. Krajovic's testimony. A comparison of actual labor expense to budgeted labor expense for the years 2009-2019, on Columbia Ex. NJDK-1, shows that actual labor expense, which includes overtime, and projected labor expense track very closely, and at no time reflect an underspend to budget to any extent close to I&E witness Mr. Zalesky's proposed \$2.5 million disallowance.

¹³ Both parties make related adjustments to other associated payroll items, which are addressed later in this Brief.

Furthermore, Columbia's HTY actual labor expense reflected \$4.4 million in overtime costs, when actual headcount was below authorized FTEs. In developing the FPFTY budget, the Company removed \$1.3 million in overtime, because the budget assumes all FTEs will be filled. Columbia St. No. 9-R, p. 10; Columbia Ex. NJDK-5R, p. 3. If the Company's budget is to be revised to adjust the FTE complement for vacancies, then the budget amount must be increased to add back the HTY level of overtime.¹⁴ This difference in overtime is substantially greater than OCA's proposed adjustment, and offsets more than half of I&E's proposed adjustment. Moreover, Columbia's FTEs at August, 2020, was 773, more than the HTY end count of 763. Yet, OCA's and I&E's payroll adjustments would reduce FPFTY payroll below the annualized HTY payroll expense.

For reasons explained above, I&E's and OCA's proposed adjustments to labor expense should be rejected.

B. OTHER EMPLOYEE BENEFITS

I&E proposes an adjustment of \$500,968 to other Employee Benefits, associated with its proposed vacancy adjustment to labor expense. I&E St. No. 1-SR, pp. 12-14. OCA proposes an adjustment of \$371,000 to other employee benefits, associated with its proposed vacancy adjustment. OCA St. No. 2-S, Sch. C-1.1.

Both adjustments should be rejected for the reasons explained in the preceding Section of this brief. In addition, the adjustments should be rejected because they assume a direct correlation of Other Employee Benefits to payroll, as Columbia explained:

Actual Other Employee Benefits expense can vary from budgets for reasons unrelated to headcount such as, for example, actual costs associated with the benefits themselves (insurance premiums) and actual payouts during a given period.

¹⁴ The HTY employee count was 763, which is substantially similar to the count, with vacancies, proposed by I&E. I&E St. No. 1-R, p. 12.

Columbia St. No. 9-R, p. 20.

C. INCENTIVE COMPENSATION AND STOCK REWARDS

1. Incentive Compensation

I&E and OCA have made substantially similar adjustments to the Company's FPFTY Incentive Compensation expense. The Company's claim for Incentive Compensation is \$2,267,000. Columbia Ex. 104, Sch. 1, p. 4. I&E has proposed an adjustment of \$784,686. I&E St. No. 1-SR, p. 18. OCA's proposed adjustment is \$775,000. OCA St. No. 2, p. 11. Both adjustments reflect a ratio of HTY Incentive Compensation to labor expense, applied to FPFTY labor expense. It is noted that I&E changed its methodology for computing its adjustment between its direct testimony and surrebuttal testimony. In its direct testimony, I&E used a three-year average of actual incentive compensation payouts for the period December 1, 2016 through November 30, 2019 to derive its recommended incentive compensation allowance. I&E St. No. 1, p. 16. The proposals to disallow a substantial (over 30%) of the Company's FPFTY incentive compensation based upon a single year's historic payout ratio is not justified and should be rejected.

Incentive Compensation is a part of the NiSource "total rewards" philosophy, as Columbia explained:

NiSource's "total rewards" philosophy is to reward employees competitively in comparison to its peers in the utility industry, as well as general industry employers, in order to attract, retain and motivate qualified employees, while consistently meeting its requirements to provide safe, reliable, and cost-effective service to its customers. Competitively rewarding employees motivates them to achieve important goals, retains their significant operational knowledge and value, and reduces costly turnover. The Company has goals related to customer service, quality of service, containment of costs, and safety which are customer-oriented goals and by which every Company employee is expected to abide. Employees are accountable for these goals and employees take

action to reinforce those goals in order to achieve incentive rewards.

Columbia St. No. 16-R, pp. 3-4.

The amount of incentive compensation paid is dependent upon achievement of specified goals, including earnings, customer care measures, customer satisfaction measures and safety. Columbia Ex. GAS-RR-027, Attachment E. In each category there is a base “trigger,” a “target” and a “stretch” goal, with increasing levels of payout.

I&E’s and OCA’s adjustments, derived from a single year’s ratio of incentive compensation payout to payroll, fails to take into account that the percentage of payout changes based upon the level of achievement of goals. The budget amount should not be changed simply because a single HTY payout ratio was high because all goals achieved a “stretch” payout level or was low because all goals achieved only trigger levels. A more appropriate approach to measure the reasonableness of the budgeted incentive compensation is to consider an average of payout ratios over a period of years. Otherwise, the effect of the adjustment is to replace the use of a FPFTY with an historic test year, in contravention of the Public Utility Code.

Columbia computed a three-year average ratio of Incentive Compensation to labor expense of 5.8%. This ratio reflected years of high Incentive Compensation payouts and years of low incentive compensation payout. I&E St. No. 1-SR, p. 17. When this average Incentive Compensation ratio to labor expense ratio is applied to Columbia’s FPFTY labor expense, the result is an Incentive Compensation amount virtually identical to the Company’s budgeted Incentive Compensation (\$2.262 Million vs. \$2.267 Million.) This demonstrates the reasonableness of the Company’s Incentive Compensation claim and supports the rejection of the I&E and OCA adjustments.

2. Stock Rewards

OCA also has proposed to disallow 100% of the Company's FPFTY stock rewards, in the amount of \$2.3 Million. OCA St. No. 2, p. 11. OCA's witness asserted that stock rewards are a form of incentive compensation whose value is based solely on the attainment of financial goals. Mr. Effron asserts that if the rewards are successful in increasing earnings and stock values, then shareholders should absorb the costs. OCA St. No. 2, p. 12. Mr. Effron specifically acknowledged that he is not taking "the position that stock rewards should not be a component of the employees' total compensation package." OCA St. No. 2-S, p. 8.

Mr. Effron fails to recognize that the grant of stock rewards is not based solely on financial metrics such as earnings or stock price. Rather, the Company now includes important customer value goals in determining the level of stock awards to be granted. As Columbia's witness explained:

Starting in 2018, additional stock compensation metrics were added that include customer value goals of safety, customer, financial, culture, and environmental components. The safety goal is to have top decile results in the National Safety Council Barometer Survey. The customer goal is to have top quartile performance in the J.D. Power Gas Utility and Electric Residential Customer Satisfaction Studies. The financial goal is to control the Operations and Maintenance ("O&M") cost per customer by maintaining flat O&M expenses. The culture goal is top quartile performance in the Employee Engagement Survey Culture Index. The environmental goal is to reduce greenhouse gas emissions by approximately 2 million tonnes.

Columbia St. No. 16-R, p. 6. Thus, the provision of stock rewards benefits customers, as well as shareholders.

Public utilities are entitled to recover all reasonable expenses, including incentive compensation, incurred to provide service to customers. In *Butler Township v. Pa. PUC*, 473 A.2d 219, 221 (Pa. Cmwlth. Ct. 1984), the Commission sought to disallow a portion of rate case

expense, on the basis that shareholders benefited from rate increases. The Commonwealth Court concluded:

The general rule is that a public utility is entitled to recover in rates those expenses reasonably necessary to provide service to its customers and to earn a fair rate of return on the investment and plant used and useful in providing service. *Western Pennsylvania Water Co. v. Pennsylvania Public Utility Commission*, 54 Pa. Cmwlth. Ct. 187, 422 A.2d 906 (1980). Operating expenses include prudently incurred rate case expenses. *Driscoll v. Edison Light and Power Company*, 307 U.S. 104 (1939); *West Ohio Gas Company v. Public Utility Commission of Ohio*, 294 U.S. 63 (1935). Obviously, the refusal to allow the recovery of a proper expense diminishes to the same extent the utility's return on investment. There is no evidence in the record that the ... expenses claimed here were unreasonable, imprudently incurred or excessive in amount.

See also T.W. Phillips Gas and Oil Co. v. Pa. P.U.C., 81 Pa. Cmwlth. 205, 474 A.2d 355 (Pa. Cmwlth. 1984). Columbia is entitled to recover in rates all expenses reasonably necessary to provide service to customers. OCA has not claimed that the total stock reward expenses were unreasonable, imprudent or excessive. OCA simply seeks to disallow the expenses on the basis that shareholders benefit from increases in stock prices, without consideration for the customer benefits derived from achievement of the customer performance metrics applied to stock rewards.

The Commission has reviewed and approved incentive compensation programs in numerous prior rate cases. *See e.g., Pa. P.U.C. v. PPL Electric Utilities Corp.*, Docket No. R-2012-2290597, 2012 Pa. PUC LEXIS 1757, (“*PPL Electric 2012*”); *Pa. P.U.C. v. Aqua Pa., Inc.*, Docket No. R-00072711, 2008 Pa. PUC LEXIS 50 (Order dated July 17, 2008)(“*Aqua 2008*”); *Pa. P.U.C. v. Duquesne Light Co.*, 63 Pa. PUC 337, 1987 Pa. PUC LEXIS 342 (Order dated March 10, 1987); *Pa. P.U.C. v. PPL Gas Utilities Corporation*, R-00061398, at p. 40 (Order dated Feb. 9, 2007); *Pa. P.U.C. v. Philadelphia Gas Works*, Docket No. R-2008-

2073938, 2008 Pa. PUC LEXIS 32 (Order dated Dec. 19, 2008). In these cases and others, the Commission has established a bright line test for incentive compensation expense. If the incentive compensation programs of the utility are reasonable and provide a benefit to ratepayers, then they may be recovered in their entirety. *See, e.g., PPL Electric 2012*, p. 26. Here, the Company has demonstrated that its stock reward plans include both financial and operating metrics and goals. Moreover, the Commission has recently concluded that stock rewards may be a recoverable expense where the grant of rewards includes metrics directly related to the provision of service. *UGI Electric* at p. 74.

The Company has shown that there are meaningful customer benefits that flow from its stock rewards program. OCA's proposed adjustment to stock rewards should be rejected.

D. PUC, OCA, OSBA FEES

Columbia's FPFTY budget includes an amount of \$2,262,000 for Commission assessments. I&E opposes this claim and proposes to set Commission assessments at \$1,805,024, which was the assessment received by Columbia dated September 9, 2019, for the fiscal year ended June 30, 2020. This represents an adjustment of \$456,976.

Columbia's budget projection took into account the average annual assessments of \$2.2 million incurred by Columbia for the period of 2015-2019. I&E Ex. 1, Sch. 7, p. 1. While assessments vary from year to year, a multi-year average presents a reasonable basis for projection. A single year's historic assessment is not a reasonable basis to develop a projection. Alternatively, if a single year's assessment is to be used, it should be the most recent invoice received by Columbia, for the Fiscal Year beginning July 1, 2020. That amount is \$2,008,792. Columbia Ex. NJDK-1RJ. This reflects an increase of approximately \$203,700 over I&E's proposed adjustment.

For these reasons, I&E's proposed adjustment should be denied.

E. RATE CASE EXPENSE

Columbia's claim for rate case expense is \$1,060,000, normalized over a one-year period. The only issue presented is the normalization period to be used.

I&E argues that rate case expense should be normalized over a 20-month period, based upon the filing interval of Columbia's last four base rate cases. This produces an adjustment of \$424,000. I&E St. No. 1, pp. 5-6. OCA proposes a two-year normalization period, purportedly based upon review of the same filing frequency data. OCA St. No. 2, p. 15. This produces an adjustment of \$530,000. Both proposals should be rejected.

Columbia has used a twelve-month normalization period because Columbia anticipates the need to file annual rate cases for the foreseeable future. Columbia St. No. 4-R, p. 8. This need for annual rate relief will be driven by the capital requirements of Columbia's main replacement program. Columbia's LTIP expenditures alone in 2022 will be near \$300 Million, as the pace of main replacements continues to accelerate. *See* Section IV.A, *supra*; *Second LTIP Order* at p. 16-17. The DSIC, capped at 5% of non-gas revenues, is insufficient to allow Columbia to extend rate filings. Columbia St. No. 9-R, pp. 5-6. This driver of annual rate filings does not even consider other non-DSIC eligible capital spending, and other increases in O&M spending due to safety initiatives and normal wage and inflation increases.

While the Commission often looks to the history of rate filings to determine normalization of rate case expense, there are exceptions. In *PPL Electric 2012*, PPL Electric sought a two-year normalization of rate case expense, while I&E and OCA proposed a three-year period, based on recent rate case experience. *PPL Electric 2012*, pp. 44-45. The ALJ accepted the I&E and OCA adjustment, but the Commission reversed. *Id.*, pp. 45-46, 47-48. The Commission acknowledged PPL Electric's three-year filing history, but also noted its major capital improvement program to address aging infrastructure. *Id.*, pp. 47-48. For these reasons,

the PUC approved PPL Electric's two-year normalization of rate case expense. The same logic applies here. History can provide guidance on anticipated future conditions, but it should not be the sole basis for determining revenue requirement, as this would defeat the purpose of using a FPFTY in setting rates. Therefore, Columbia's 12-month normalization period for rate case expense should be approved.

F. OUTSIDE SERVICES

OCA witness Effron proposes a \$1,757,000 reduction to Columbia's FPFTY Outside Services expense. OCA derives its adjustment by accepting approximately \$1.8 Million in HTY ratemaking adjustments and FTY budgeted expense reductions, while rejecting approximately \$2.2 Million in FPFTY budgeted expense increases. OCA St. No. 2, p. 14; Columbia Ex. 104, Sch 11. Thus, OCA's adjustment, if adopted, would reduce Outside Services expense to a level that is approximately \$450,000 less than the Company's normalized HTY Outside Services expense. Columbia St. No. 9-R, p. 14. I&E did not oppose the Company's claim. OCA's adjustment should be rejected.

OCA's proposed adjustment would deny Columbia the financial resources to undertake important safety initiatives that are reflected in the FPFTY budget. Columbia witness Krajovic identified the specific incremental work streams included in the 2021 budget, that were not included in the 2020 (FTY) budget, in her Columbia St. No. 9-R, p. 13:

- Underground storage well inspection and remediation activities, in response to the PHMSA regulations on Minimum Safety Standards for Underground Storage Fields effective March 13, 2020, which require Columbia to undertake a baseline risk assessment. Inspections are planned to be initiated in the third and fourth quarters of 2020, with completion and resultant remediation projects included in subsequent periods. Further details of this regulation and Columbia's responsibilities are provided in Columbia St. No. 7, p. 13;
- Maximum Allowable Operating Pressure (MAOP) reconfirmation/documentation of the Company's facilities to comply

with PHMSA safety regulation amendments issued in 2019, effective July 1, 2020. Further details of this regulation and Columbia's responsibilities are provided in Columbia St. No. 7, pp. 13-14.

- Corrosion remediation, which allows the Company to proactively identify and remediate corrosion to minimize and manage facilities that would otherwise degrade to unsatisfactory condition;
- Global Positioning System ("GPS") legacy and remediation programs that consistently enhances the Company's ability to locate system facilities. As explained by Columbia, the Company continues to expand its installation and use of GPS technology to provide sub-decimeter accuracy in identifying the location of new and replacement facilities. Columbia St. No. 7, p. 10.
- Allowance for increases in contractor rates for restoration services associated with leak repair; and
- Allowance for increasing line locating costs driven by year over year trending ticket volume increases. The number of tickets received has increased each year from 2015-2019, growing 27% over that 4-year period. I&E Ex. 5, Sch. 10.

OCA criticizes Columbia for not having specific calculations to support its budget projection. However, there is no requirement that a FPFTY be a strict build up from historic data. As explained in the introduction to the Expense section of this brief, Columbia has in place a very vigorous process to ensure that its budget process is accurate. Columbia also has in place a process to review monthly budget variances, to identify differences in order to adjust spending for the remainder of the year and, where appropriate, increase spending on certain projects where spending on other projects are expected to fall below budget for the year. Columbia St. No. 9-R, p. 14. Columbia's budget process is an accurate, and indeed a conservative, projection of actual spending.

It is simply not appropriate to conclude, in an era of ever-increasing focus on safety, that Columbia's Outside Services expense should be adjusted downward, to a level below the HTY, to disallow budgeted safety initiatives. OCA's adjustment should be rejected.

G. OTHER ADJUSTMENTS

Subsequent to the preparation of its FPFTY budget, Columbia identified and quantified additional categories of costs to be incurred in the FPFTY, incremental to the budget. Columbia St. No. 4, p. 42. These adjustments are:

- Additional costs associated with the Company's new Uniontown Operations Center
- Cell phone line costs associated with new metering processes for large customers
- Additional Gas Safety initiatives
- Adjustments to compensation for a limited category of field employees whose pay is below market and to encourage employees to take field leadership positions.¹⁵

OCA has proposed to disallow \$3,776,000 in additional gas safety initiatives and all \$432,000 in compensation adjustments. I&E has not opposed Columbia's claimed other adjustments. For reasons explained next, OCA's adjustments should be rejected.

1. Safety Initiatives

As explained in Section II of this brief, Columbia is accelerating its implementation of an SMS, which focuses on identifying and mitigating potential risks and improving procedures to keep employees, customers, contractors and the public safe. Columbia St. No. 1, p. 8.

As part of this strategic focus on improved safety, the Company identified and proposed five incremental safety initiatives that were not included in its FPFTY budget. These initiatives are:

- Accelerating the Company's cross bore identification program, to reduce the current completion timeframe from 68 to 31 years;
- Adding two Gas Qualification Specialists to improve training of the future workforce;
- Adding seven full-time employees to accelerate the process to update the Company's legacy service line records;

¹⁵ A fifth category of costs, for budget billing modifications, was withdrawn by Columbia in rebuttal, because the cost properly is a capital cost and not an expense. Columbia St. No. 4-R, p. 3; Columbia St. No. 9-R, p. 25.

- Increasing the Company's field assembled riser replacement budget to include amounts dedicated to replacement of customer-owned field assembled risers; and
- Employing a new Picarro leak detection platform system, which will dispatch two vehicles with enhanced leak detection sensors and analytics

The total cost of these initiatives is \$3,895,910. Columbia Ex. 104, Sch. 2, p. 18.

In direct testimony, OCA challenged the inclusion of all of these gas safety initiatives in Columbia's FPFTY claim. OCA St. No. 2, pp. 15-18. In rebuttal, OCA withdrew its opposition to the \$120,000 included for the Picarro leak detection platform, resulting in a revised adjustment of \$3,776,000. OCA's proposed disallowance is without merit and should be rejected.

a. Cross Bore Identification Program

Columbia first began its cross bore identification program in late 2013, as a result of identifying cross bores as a potential risk in its then-DIMP. Cross bores can occur when existing unmarked underground facilities such as water or sewer lines are damaged due to direct bore installation of underground facilities. Since the inception of Columbia's cross bore identification program in 2013, the Company has inspected over 375 miles of sanitary and storm sewer mains and nearly 26,000 customer laterals. As a result of these inspections to date, Columbia identified 406 cross bores, with 278 involving Columbia's facilities. Given these results, Columbia has now identified cross bores as a high risk in its DIMP. Columbia St. No. 7, p. 21.

At the current pace, it is estimated that it will take approximately 68 years to complete inspections. However, because cross bores have recently been identified as a high DIMP risk, Columbia has decided to ramp up resources for the work. The first stage is to increase spending by \$1.4 Million, which would result in a reduction of the current timeframe to complete inspections by more than half, to 31 years. In future years, Columbia will examine whether to increase the pace of inspections even further. Columbia St. No. 7, pp. 21-22.

OCA opposes the Company's proposed increase to cross bore spending on the basis that the Company's recent level of spending shows no need to spend more on cross bore investigations: "It is not clear why the spending on the cross bore program must more than double from 2020 to 2021 after having been at a reduced level from previous years in both 2019 and 2020." OCA St. No. 2, p. 17. In surrebuttal, OCA's witness further reiterated his conclusion that the Company's cross bore spending in 2020 is not anticipated to be greater than 2019 spending, and thus establishes no support for Columbia's proposed increasing level of spending on the cross bore program. OCA St. No. 2-S, p. 12.

There should be no adverse inference drawn from the fact that Columbia has not substantially increased cross bore spending in 2020 over 2019, because the planned acceleration of cross bore spending is scheduled to begin in 2021. Columbia does not have unlimited resources to spend over budget, and the current budget for 2020 does not provide for an increase in 2020 spending on cross bore investigations over prior years. Columbia St. No. 7-R, p. 21.

There is no requirement that a utility may only recover an increased level of spending if it has proven that it has already increased its pace of spending. Such a requirement would eviscerate the FPFTY process, and in effect return ratemaking to the era when a utility could only rely upon an historic test period. This would reinstitute the regulatory lag that the FPFTY was designed to ameliorate, as a utility would always have to bear the cost of an increase in expense before it could make a claim for the increase in a rate proceeding.

OCA's assertion that Columbia has reduced spending on its cross bore program in 2019 and 2020 distorts the facts. As explained by Columbia's witness Mr. Davidson, Columbia has budgeted \$1.3 Million annually for the cross bore program since 2014. Actual spending on the cross bore program was above budget in 2015-2018 because resources were able to be

reallocated from other planned work streams in those years.¹⁶ Spending in 2019 met the budget target of \$1.3 Million, and Columbia projects to spend approximately \$1.5 Million on its cross bore program in 2020. Columbia St. No. 7-R, p. 21.

Given program results to date, Columbia has now identified cross bores as high risk, and seeks to increase spending in the FPFTY to reduce the years needed to complete the program by more than half. This is an appropriate increase in spending on this important safety concern and should be approved.

b. Gas Qualification Specialists

OCA opposes the addition of two new Gas Qualification Specialists in 2021, relying upon the current employee headcount and arguing that the Company has not hired these incremental employees to date. OCA St. No. 2, p. 16; OCA St. No. 2-S, p. 11.

Columbia, like many utilities around the country, faces an employee retirement challenge. Long-time employees are reaching retirement age, and the Company must be prepared to train new employees on the ever-increasing requirements for maintaining a safe system, as Columbia's witness Davidson explained:

As Columbia works to build the pipeline of the future, the Company also finds itself in the midst of building the workforce of the future. With the ramp up of the capital program, Columbia has experienced the transfer of employees from O&M positions to capital construction positions; in addition, the Company continues to see an increase in the number of employees who are eligible to retire. Columbia sees both opportunity and risk in the current and future transition of its workforce. Columbia's historical methods of training were developed in an era of very low turnover and well-established institutional knowledge. These traditional training methods will not address the increase risk of human error to its system introduced by this large scale workforce transition. The Company has adjusted its methods of training to reduce that risk for new and existing employees. Columbia is currently conducting a formal employee training and qualification program to address its

¹⁶ This process of reallocating unused budget spending is described in the introduction to Section VI of this brief.

DIMP plan and system risks associated with human error in the field. These programs not only include more classroom time and far more stringent testing procedures, where appropriate, they also require hands-on demonstration of necessary skills to validate employee or contractor qualification competency prior to work with the Company's live natural gas system. Columbia has made organizational changes to focus on training and development of employees that are vital in preparing the next generation of employees, so as to minimize risk to employees, our customers, and the general public. To support this ongoing effort, Columbia is seeking to add two Gas Qualifications Specialists to conduct hands on skill performance evaluations and proctor knowledge exams as needed. They would also participate in auditing Approved Providers working with our Contractors to ensure adherence to the operator qualification plan.

Columbia St. No. 7, pp. 22-23.

Columbia cannot rely upon its existing workforce to provide the 21st Century training needed for the new workforce being brought on as its current workforce retires. The current workforce is needed to execute the work plan. The two incremental Gas Qualification Specialists are specialized instructors. OCA's proposal will hamper this training, to the detriment of Columbia, its employees and customers. OCA's proposed disallowance should be rejected.

c. Legacy Service Line Record Enhancement

In January 2019, Columbia implemented a legacy service line record enhancement program. The program involves the review and correction of legacy service line records. Accurate records are critically important to maintaining a safe system. Columbia St. No. 7, p. 23.

Columbia currently uses just temporary employees for this work. To accelerate the effort, and minimize the challenges of turnover and training of temporary employees, Columbia has proposed to add seven new permanent employees, supplemented with temporary employees, to undertake the work, at a cost of \$491,000.

OCA opposes this proposed cost, asserting the same basis as its opposition to the Company's Gas Qualification Specialists – that the Company has not yet hired these employees and should rely upon its current headcount. OCA St. No. 2, p. 16; OCA St. No. 2-S, p. 11.

For the same reasons explained in the preceding section of this brief, OCA's proposal should be rejected. These employees have not yet been hired because they are not reflected in the 2020 budget and are scheduled to be added in 2021. OCA has not asserted that the proposed work should not be undertaken. Indeed, I&E's Pipeline Safety witness has endorsed the project to update Company records. I&E St. No. 5-SR, p. 12.

d. Field-Assembled Riser Replacement

Columbia has included an incremental amount of \$1.7 Million, added to its budget, for the replacement of customer-owned field-assembled risers.¹⁷ OCA opposes this addition, arguing that because the Company replaced 1,279 customer-owned field-assembled risers in 2019, the proposed expenditure of \$1.7 million to replace 2,712 customer-owned field-assembled risers cannot be entirely incremental. OCA St. No. 2, p. 17. OCA further asserts that because Columbia's projected replacement of customer-owned field assembled risers in 2020 are not projected to exceed 2019 replacements, the Company has not demonstrated that FPFTY replacements will be increased. OCA St. No. 2, p. 17.

There are multiple flaws in OCA's arguments. First, Mr. Effron continues to ignore Columbia's budgeting process and its budget management. Columbia first received approval to replace customer-owned field-assembled risers by Commission Order entered December 6, 2018,

¹⁷ A riser is a section of pipe that connects fuel lines and meter sets outside a customer's premises. Field-assembled risers are risers that were assembled in the field and installed. The Company has identified a higher incidence of failure in risers that are field-assembled rather than pre-assembled. Columbia ceased installing field assembled risers in 2007. The Company first began to target and replace Company owned field-assembled risers after failures were identified after the 2014-2015 winter. However, like service lines, on Columbia's system most risers are installed and owned by customers. I&E St. No. 5, p. 11; Columbia St. No. 7, p. 25; Columbia St. No. 7-R, pp. 17-18.

at Docket No. P-2018-2641560. However, Columbia’s budget for 2019 included no amount for replacement of customer-owned field-assembled risers. Columbia St. No. 7, p. 24.¹⁸ Similarly, no amounts for replacement of customer-owned risers were included in the 2020 and 2021 budgets. OCA St. No. 2-S, p. 13.¹⁹ Columbia shifted funds from other programs, including some amounts budgeted for replacement of Company-owned field-assembled risers, to undertake replacements of customer-owned field-assembled risers in 2019 and 2020. Columbia St. No. 9-R, p. 16.

Contrary to the implication in Mr. Effron’s testimony, Columbia’s FPFTY claim is not a buildup from the HTY, but is a grass roots budget. Therefore, the fact that Columbia replaced some customer-owned field-assembled risers does not alter the fact that the Company is including an incremental \$1.7 Million for customer-owned field-assembled risers because no amount is included in its FPFTY budget. This argument by OCA should be rejected.

OCA’s contention that the Commission should deny the additional \$1.7 Million because Columbia’s 2020 spending on replacement of customer-owned field-assembled risers will not exceed its 2019 spending is likewise flawed and should be rejected. OCA’s argument is another example of OCA’s efforts to reject the use of the FPFTY and to instead rely upon the FTY or HTY as the basis for setting rates. If FPFTY expense levels are to be rejected unless they are incurred in the HTY and FTY, then the whole intent of the Legislature to authorize a FPFTY will be overturned. The Commission rejected such efforts in *UGI Electric*, and they should similarly be rejected here.

¹⁸ Columbia’s last base rate case was in 2018, with a FPFTY of calendar year 2019. *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2018-2647577, Order entered December 6, 2018, Order at p. 4.

¹⁹ “The FPFTY budget, like prior years budgets, did not include incremental funding for replacement of customer-owned field-assembled risers, but budgeted for the other workstreams, including company-owned risers.” Columbia Response to OCA Interrogatory X-12.

Finally, OCA's disallowance of the entire \$1.7 Million is contrary to its contentions that only incremental amounts should be allowed. Although Columbia denies that any adjustment is appropriate. OCA's own evidence is that the \$1.7 Million is based upon 2,712 risers being replaced at \$625/unit. However, only 1,279 customer-owned field-assembled risers were replaced in the HTY. Therefore, even under OCA's flawed analysis, 1,433 additional risers will be replaced over the HTY level, totaling approximately \$900,000. However, this alternative allowance would be insufficient to undertake the appropriate level of replacements of company-owned and customer-owned field assembled risers.

OCA's rejection of the incremental spending over the FPFTY budget to replace customer-owned field-assembled risers should be rejected.

2. Compensation Adjustments

OCA proposes to disallow \$432,000 in adjustments to certain field employees' pay.²⁰ OCA's sole basis for this disallowance is that the adjustments have not been made in the FTY. OCA St. No. 2, p. 19. OCA's adjustment is yet again an effort to disallow the use of a FPFTY.

Columbia detailed the purpose and amount of its compensation adjustments in its direct testimony:

The first compensation issue deals with comparison of the salaries of Field Operations Leaders ("FOLs") against market rates. It was determined that 54 of the current 68 FOL incumbents are below market value. An adjustment of \$461,000, with an O&M/Capital allocation of 70/30 applied, will remediate the salary gap and increase O&M labor expense by \$322,700.

The second planned adjustment for compensation will provide additional compensation for salaried Leaders who are required to be on standby on a rotational basis for Emergency Response, but who do not receive overtime pay in the instances that they are called out for service. The current lack of incremental compensation for emergency call-out service acts as a disincentive

²⁰ The actual adjustment is \$431,000. Columbia Ex. 104, Sch. 2, p. 18.

for employees to move into leadership positions, because such a promotion would effectively eliminate potential overtime pay. Addressing the potentially punitive nature of the shift from non-exempt to exempt compensation will enhance the Company's ability to promote and retain qualified individuals into leadership positions. The Company estimates the cost of this adjustment to be an incremental \$109,200 in O&M labor expense.

Columbia St. No. 9, pp. 17-18.

Columbia has not yet made the pay adjustment because it is a FPFTY cost. Just as is the case with respect to FPFTY merit increases, there is no basis to deny this adjustment to pay simply because it was not incurred in the HTY or FTY. The amount is known and quantified and should be permitted.

H. DEPRECIATION EXPENSE

Columbia's FPFTY depreciation expense claim, including the amortization of net salvage, is \$98,832.789. Ex. KKM-1R, p. 1. The calculation of annual depreciation expense and net salvage was prepared in accordance with standard procedures long accepted by this Commission. Columbia St. No. 5, pp. 3-4.

The only adjustment to depreciation expense was proposed by OCA and is directly related to its proposal to reduce FPFTY plant additions. As the adjustment to net plant additions is improper, as explained in Section IV.A of this brief, so also is OCA's proposed adjustment to depreciation expense.

VII. TAXES

A. TAXES OTHER THAN INCOME TAXES

Columbia's FPFTY Taxes Other Than Income Taxes is \$3,825,546. The only proposed adjustments to Taxes Other Than Income Taxes are to payroll taxes associated with proposed payroll adjustments proposed by I&E and OCA. I&E St. No. 1-SR, p. 2; OCA St. No. 2-S, Sch.

C. As the adjustments to payroll should be denied, as explained in Sections VI A and C of this brief, the proposed payroll tax adjustments also should be denied.

B. INCOME TAXES

No party has proposed disallowance of Income Tax expense, other than as related to their respective other adjustments to rate base, expenses and return.

VIII. RATE OF RETURN

A. INTRODUCTION

As explained in prior sections of this brief, Columbia is in the middle of a long-term program to modernize its distribution system and to replace at risk pipe across Pennsylvania. Columbia St. No. 1, p. 7. The Company's total capital expenditures for the years 2020-2024 are expected to total over \$1.9 Billion, or approximately 93% of its net utility plant in service at December 31, 2018. Columbia St. No. 8, p. 9. Other gas, electric and water utilities are similarly in the midst of major infrastructure replacement programs. In order for Columbia, and other utilities, to continue to be able to raise the capital necessary to finance these investments, it is critical that the Commission demonstrate that Pennsylvania remains a constructive and supportive regulatory environment, through a fair rate of return. As the Commission observed in *PPL Electric 2012*:

Furthermore, we note that the setting of the proper return on equity is even more critical in this proceeding as our Pennsylvania jurisdictional utilities implement plans to accelerate the greatly needed replacement of aging infrastructure. Attracting capital to Pennsylvania at reasonable rates to accomplish this infrastructure replacement has never been more important to PPL, its customers and the Commonwealth of Pennsylvania.

PPL Electric 2012 at p. 81.

OCA's position, in particular, would be directly contrary to the need for a supportive regulatory environment to enable Columbia to raise capital at reasonable rates. OCA's primary

position, as expressed by Mr. Rubin and endorsed by witnesses for several other parties, would deny Columbia any rate increase, resulting in a paltry rate of return of less than 4.9% on FPFTY investment. Columbia St. No. 16-R, p. 12; Columbia Ex. KKM-1R, p. 1. This barely exceeds Columbia's embedded cost of long-term debt. Columbia Ex. 400 (Updated) p. 1. Columbia explains why this confiscatory and unconstitutional recommended rate of return must be rejected in Section III of this brief.

OCA's alternative position on rate of return is only slightly less extreme. OCA proposes the use of a hypothetical capital structure, contrary to established precedent, and an unreasonably low return on equity of 8.5% based on an unreasonable methodology. If such a result were adopted, the investment community would be very concerned, and begin to question continued investment in Pennsylvania utilities. As Columbia's witness, Mr. Moul, explained:

The investment community would be very concerned if the Commission were to adopt any of the positions of the OCA or OSBA. If it were to do so, investors would see Pennsylvania regulation as less supportive of the Company at a time of high levels of capital investment. At present, Pennsylvania regulation is currently ranked Above Average/3 by Regulatory Research Associates ("RRA"), which reflects an upgrade that occurred on May 10, 2017. The rating system used by RRA includes three principal categories (i.e., Above Average, Average and Below Average with more refined positions within the categories designated by the number 1, 2 and 3).

* * *

If the Commission were to follow the proposals of OCA or OSBA, the regulatory ranking of Pennsylvania would certainly be jeopardized. The return on equity used by the Commission to set rates should embody in a single numerical value a clear signal of regulatory support for the financial strength of the utilities that it regulates. Although cost allocations, rate design issues, and regulatory policies relative to the cost of service are important considerations, the opportunity to achieve a reasonable return on equity represents a direct signal to the investment community of regulatory support (or lack thereof) for the utility's financial strength. In a single figure, the return on equity utilized to set rates

provides a common and widely understood benchmark that can be compared from one company to another and is the basis by which returns on all financial assets (stocks – both utility and non-regulated, bonds, money market instruments, and so forth) can be measured. So, while varying degrees of sophistication are required to interpret the meaning of specific Commission policies on technical matters, the return on equity figure is universally understood and communicates to investors the types of returns that they can reasonably expect from an investment in utilities operating in Pennsylvania.

Columbia St. No. 8-R, pp. 12-13.

As explained in detail below, Columbia's proposed use of actual capital structure is proper and in accordance with precedent. Columbia's proposed return on common equity of 10.95%, inclusive of a 20-basis point adjustment for management effectiveness, is fully supported by the record and should be adopted.

1. Rate of Return Standards

A public utility, whose facilities and assets have been dedicated to the service of the public, is entitled to an opportunity to earn a fair rate of return on its investment. The standards to be used by the Commission in determining what return rate is fair are well-established, having been set forth by the United States Supreme Court in *Bluefield Waterworks and Imp. Co. v. P.S.C. of West Virginia*, 262 U.S. 679, 690 (1923), over eighty years ago: Rates which are not sufficient to yield a reasonable return on the value of the property at the time it is being used to render service are unjust, unreasonable and confiscatory, and their enforcement deprives the public utility of its property in violation of the Fourteenth Amendment.

The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. 262 U.S. at 693. These principles have been adopted and applied by the appellate

courts of Pennsylvania in numerous cases. *See, e.g., Riverton Consolidated Water Co. v. Pa. P.U.C.*, 186 Pa. Super. 1, 140 A.2d 114 (1958); *City of Pittsburgh v. Pa. P.U.C.*, 182 Pa. Super. 376, 126 A.2d 777 (1956); *Lower Paxton Twp. v. Pa. P.U.C.*, 13 Pa. Cmwlt. 135, 317 A.2d 917 (1974).

The return allowed to investors must be commensurate with the risk assumed, as the Supreme Court has stated in three landmark opinions. *Bluefield, supra* at 692, requires that the rate of return reflect:

. . . a return on the value of the [utility's] property which it employs for the convenience of the public equal to that generally being made at the same time on investments in other business undertakings which are attended by corresponding risks and uncertainties. . . .

Twenty-one years later, the Supreme Court reiterated that standard in *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944), as follows:

From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

Later, in reaffirming *Hope*, the Supreme Court, in *Duquesne Light Co. v. Barasch*, 488 U.S. 299, 109 S. Ct. 609, 102 L. Ed. 2d 646, 661 (1989) observed that “[o]ne of the elements always relevant to setting the rate under *Hope* is the return investors expect given the risk of the enterprise.”

The determination of a fair rate of return thus requires the review of many factors, including: (1) the earnings that are necessary to assure confidence in the financial integrity of the company and to provide a reasonable credit profile to permit access to capital markets on reasonable terms, and (2) the amount of the investment, the size and nature of the utility and, its

business and financial risks, in comparison to other enterprises. *Pa. P.U.C. v. Pennsylvania Gas and Water Co. - Water Division*, 19 Pa. Cmwlth. 214, 233, 341 A.2d 239 (1975); *Lower Paxton Twp., supra*. Moreover, the Commission’s findings must be based upon substantial and competent evidence on the record before it, not upon speculation or hypothesis. *Ohio Bell Telephone Co. v. Pub. Util. Comm. of Ohio*, 301 U.S. 292 (1937); *United States Steel Corp. v. Pa. P.U.C.*, 37 Pa. Cmwlth. 195, 390 A.2d 849 (1978); *Octoraro Water Co. v. Pa. P.U.C.*, 38 Pa. Cmwlth. 83, 391 A.2d 1129 (1978).

2. Rate of return components

In determining the overall rate of return, the Commission uses the weighted average cost of capital method. This method determines the percentages of long-term debt, short-term debt and common equity in the Company’s capital structure. It then determines the cost rate of capital for each component and weighs it by multiplying the percentages of each class of capital by the applicable cost rate. Columbia’s proposed cost of capital is as follows:

| Type of Capital | Ratio | Cost Rate | Weighted Cost Rate |
|-----------------|--------|-----------|--------------------|
| Long-Term Debt | 42.22% | 4.75% | 2.00% |
| Short-Term Debt | 3.59% | 2.06% | 0.07% |
| Common Equity | 54.19% | 10.95% | <u>5.93%</u> |
| | | | 8.00% |

Columbia Ex. 400 (Updated), p. 1.

No party has challenged the Company’s claimed cost rates for long-term debt or short-term debt. The issues of dispute involve Columbia’s capital structure ratio and cost rate of common equity.

B. CAPITAL STRUCTURE RATIOS

The only party to challenge Columbia's capital structure is OCA. I&E adopted the Company's capital structure. I&E St. No. 2, p. 11. OCA proposes a hypothetical capital structure of 50% debt²¹ and 50% equity. OCA's use of a hypothetical capital structure is unreasonable and contrary to precedent and should be rejected.

1. Columbia's Capital Structure

Columbia's capital structure of 54.19% common equity, 42.22% long-term debt and 3.59% short-term debt is its projected capital structure as of December 31, 2021, the end of the FPFTY. Columbia St. No. 8, p. 16. The Company's FPFTY capital structure is based upon its actual capital structure at November 30, 2019 updated for changes during the FTY and FPFTY. The changes are to finance the Company's FTY and FPFTY net rate base additions of approximately \$551 million in the FTY and FPFTY. Columbia Ex. 108, p. 3. Specifically, Columbia included additional debt of \$110 million to be issued in the FTY²² and \$100 million to be issued in the FPFTY.²³ Columbia also projected the retention of all earnings over the period, and the infusion of an additional \$55 million in equity. Columbia retains all of its earnings, rather than pay dividends to its parent, to support its main replacement program. Columbia St. No. 8-R, p. 5.

In support of Columbia's capital structure, Columbia witness Mr. Moul explained that Columbia's common equity ratio is within the range of common equity ratios of the proxy group of companies that he used in this proceeding. Columbia St. No. 8-R, p. 5. Columbia's capital structure contains a common equity ratio that is also with the range of common equity ratios of

²¹ OCA does not specify a breakdown of capital structure ratios for long-term debt and short-term debt, but employs a blended debt cost rate comprised of the Company's long-term and short-term debt cost rates. OCA St. No. 3S, p. 1, n. 2.

²² This debt was issued, as scheduled, in March of 2020. Columbia St. 8-R, p. 6.

²³ Columbia also projected a small increase in short-term debt, based upon the projected twelve-month average balance of short term debt. Columbia Ex. 400 (Updated) p. 10.

other parties' proxy groups. OCA's proxy group includes four companies with 2019 common equity ratios in excess of Columbia's common equity ratio, with two companies in excess of 60%. OCA St. No. 3, p. 30. I&E's proxy group includes two companies with five-year average common equity ratios in excess of 55%. I&E Ex. 2, Sch. 2. Clearly, Columbia's common equity ratio cannot be deemed atypical.

2. OCA's Hypothetical Capital Structure is Unjustified and Should be Rejected

a. Applicable Legal Standards

The Commission has determined that a utility's actual capital structure is to be used, absent circumstances where the actual capital structure is atypical for the type of utility service being offered. *See, Pa. PUC v. City of Lancaster – Water*, 1999 Pa. PUC Lexis 37 at *17; *Pa. PUC v. City of Bethlehem*, 84 Pa. P.U.C. 275, 304 (1995); *Carnegie National Gas Co. v. Pa. PUC*, 433 A.2d 938, 940 (Pa. Cmwlth. 1981). In determining whether the claimed capital structure is atypical, the Commission has looked to see whether the capital structure used by the utility is outside the range of that employed by the barometer group of companies considered in the rate of return analysis. If a utility's capital structure is within a reasonable range of similar risk barometer group companies, the utility's capital structure should be used and not a hypothetical capital structure. For example, in *Pa. P.U.C. v. ALLTEL*, the Commission stated as follows:

The ALJ recommended use of the Company's stand-alone capital structure since it met the following characteristics of an appropriate capital structure: (1) It was within a reasonable range of similar risk barometer group companies. (2) It reflected the Company's actual capital structure and projected near term capital structure. (3) It is consistent with the Company's apparent capital structure goal. (R.D., p. 28).

We concur with the recommendation of the ALJ, particularly for the reason that the Company's actual capital structure falls within a

range employed by similar risk barometer group companies, described by Mr. Shiavo as commensurate with capital ratios employed by other independent telephone operating companies.

Pa. P.U.C. v. ALLTEL Pa., Inc., Docket No. R-942710 et al., 59 Pa. PUC 447, 491, 1985 Pa. PUC LEXIS 53, *106 - *107, (Order entered May 24, 1985), (“ALLTEL”).

This analysis was reaffirmed by the Commission in *PPL Electric 2012*. In that case, PPL Electric proposed to use its actual capital structure. Both I&E and OCA proposed to use a hypothetical capital structure. I&E argued in favor of a hypothetical capital structure based upon a calculated industry average. OCA proposed a hypothetical capital structures that was based on an average of PPL Electric’s capital structure for a recent five-year period. OCA further supported its proposal by reference to the average common equity ratio of the barometer group sponsored by the Company, *PPL Electric 2012*, at pp. 63-65. The Commission rejected I&E’s and OCA’s contentions and adopted the Company’s proposed capital structure, concluding:

Absent a finding by the Commission that a utility’s actual capital structure is atypical or too heavily weighted on either the debt or equity side, we would not normally exercise our discretion with regard to implementing a hypothetical capital structure. *See, Pa. PUC v. City of Lancaster – Water*, 1999 Pa. PUC Lexis 37 at *17; *Carnegie Natural Gas Co. v. Pa. PUC*, 433 A.2d 938, 940 (Pa. Cmwlth. 1981). With regard to these factors, we are persuaded by the arguments of PPL that its actual capital structure is not atypical, is with a range of reasonableness, and, pursuant to precedent, provides no basis to employ a hypothetical capital structure. Also, we are further swayed by PPL’s assertion that it requires an equity ratio near the high end of the historic range employed by the barometer group companies to support its expanded infrastructure replacement program and its credit rating.

2012 PPL Electric at p. 68.

b. OCA has Failed to Demonstrate that Columbia’s Proposed Capital Structure is Atypical

OCA has offered no evidence to support a conclusion that Columbia’s proposed capital structure is atypical, requiring the use of a hypothetical capital structure. OCA’s exclusive

argument is that equity costs more than debt, and Columbia's proposed common equity ratio is above average:

I based my capital structure recommendation upon figures such as the average common equity ratio granted by state regulators across the country for the Natural Gas Industry during 2019 (*i.e.*, 51.75%), the average common equity ratio granted by state regulators across the country for the Natural Gas Industry over the previous 15-year period (*i.e.*, 49.91%), and the average common equity ratio of each of the companies included within my cost of capital analyses (*i.e.*, 50.70%).

OCA St. No. 2S, p. 8.

OCA's own data, cited above, demonstrates that various gas utilities employ a higher level of common equity than Columbia. However, OCA would have the Commission reject this evidence of typical capital structures and employ a process that would direct the use of hypothetical structure any time an actual capital structure varies from the proxy group average. Such a standard would effectively mean that the Commission would adopt hypothetical capital structure ratios in virtually every rate case, contrary to long-established precedent. OCA would further ignore the fact, as noted by the Commission in *PPL Electric 2012*, that the need to support an extensive infrastructure replacement program further justifies an equity ratio above the "average."

OCA has not, and cannot, show that Columbia's capital structure is outside the norm for comparable gas companies. Having failed to do so, OCA impermissibly attempts to interfere in the management discretion of Columbia to determine the capital structure the Company believes is necessary. OCA has failed to demonstrate that Columbia's actual capital structure is atypical and therefore the use of a hypothetical capital structure is inappropriate.

3. Conclusion as to Capital Structure

Columbia is acting prudently to replace aging plant to maintain reliable service, and is maintaining a financial profile that will enable it to obtain the necessary financing to do so. That financial profile is within the range of capital structure ratios of the proxy groups presented in this proceeding. OCA's hypothetical capital structure must be rejected.

C. DEBT COST RATE

Columbia's long-term debt cost rate, as updated to reflect the actual cost rate on \$110 million in long-term debt issued in 2020, is 4.75%. Columbia's short-term debt cost rate is 2.06%. No party has challenged these debt cost rates, and they should be adopted in the context of Columbia's actual capital structure ratios for debt.

D. RETURN ON COMMON EQUITY

The record in this proceeding contains extensive testimony concerning the cost rate for common equity capital. Columbia St. Nos. 8, 8-R, 8-SR; I&E St. Nos. 2 and 2-SR; OCA St. Nos. 3 and 3S; OSBA St. Nos.1 and 1-R. In these statements, witnesses for the Company, I&E, OCA and OSBA apply various theoretical models using various inputs to estimate the cost of equity. The appropriate components of these models and the selection of inputs to these models is a matter of the judgment of each witness. It is important in reviewing these judgments that the realities of the marketplace and the concerns of investors, who determine the cost of equity capital by purchasing common stock of utilities, be considered. These judgments also should be examined in the context of other recent determinations by the Commission regarding the cost of common equity, to measure the reasonableness of the recommendations. Columbia St. No. 8-R, pp. 11-12.

1. Columbia's Cost Rate for Common Equity Capital

Columbia's witness, Mr. Moul, summarized his approach to determining the cost rate for common equity and the results of his analysis in his direct testimony, as follows:

In general, the use of more than one method provides a superior foundation to arrive at the cost of equity. At any point in time, a single method can provide an incomplete measure of the cost of equity. The specific application of these methods/models will be described later in my testimony. The following table provides a summary of the indicated costs of equity using each of these approaches.

| | <u>Gas Group</u> |
|---------------------|------------------|
| DCF | 11.91% |
| Risk Premium | 10.50% |
| CAPM | 10.19% |
| Comparable Earnings | 12.75% |

From these measures, I recommend a cost of equity of 10.95% including recognition of the exemplary performance of the Company's management. Witness Huwar²⁴ has shown that the Company ranks high in customer service and management efficiency. In recognition of its outstanding performance, the Company should be granted an opportunity to earn a 10.95% rate of return on common equity. The 10.95% rate of return on common equity, which includes 20 basis points in recognition of the exemplary performance of the Company's management, is well within the range of the market-based measures (*i.e.*, DCF, RP and CAPM) of the cost of equity. To obtain new capital and retain existing capital, the rate of return on common equity must be high enough to satisfy investors' requirements.

Columbia St. No. 8, pp. 4-5.

In rebuttal, Mr. Moul provided updated data for each of the four approaches. Although Mr. Moul did not change his recommended 10.95% cost rate for common equity, he presented

²⁴ Mr. Huwar's testimony was subsequently adopted by Columbia witness Mr. Tubbs.

updated data because the market data presented in his direct testimony pre-dated the economic effects of the COVID-19 pandemic.²⁵

As described by Mr. Moul:

[T]he Commission may want to examine the effects of the pandemic in making its determination of prospective rates in this proceeding. To do so, I have recalculated my cost of equity models using input data that includes conditions associated with the economic recession. I have accomplished this by using a three-month average period in compiling my later data. I have done this to avoid mixing expansion data with recession market data in my update. In the post expansion period, a 3-month period and current projections are far more representative of what the prospective cost of capital will be during the FPFTY than the data prior to the coronavirus outbreak. I emphasize that I am not departing from my long-standing approach of using six-month data, and I am not changing my recommendation. As shown below, however, if this recent data were used, my recommendation would increase from my original recommendation.

Q. How have the results of the various measures of the cost of equity performed in your additional analysis?

A. Those results are shown on page 2 of Schedule 1 of CPA Exhibit No. 400 (Updated). Other than shifting to a three-month average in the update, all procedures used to apply each of the models of the cost of equity are the same as in my direct testimony. On page 2 of Schedule 1, I have shown the comparison of the updated cost of equity results and the difference in the outcomes from my original analysis contained in Statement No. 8. You will see that the DCF result moved up by a meaningful amount due to the increase in the dividend yield (*i.e.*, 3.39% currently vs. 2.69% formerly) and the leverage adjustment. The growth rate that I used in the DCF has not changed so that the later DCF calculation is 1.01% higher than the former one (12.92% - 11.91% = 1.01%). Indeed, the update of the range of earnings per share growth rates is 6.20% to 10.06% which is not materially different from the original range of 5.94% to 10.06%. Even setting aside the leverage adjustment, the simple dividend yield plus growth return moved from 10.19% originally to 10.89% in the update, or an increase of 0.70%.

²⁵ As explained in Section II of this brief, the Company had prepared its case for filing in March 2020 but delayed the filing by more than a month due to the emergence of COVID-19.

The Risk Premium approach shows a downward change in the cost of equity in the update. It should be noted that an increase in the risk premium value provided some offset to the decline in the prospective yield on A-rated public utility debt.

The revised CAPM results of 12.49% show a significant increase in the cost of equity. The increase can be traced to two factors, those being an increase in the beta (“ β ”) measure of systematic risk and an increase in the market premium that is represented by the return on the overall market less the risk-free rate of return (“ $R_m - R_f$ ”). These increases have been offset by the decline in the risk-free rate of return.

Lastly, the Comparable Earnings approach shows a slight decline in results. Those results will be subject to further pressure as the consequences of the current recession become clearer on the prospective returns for these non-regulated companies.

Columbia St. No.8-R, pp. 8-10,

Mr. Moul further explained why more than one model should be used to determine the cost of common equity:

It is also important to reiterate that no one method or model of the cost of equity can be applied in an isolated manner. Rather, informed judgment must be used to take into consideration the relative risk traits of the firm. It is for this reason that I have used more than one method to measure the Company’s cost of equity. As I describe below, each of the methods used to measure the cost of equity contains certain incomplete and/or overly restrictive assumptions and constraints that are not optimal. Therefore, I favor considering the results from a variety of methods. In this regard, I applied each of the methods with data taken from the Gas Group and arrived at a cost of equity of 10.95% for CPA, which includes recognition of strong management performance.

Columbia St. No. 8, p. 18.

a. Barometer Group

Mr. Moul used a barometer group of nine gas companies, which will be referred to as the “Gas Group.” Mr. Moul began with the group of 10 gas companies contained in The Value Line Investment Survey (“Value Line”), which is an investment advisory service widely used in

public utility cases. Mr. Moul excluded UGI Corporation from the initial list, due to its diversified businesses that include natural gas, propane two international LPG segments, electric generation and distribution and energy services. Columbia St. No. 8, p. 4. The nine companies used by Mr. Moul are the same companies used by the Commission as its barometer group for the DSIC in its Quarterly Earnings Reports. Columbia St. No. 8, p. 4; *TUS Report on the Quarterly Earnings of Jurisdictional Companies for the Year ended March 31, 2020*, Docket No. M-2020-3020940, Attachment G (August 6, 2020) (“*Quarterly Earnings Report*”).

I&E witness Mr. Keller excluded two companies, New Jersey Resources and Southwest Gas Holdings, from Mr. Moul’s Gas Group to create his barometer group. Mr. Keller stated that he excluded these companies because their regulated revenues did not exceed 50% of their total revenues. However, Mr. Moul explained that percentage of revenues is not an appropriate screen to eliminate companies from a proxy group:

For utilities, the percentage of regulated revenues cannot be used to select members of the Barometer Group because the margins on other business segments within Barometer Group companies are generally dissimilar to the utility business. Energy trading is a case in point, which would make revenue comparisons incompatible because of the large revenues and small margins associated with that business, when contained in potential Barometer Group companies. That is to say, energy trading generates large amount of revenues, but little profits because the margins on such trades are very small.

Columbia St. No. 8-R, p. 15-16.

OCA witness Mr. O’Donnell adds UGI Corporation to Mr. Moul’s Gas Group to create his barometer group. However, UGI Corporation should not be included in a gas barometer group because it is not a comparable gas utility. Non-utility operations comprise 73% of UGI Corporation’s assets, 82% of its revenues and 48% of its net income. Columbia St. No. 8-R, p. 15. OCA witness Mr. O’Donnell also prepared a separate stand-alone cost rate of common

equity calculation for NiSource. However, no weight should be given to this separate analysis. A single company is not a barometer group, and thus provides no balanced analysis of the cost of equity for gas utilities. Columbia St. No. 8-R, p. 15.

b. DCF

Mr. Moul’s Discounted Cash Flow (“DCF”) analysis is comprised of a dividend yield, a growth rate and a leverage adjustment as follows:

| | Dividend | + Growth | + Leverage | = DCF Cost Rate |
|----------|----------|----------|------------|-----------------|
| Original | 2.69% | 7.50% | 1.72% | 11.91% |
| Updated | 3.39% | 7.50% | 2.03% | 12.92% |

i. Dividend Yield

In his original calculation, Mr. Moul derived the dividend yield by calculating the six month average dividend yields for the Gas Group, and adjusting those yields for expected growth in the dividend using three well-recognized approaches to produce the dividend yield of 2.69%. Columbia St. No. 8, p. 20. In his updated presentation, Mr. Moul used data for the three-month period May – July 2020 to calculate a dividend yield following the market reaction to the COVID-19 pandemic. This data showed that if updated information were used, the adjusted dividend yield would rise to 3.39%. Columbia St. No. 8-R, p. 8; Columbia Ex. 400 (Updated), p. 14. The Updated dividend yield is consistent with dividend yields presented by I&E and OCA.

ii. Growth Rate

Mr. Moul’s growth rate reflects his expert analysis, following a review of both historic and projected growth rates in earnings per share, dividends per share, book value per share, and cash flow per share for the Gas Group. However, the DCF is an expectational model. Investors do not purchase past earnings, but instead rely upon analysts’ forecasts to develop their

expectation of future earnings. Columbia St. No. 8, p. 23. Mr. Moul principally relied upon five-year forecasts of earnings per share growth, as earnings growth appropriately measures the growth in price over time:

The constant form of the DCF assumes an infinite stream of cash flows, but investors do not expect to hold an investment indefinitely. Rather than viewing the DCF in the context of an endless stream of growing dividends (e.g., a century of cash flows), the growth in the share value (i.e., capital appreciation, or capital gains yield) is most relevant to investors' total return expectations. Hence, the sale price of a stock can be viewed as a liquidating dividend that can be discounted along with the annual dividend receipts during the investment-holding period to arrive at the investor expected return. The growth in the price per share will equal the growth in earnings per share absent any change in price-earnings ("P-E") multiple - - a necessary assumption of the DCF. As such, my company-specific growth analysis, which focuses principally upon five-year forecasts of earnings per share growth, conforms with the types of analysis that influences the actual total return expectation of investors. Moreover, academic research focuses on five-year growth rates as they influence stock prices.

Columbia St. No. 8, pp. 23 – 24. Mr. Moul relied upon four separate sources of projected earnings growth: I&E's First Call, Zacks, Morningstar and Value Line. Columbia Ex. 400, p. 16. From this data, and applying judgment, Mr. Moul recommended a growth rate of 7.5%. Columbia St. No. 8, p. 26.

iii. Leverage Adjustment

The parties in this proceeding have devoted substantial portions of their testimony to the reasonableness of employing a leverage adjustment as part of the DCF analysis. In this regard, I&E and OCA attempt to overlook that the Commission has included such an adjustment in numerous prior rate cases. *See, e.g., Popowsky v. Pa. P.U.C.*, 868 A.2d 606, 612-13 (Pa. Cmwlth. 2004) ("*PA American*"); *Pa. Pub. Util. Comm'n v. Pa. American Water Co.*, Docket No. R-0001639 (Order dated Jan. 10, 2012) (approving 60 basis point adjustment); *Pa. Pub. Util. Comm'n v. PPL Gas Utilities Corp.*, Docket No. R-00061398 (Order dated Feb. 8, 2007)

(approving 70 basis point adjustment); *Aqua 2004 Order*, at *85-87 (adopting 60 basis point adjustment); *Pa. Pub. Util. Comm'n v. PPL Electric Utilities Corp.*, Docket No. R-00049255 (Order dated Dec. 6, 2004) (approving 45 basis point adjustment). Before addressing these cases, however, Columbia will briefly explain the basis for the leverage adjustment.

Mr. Moul explained that the leverage adjustment is designed to adjust the DCF cost rate for the different percentage of debt in the capital structure calculated at market values of equity and long-term debt (*i.e.* the values used by investors in the DCF analysis) as compared to the percentage of debt in the capital structure at book value (*i.e.* the values used in the ratemaking process). Columbia St. No. 8, pp. 26-27. For example, a utility that has a stock price above its book value and has an embedded cost of debt different from the marginal cost of debt, has a market value or capitalization of its equity that is greater than the book value of its equity. When an investor purchases that equity at the market price (*i.e.* the price assumed in the DCF model), the percentage of equity in the market capitalization is greater than the percentage of equity at book value. Under such circumstances, the DCF cost rate based on market prices must be adjusted to reflect the greater financial risk created by a higher debt ratio when that cost rate is applied to a book value capitalization in utility proceedings. *Id.*; Columbia St. No. 8-R, pp. 23-25.

The Commonwealth Court has held that the decision of whether to adopt a leverage adjustment is within the Commission's discretion. In *PA American*, the Commonwealth Court stated:

As to economic theory, the PUC explains the reasons the common equity costs rate adjustment is appropriate. First, the formula used to estimate cost rate is market based, but Utility's stock is not publicly traded and is listed at a much lower book value. Under these circumstances the formula can understate the cost of capital.

• • •

Similarly, Utility highlights the testimony of its expert, who opined that “the capital structure ratios measured at the utility’s book value show more financial leverage, and hence higher risk, than the capitalization measured at its market values.” R.R. at 987a.

• • •

The present issue involves the application of a market value cost to a book value amount of common stock. The PUC made its adjustment to the common equity cost rate in recognition of the “financial risk” arising from the different valuation methods.

No witness stated that 0.6% was an appropriate adjustment. However, as Utility’s expert opined that an adjustment of about 0.8% was appropriate, the record supports an adjustment larger than that approved. Further, case law supports an adjustment. E.g., *West Penn Power Co.* Also, the amount of the adjustment is exactly the same in this case as in the last rate proceeding involving Utility. R.R. at 900a. That prior order was not appealed. Under these circumstances, there was no abuse of discretion in making the identical adjustment.

PA American, 868 A.2d at 612-13 (footnote omitted).

Furthermore, the Commission has accepted the leverage adjustment in a number of cases, including. *See, e.g., Pa. Pub. Util. Comm’n v. Pa. American Water Co.*, Docket No. R-0001639 (Order dated Jan. 10, 2012) (approving 60 basis point adjustment); *Pa. Pub. Util. Comm’n v. PPL Gas Utilities Corp.*, Docket No. R-00061398 (Order dated Feb. 8, 2007) (approving 70 basis point adjustment); *Aqua 2004 Order*, at *85-87 (adopting 60 basis point adjustment); *Pa. Pub. Util. Comm’n v. PPL Electric Utilities Corp.*, Docket No. R-00049255 (Order dated Dec. 6, 2004) (approving 45 basis point adjustment).

Parties to this proceeding incorrectly argue that the Commission has fundamentally rejected leverage adjustments by citing two cases. First, in *Aqua 2008*, the Commission declined to use a leverage adjustment in arriving at the DCF cost of equity because the unadjusted DCF results presented by Aqua adequately captured the perceived risk associated with Aqua’s market-to-book ratio. The Commission explained:

Based upon our analysis and review of the record, the Recommended Decision, and the Exceptions and Replies thereto, we reject the ALJ's recommendation to add a 65 basis point risk adjustment. The award of such an adjustment is not precedential but discretionary with the Commission. In fact, in *Met Ed/Penelec (Pa. P.U.C. v. Metropolitan Edison Co./Pennsylvania Electric Co.* Order of Jan. 11, 2007, at R-000161366 and R-00061367), we specifically approved the removal of any risk adders from the cost of equity calculations. *Met Ed/Penelec* at 136.

In the cases cited by Aqua in support of its leverage adjustment, it is obvious that the DCF results in those cases were not as high as the unadjusted DCF result we have in this proceeding, since the final cost of equity in those cases was no higher than 10.6% with the leverage adjustment. The unadjusted DCF results presented by the Parties in this case are generally higher than the DCF recommendations from the earlier cases cited by Aqua. When viewed in the context of the other methodologies, we conclude that there is no need to have an upwards adjustment to compensate for any perceived risk related to Aqua's market-to-book ratio. Accordingly, we reject the ALJ's recommendation to allow a 65-basis point leverage adjustment.

Aqua 2008, pp. 38-39. Importantly, while the Commission declined to adopt Aqua's proposed leverage adjustment, it ultimately approved an 11.0% cost of common equity, which was also inclusive of a 22-basis point adjustment for managerial performance. *Aqua 2008*, pp. 53-54.

Mr. Moul cautioned that the use of an unadjusted DCF alone significantly understates the cost of common equity, because the proportion of market value of common equity in the Gas Group's capitalization was significantly higher than its proportionate measure at book value. *Columbia St. No. 8*, p. 27. As such, the leverage adjustment is necessary to reflect the difference between market prices, which are assumed to drive investors' expectations in the DCF analysis, and book values, which are used in the ratemaking process. Without this adjustment, market-derived DCF results would be inapplicable in the ratemaking context. *See Columbia St. No. 8-R*, p. 25.

Second, in *Pa. Pub. Util. Comm'n, v. City of Lancaster Bureau of Water*, Docket Nos. R-2010-2179103 et al. (Order dated July 14, 2011) the Commission declined to adopt a leverage adjustment. However, this order does not foreclose the adoption of a leverage adjustment. Rather, the Commission simply exercised its discretion in that proceeding not to adopt a leverage adjustment, citing the *Aqua 2008* case that it was unnecessary to adopt the leverage adjustment in that proceeding. *Id.*, p. 79. This is consistent with the Commission's actions in other proceedings where it has reviewed the entire record and either chose to adopt or chose not to adopt a leverage adjustment based upon the specific circumstances of each case. As explained above, it is especially appropriate to adopt the leverage adjustment in this proceeding to address understated DCF results and account for the mismatch between market and book values of the Company's capitalization. Further, as noted previously, the Commonwealth Court in *PA American* specifically affirmed the Commission's authority to include the leverage adjustment in the DCF analysis.

Moreover, the *City of Lancaster* decision is clearly distinguishable. The City is not an investor owned utility, such as Columbia. In its Order, the Commission specifically recognized that the City did not have the same financial risk profile as an investor owned utility, stating as follows:

We note that the City's debt cost rate in this proceeding is at 4.66%, which reflects the City's ability to tax. This illustrates that the City's taxing power lowers the City's financial risk when compared to an investor-owned utility. Since Lancaster's status as a municipally owned utility provides it with the opportunity to obtain debt at this low cost rate as a result of the City's ability to tax, this low cost debt should not be shifted to higher cost equity at the expense of the City's customers. As a result, we do not find that the City has to be treated like an investor owned utility for ratemaking purposes.

City of Lancaster, p. 54 (emphasis added). It is clear from the Order that this lower risk profile impacted the Commission's decision in that proceeding.

Finally, OCA and I&E may attempt to rely upon *PPL Electric 2012* and *UGI Electric*, to further bolster their contention that Columbia's proposed leverage adjustment be disallowed. However, it is important to recognize that the Commission did not approve the requested leverage adjustment in *PPL Electric 2012* because the Commission approved a cost of common equity at the higher end of the ranges proposed by the parties. See *PPL Electric 2012*, p. 82, and the Commission granted a management performance increment in *UGI Electric*. Columbia St. No. 8-R, p. 64. Clearly, the Commission elected not to approve the leverage adjustment because the approved cost of common equity adequately recognized the risks associated with investment.

c. Risk Premium.

Columbia witness Mr. Moul also performed a risk premium analysis to determine the cost of common equity. The risk premium analysis is based upon the fundamental principle that an equity investor in a given company has a greater risk than a bond holder in the same company because interest on bonds is paid before any return is received by the equity investor, and the bond holder receives a return of its capital before an equity investor receives any return of capital in the event of bankruptcy or the dissolution of the subject company. Columbia St. No. 8, p. 31. Furthermore, the risk premium analysis has common sense appeal to investors, who expect to earn an equity return in excess of bond returns as compensation for the increased risk associated with equity investments. Columbia St. No. 8-R, p. 32. Accordingly, the risk premium method determines the cost of equity by summing the expected public utility bond yield and the return on equity over bond returns (*i.e.* the "equity premium") over an historic period.

Mr. Moul determined the risk premium cost of common equity as follows:

| | Interest Rate | + Risk Premium | = RP Cost Rate |
|----------|---------------|----------------|----------------|
| Original | 4.00% | 6.50% | 10.50% |
| Updated | 3.35% | 6.75 | 10.10% |

The interest rate used by Mr. Moul is based upon projections of interest rates for A-rated public utility bonds using the Blue Chip Financial Forecasts as a basis. Columbia St. No. 8, p. 32. Mr. Moul summed the Blue Chip forecast yield on Treasury bonds plus a spread to reflect the borrowing cost of a public utility. The Update reflects the recent decline in the prospective yield on A-rated public utility bonds. Columbia St. No. 8-R, p. 9.

The risk premium used by Mr. Moul reflects historical risk premiums over long-term corporate bonds. Columbia St. No. 8, p. 34. Importantly, Mr. Moul highlighted the fact that the equity risk premiums bears an inverse relationship to the interest rates of long-term corporate bonds (*i.e.*, when long term interest rates are low, the equity risk premium is high and vice versa).

Mr. Moul developed his risk premium from an analysis of results from 2019 SBBI Yearbook, Stocks, Bonds, Bills and Inflation. That data demonstrated that the risk premium (return over long-term corporate bonds) was 6.9% when interest rates were low, 5.64% across all interest rates, and 4.34% when interest rates were high. Columbia Ex. 400, p. 21. In his original presentation, Mr. Moul recommended a 6.5% risk premium, between the experienced risk premium of 6.9% at low interest rates and the average risk premium of 5.63% across all interest rates, based upon projected interest rates on utility bonds. Columbia St. No. 8, p. 34. In the Update, Mr. Moul adjusted the risk premium 25 basis points higher, in recognition of the lower interest rate environment. Columbia St. No. 8-R, p. 9.

d. CAPM

Columbia witness Mr. Moul also prepared a capital asset pricing model (“CAPM”) analysis to estimate the cost of common equity for the Gas Group. The CAPM analysis is similar in concept to the risk premium analysis in that it determines a “risk-free” interest rate based on U.S. Treasury obligations and an equity risk premium that is proportional to the systematic (*i.e.*, “beta value”) risk of a stock, which are summed to produce the cost rate of equity. Columbia St. No. 8, pp. 35-40. To this, Mr. Moul added a size adjustment, to account for size differences between Columbia and the much larger Gas Group companies. Columbia St. No 8, p. 39. Mr. Moul determined the CAPM cost of equity as follows:

| | Rf | + Beta | x (Rm-Rf) | + Size | = CAPM Rate |
|----------|-------|--------|-----------|--------|-------------|
| Original | 2.75% | 0.83 | (7.74%) | 1.02% | 10.19% |
| Updated | 1.75% | 1.05 | (9.26%) | 1.02% | 12.49% |

Mr. Moul initially determined the risk free (Rf) rate to be 2.75% based on then-current and forecasted yields on long-term Treasury bonds. Columbia St. No. 8, p. 38. In his update, Mr. Moul reflected a reduction to the risk-free rate, based upon revised projections. Columbia St. No. 8-R, p. 9.

For the market premium (Rm-Rf) component of the CAPM analysis, Mr. Moul calculated a 7.74% premium, based upon an average derived from historical data (7.83% premium) and forecasted returns (7.63% premium). Columbia St. No. 8, p. 39. In his update, Mr. Moul derived an increase to the risk premium based upon updated historical and projected data. Columbia Ex. 400 (Updated) p. 24. Mr. Moul observed that the premium moves inversely to the risk free interest rate, and thus an increase is to be expected as interest rates decline. Columbia St. No. 8-R, p. 9.

For the beta measure of systematic risk, Mr. Moul used leveraged betas developed from Value Line betas. As Mr. Moul explained:

I used the Value Line betas as a foundation for the leverage adjusted betas that I used in the CAPM. The betas must be reflective of the financial risk associated with the rate setting capital structure that is measured at book value. Therefore, Value Line betas cannot be used directly in the CAPM, unless the cost rate developed using those betas is applied to a capital structure measured with market values. To develop a CAPM cost rate applicable to a book-value capital structure, the Value Line (market value) betas have been unleveraged and re-leveraged for the book value common equity ratios using the Hamada formula . . .

Columbia St. No. 8, pp. 35-36.

In his update, Mr. Moul observed a substantial increase in the reported Value Line betas, to 0.84. The result is an increase in the leverage adjusted beta to 1.05. Columbia St. No. 8-R, p. 9.

Finally, Mr. Moul included a 1.02% size adjustment to his CAPM analysis to recognize the Company's smaller size relative to the Gas Group and resultant increased risk profile. This adjustment is based upon generally accepted and widely recognized literature that states smaller firms have higher capital costs than larger firms. Columbia St. No. 8, p. 39.

Other parties have opposed the addition of a size adjustment in the CAPM, questioning whether there is a difference in capital costs among utilities based upon size. I&E. St. No. 2, p. 45; OCA St. No 3, p. 87. Mr. Moul explained the error in these contentions:

As a preliminary matter, recent Federal Energy Regulatory Commission's ("FERC") orders specifically prescribe an adjustment to the CAPM due to the size of an enterprise. It is noteworthy that CAPM provides compensation solely for systematic risk. In making his arguments, Mr. Keller claims, "the technical literature he cites supporting investment adjustments related to the size of a company is not specific to the utility industry; therefore, has no relevance in this proceeding." This supposes that there is distinction between regulated utilities and unregulated industrial companies when related to the impact on the cost of equity

related to size. But that is not enough to reject this adjustment. This is because the size adjustment that I use is derived from the Ibbotson study that included, among other industries, public utilities. So, I have considered the utility industry in my adjustment. The Wong article that Mr. Keller cites provides no support for rejecting the size adjustment. The Wong article that he relies upon was authored twenty (20) years ago, and employed data going back into the 1960s. Enormous changes have occurred in the industry since the 1960s that have fundamentally changed the utility business. The Wong article also noted that betas for the non-regulated companies were larger than the betas of the utilities. This, however, is not a revelation, because utilities continue to have lower betas than many other companies. This fact does not invalidate the additional risk associated with small size.

The Wong article further concludes that size cannot be explained in terms of beta. Again, this should not be a surprise. Beta is not the tool that should be employed to make that determination. Indeed, beta is a measure of systematic risk and it does not provide the means to identify the return necessary to compensate for the additional risk of small size. In contrast, the famous Fama/French study (see “The Cross-Section of Expected Stock Returns,” *The Journal of Finance*, June 1992) identified size as a separate factor that helps explain returns.

Columbia St. No. 8-R, pp. 28-29. Mr. Moul further explained that that analyzes of CAPM results demonstrate that there is a size risk that is not captured by the model. Columbia St. No. 8-R, p. 32. A size adjustment is appropriate and should be included in the CAPM results.

e. Comparable Earnings

Columbia witness Moul also performed a comparable earnings analysis based on the principle set forth by the United States Supreme Court that a utility should be afforded an opportunity to earn a return on its property equal to that being earned on investments in other businesses with corresponding risks and uncertainties. *Bluefield Water Works v. Public Service Commission*, 262 US 668 (1982). The analysis identifies non-regulated companies with comparable risk and produces a cost rate of 12.75% (updated to 12.70%). Columbia St. No. 8, pp. 43-44; Columbia Ex. 400 (Updated), p. 2.

f. Cost of Equity Should Include an Increment for Management Performance

Columbia has demonstrated strong performance in the area of management effectiveness, which should be recognized by the Commission through a 20-basis point addition to the cost of common equity. This will be explained further in Section VIII.D.3 of this brief.

2. Opposing Parties Common Equity Cost Rate Recommendations Must be Rejected

Three parties have presented testimony on the cost rate of common equity: I&E, OCA and OSBA.

As noted in Section VIII.A of this brief, OCA has presented testimony that supports alternative rates of return. One, supported by OCA witness Rubin, would allow no rate increase, effectively producing an overall rate of return of less than 4.9%. This alternative does not attempt to calculate the resulting cost rate of common equity, but its result would likely be less than 6%. Columbia has responded to this proposal in Section III of this brief and will not be discussed further here. This section will respond to OCA's wholly inadequate alternative return on common equity proposal of 8.5% sponsored by OCA witness O'Donnell. OCA St. No. 3. This section of the brief also will respond to the I&E proposal of a common equity cost rate of 9.86%. In addition, Columbia will respond to OSBA witness Knecht, who undertook no specific rate of return analysis, but appears to endorse a "back of the envelope" risk premium calculation of 7.5%. These results are incorrect, as explained next, and inadequate to support Columbia's ongoing and substantial infrastructure replacement program, whose focus is on replacing at risk pipe.

a. I&E's Return on Common Equity Recommendation is Understated

I&E witness Mr. Keller based his 9.86% rate of return on common equity recommendation solely on the results of his DCF method. He prepared a CAPM analysis, but only as a check on his DCF result. I&E St. No. 2, p. 21.

Mr. Keller derived a dividend yield for his proxy group of 3.34%, using an average of spot and a 52-week average. The result is substantially similar to Mr. Moul's updated dividend yield of 3.39%.

Mr. Keller relied upon five-year projected growth rates for his proxy group, taken from four sources. I&E St. No. 2, p. 23. Mr. Keller acknowledges that his average of all projected growth rate data for his proxy group produces a growth rate of 7.64%, again substantially similar to Mr. Moul's growth rate projection of 7.50%. I&E St. No. 2, p. 23. However, Mr. Keller recommends an adjusted growth rate of 6.42%, by improperly and selectively excluding a single data point projection for Northwest Natural Gas. I&E St. No. 2, p. 23.

Mr. Keller's exclusion of a single data point for Northwest Natural Gas is biased. He removed a single growth rate projection for this company on the basis that it was too high, and yet he retained other growth rate data for Northwest Natural Gas that is objectively well below other results. As Mr. Moul demonstrated, Mr. Keller's resulting adjusted Northwest Natural Gas growth rate is 3.10%, which is below the adjusted growth rate for any other company in Mr. Keller's proxy group, and well below the average growth rate for the remaining companies in his proxy group. Columbia St. No. 8-R, pp. 18-19. As further proof of the bias, Mr. Keller's adjustment removes an average growth rate for Northwest Natural Gas of 10.90%, which is within the range of growth rates for the other companies in Mr. Keller's proxy group (4.96% -

10.97%) and replaces it with a growth rate (3.10%) well below that range. Columbia St. No. 8-R, p. 19. As Mr. Moul explained:

Mr. Keller says, “Value Line’s growth projection for Northwest is extremely inconsistent and would have an unreasonable and unwarranted impact on my DCF analysis.” However, Mr. Keller’s approach to excluding the Value Line growth rate for Northwest is one-sided. He advocates the exclusion of a high growth rate, but he makes no effort to exclude any low growth rates. There is a clear bias to his exclusion. As I demonstrated above, by altering the growth rate for Northwest Natural, Mr. Keller has made its result an outlier that artificially lowers his overall DCF result. Moreover, the use of a group average without alteration will give appropriate weight to both high and low growth rates, and as such all values (e.g., high and low) should be used in the analysis.

Columbia St. No. 8-R, p. 19.

Mr. Keller’s improper exclusion of a single data point to compute his DCF growth rate should be rejected. Correcting Mr. Keller’s growth rate to include all barometer group data would produce a DCF result of 10.98% (3.34% + 7.64%), which is consistent with Mr. Moul’s recommended rate of return on common equity.

Mr. Keller also rejects Mr. Moul’s leverage adjustment. Columbia previously addressed the propriety of Mr. Moul’s leverage adjustment in Section.III.D.1.b.iii, *supra*.

While Mr. Keller offers a CAPM analysis as a check on his DCF results, his CAPM analysis is also unreliable. There are three principle flaws in his CAPM calculation.

First, Mr. Keller incorrectly relies upon the yield of 10-year Treasury notes instead of long-term bonds, which produces a systematic understatement of the risk free rate. As Mr. Moul explained:

Short-term rates respond more to the monetary policy actions taken by the Federal Open Market Committee (“FOMC”), while long-term rates are more a reflection of investor sentiment of their required returns. For this reason, long-term rates, such as those revealed by 30-year Treasury bonds, should be used to measure the risk-free rate of return. Use of shorter term rates, such as Mr.

Keller's 10-year Treasury Notes yields, are more susceptible to Fed policy actions.

Columbia St. No. 8-R, p. 28. Mr. Keller compounds this understatement by giving the same weight to the yield on 10-year Treasury notes for the third and fourth quarters of 2020 and the first three quarters of 2021 as he does for the entire five-year period 2022 – 2026. Mr. Moul demonstrates that if 30-year Treasury yields and corrected weights were applied to Mr. Keller's calculation, the resulting risk-free rate would rise to 2.77%, rather than the 1.22% used by Mr. Keller. Even if the 10-year yield should be considered, then the proper rate should be 2.15% that correctly weights the forecasts and not the 1.22% that Mr. Keller used. Columbia St. No. 8-R, p. 27.

Second Mr. Keller's CAPM calculation is understated by failing to use leverage adjusted betas. The need for a leverage adjustment is explained previously.

Third, Mr. Keller's CAPM analysis is understated by failing to reflect a size adjustment. A size adjustment should be included for reasons explained in Section VIII.D.1.d of this brief.

For the reason explained above, Mr. Keller's improper adjustment to his DCF growth rate should be rejected, and his CAPM analysis should not be relied upon as a check upon his DCF analysis.

b. OCA's Recommended Cost of Equity is Flawed and Should be Rejected

OCA witness O'Donnell recommends a cost rate for common equity of 8.5%, primarily based upon a claimed DCF range of 7.5% - 9.5%. There are a number of serious flaws in Mr. O'Donnell's analysis, which produce an erroneous result that should not be relied upon.

Mr. O'Donnell's DCF result is based upon a dividend yield ranging from 3.3% to 3.5%, and a growth rate range of 4% to 6%. This growth rate recommendation is erroneous.

OCA's growth rate is derived from five sources: (1) "plowback", or retained earnings; (2) Value Line historical growth rates of earnings, dividends and book value; (3) Value Line forecasts of earnings, dividends and book value growth; (4) earnings forecast from CFRA, and earnings forecast from Schwab. OCA St. No. 3, pp. 46-56. The three principle flaws in this analysis of growth are the reliance on retained earnings growth, the use of historic growth rates and the inclusion of dividend and book value growth rates.

Retained earnings growth, often referred to as "b x r", is not a proper method to consider in developing a growth component for the DCF. Retention growth has been rejected by the Commission. See, *UGI Electric*, pp. 90, 92. *Pa. PUC v. The York Water Company*, 62 Pa. PUC 459, 504 (1986). As Mr. Moul explained, the retained earnings approach merely adjusts an assumed return on book common equity by the difference in the dividend yield on book value and the dividend yield on market value. Columbia St. No. 8-R, pp. 21-22. This is evident from Mr. O'Donnell's Exhibit KWO-2 and KWO-3. Mr. O'Donnell begins with a projected 10.1% return for his proxy group, which he derives from Value Line. He then calculates retained earnings growth, or "plowback," of 4.3%, resulting in a dividend yield on book value of 5.86% (10.1% - 4.3%). That dividend yield on book value is replaced by his calculated dividend yield on market value (averaging 3.43%) to produce a DCF return of 7.73%. Mr. O'Donnell offers no explanation of why an investor who expects a return of 10.10% should have that expected return reduced to 7.73%. An achieved rate of return of 10.1% simply is not possible to attain if the authorized return is calculated to be less than 8%.

OCA's reliance upon historical growth rate information is similarly flawed. The DCF is an expectational model. As previously explained, investors do not purchase past earnings, but look to projections of future earnings. While investors projections of earnings are informed by

historic experience, that historic information is already baked into the projected growth rates, and it is improper double counting to separately consider historic growth rates. Professor Myron Gordon, the foremost proponent of the DCF, has explained that the best measure of growth is a forecast of earnings per share growth. Columbia St. No. 8, p. 25. In this case, Mr. O'Donnell's historical results are heavily distorted by negative returns. See OCA Ex. KWO-1. Rational investors do not invest in a company with an expectation of negative growth and loss of capital.

Mr. O'Donnell's reliance on dividend per share and book value growth is also improper.

As Mr. Moul explained:

Mr. O'Donnell presents EPS, DPS, and BPS growth rates. Mr. O'Donnell is incorrect to believe that DPS and BPS have any role in the DCF model. The theory of the model rests on the assumption that there will be a constant price-earnings multiple, and therefore the price of stock will increase at the same rate as earnings growth. Moreover, with the constant payout ratio assumption of the DCF, dividend growth will equal earnings growth in the long-term. Finally, with a consistent market-to-book ratio assumption of the DCF, book value per share will equal the other variables of growth, *i.e.*, earnings per share and dividends per share.

Columbia St. No. 8-R, p. 20.

If Mr. O'Donnell had relied upon earnings per share growth rate projections, his results would have been in line with Mr. Moul's recommendations. The forecasted earnings per share growth rates presented by Mr. O'Donnell from Value Line, CFRA and Schwab produce an average growth rate of 7.57%. When added to Mr. O'Donnell's dividend yield, the resulting DCF outcome is 11.00% (7.57 % + 3.43%). This result is understated by Mr. O'Donnell's rejection of a leverage adjustment.

Mr. O'Donnell purports to offer two comparable earnings analyses. However, the "comparable" companies he uses are all regulated natural gas utilities. OCA St. No. 3, pp 57-59. This is contrary to the underlying premise of the comparable earning method, which is that

regulation should emulate results achieved by firms with comparable risks operating in competitive markets. Columbia St. No. 8-R, p. 34. The use of regulated entities removes the competitive market from the equation, nullifying the calculation.

Mr. O'Donnell's CAPM analysis produces results so low as to be demonstrably unjustified, with a range of 5.5% (barely above Columbia's embedded debt cost) to 7.5%. The errors in Mr. O'Donnell's analysis include the use of geometric means instead of arithmetic means in analyzing historic market returns and use of non-standard data sources in support of a market risk premium. Columbia St. No. 8-R, p. 31. The Commission has rejected the use of geometric means for CAPM purposes. *UGI Electric*, p. 99. Mr. O'Donnell also improperly rejects a size adjustment. OCA's CAPM analysis should be disregarded.

c. OSBA's Return on Equity Observations Should be Given No Weight

OSBA witness Knecht did not prepare an independent analysis of the cost of common equity. Instead, he opines that a rate of return on equity of 7.5% would be reasonable based upon an implied risk premium calculation derived from the *UGI Electric* case. OSBA St. No. 1, p. 5. Specifically, he calculates that the Commission awarded a 6.9% risk premium over what he claimed was the yield on 10-year Treasury bonds at the time. However, OSBA fails to recognize accepted risk premium theory that risk premiums move inversely to interest rates. Columbia St. No. 8-R, p. 35. Also, a proper risk premium analysis uses corporate bond yields plus a risk premium to measure the appropriate cost of common equity over corporate bonds. Columbia St. 8, No. p. 31. OSBA's use of 10-year Treasury bonds, as a measure of a risk-free interest rate, improperly confuses the risk premium and CAPM methods. OSBA St. No. 1, p. 5, n. 5. Further, Mr. Knecht's analysis fails to account for the generally greater risk, and consequently higher returns, awarded to gas companies vs. electric companies. Quarterly Earnings Report, pp. 18-23.

Finally, Mr. Knecht offers no evidence that the Commission relied upon a risk premium analysis in *UGI Electric*.

OSBA's suggested 7.5% rate of return on common equity is unsupported and must be rejected.

3. Increment for Management Effectiveness

Columbia has demonstrated strong performance in the area of management effectiveness, which should be recognized by the Commission through a 20-basis point addition to the cost of common equity.

Under the Public Utility Code, the Commission is required to consider management effectiveness in setting rates. Section 523 of the Public Utility Code provides:

The commission shall consider, in addition to all other relevant evidence of record, the efficiency, effectiveness and adequacy of service of each utility when determining just and reasonable rates under this title. On the basis of the commission's consideration of such evidence, it shall give effect to this section by making such adjustments to specific components of the utility's claimed cost of service as it may determine to be proper and appropriate. Any adjustment made under this section shall be made on the basis of specific findings upon evidence of record, which findings shall be set forth explicitly, together with their underlying rationale, in the final order of the commission.

66 Pa.C.S. § 523(a) (emphasis added). In addition, the Commission has, where appropriate, included an incremental upward adjustment to the cost of common equity to reflect management effectiveness. *See, e.g., UGI Electric*, p. 119; *PPL Electric 2012*, pp. 98-99; *Aqua 2008*, at *63; *Pa. P.U.C. v. West Penn Power Co.*, Docket Nos. R-00942986, et al., 1994 Pa. PUC LEXIS 144, *147 (Order dated Dec. 29, 1994). In *UGI Electric*, the Commission recognized improved customer satisfaction, workforce safety and service reliability as relevant factors in assessing management performance.

Nothing in Section 523 requires a finding that a utility must outperform all other utilities in the Commonwealth or that a utility's programs not be funded by customers before it is eligible for an increment to the rate of return for management performance.

a. Evidence of Columbia's management effectiveness

Columbia has presented substantial evidence as to its management performance.

Columbia has a strong focus on safety. Columbia began its program to replace priority pipe beginning in 2007, long before the establishment of LTIPs and DSIC mechanisms. Columbia St. No. 1, p. 12. Columbia has consistently met or exceeded its LTIP goals.²⁶ More recently, Columbia has established SMS, pursuant to American Petroleum Institute ("API") Recommended Practice ("RP") 1173. SMS is another step toward improved safety, as Columbia explained:

A Pipeline SMS places particular emphasis on proactive thinking of what can go wrong in a systematic manner, clarifying safety responsibilities throughout the pipeline operator's organization (including contractor support), the important role of top management and leadership at all levels, encouraging the non-punitive reporting of and response to safety concerns, and providing safety assurance by regularly evaluating operations to identify and address risks. These factors, plus a strong safety culture, work together to make safety programs and processes more effective, comprehensive, and integrated.

Columbia St. No. 1, p. 16.

Columbia's safety efforts are not limited to accelerated pipeline replacement. Columbia also has demonstrated long-term success in locating Grade 2 leaks, reducing third party damages and improving emergency response times. Columbia St. No. 1, pp. 19-21.

²⁶ In 2018, Columbia's pipe replacement was short of projections, as it assisted its sister utility in Massachusetts recover from significant damage due to over pressurization. Columbia has since caught up to its replacement goals. Columbia St. No. 14-R, p. 4.

Columbia has also performed well relative to its peers from a Commission management audit perspective. The Commission's auditors use a ranking system from "Meets Expected Performance" to "Major Improvement Necessary". Columbia achieved the second highest "Meets Expected Performance" percentage of all companies and was one of four companies to not receive any ranking of "Significant Improvement Necessary." Columbia St. No. 1, p. 23,

Columbia also performed well in the Commission's most recent Utility Consumer Report and Evaluation ("UCARE"). Columbia is the best in most categories for the gas industry, which includes consumer complaint rates, justified consumer complaint rates, Payment Arrangement Request ("PAR") rates, and Commission infraction rates. Columbia St. No. 1, pp. 24-26.

Columbia's recent Quality of Service Performance Report further demonstrates Columbia's commitment to quality service to customers. Overall, call center performance, avoidance of deferred billings and on time meter reading demonstrate quality customer service. Columbia St. No. 1, pp. 27-29.

In addition to the foregoing reports, Columbia uses three outside contractors to survey customers regarding their satisfaction with Columbia's service. These survey results show high customer satisfaction with both customer service representatives and field service employees, with overall satisfaction for both groups exceeding 93%. Columbia St. No. 1, pp. 30-31. Customer satisfaction scores from the most recent J.D. Power survey show Columbia scoring in second place among mid-sized eastern natural gas utilities, outperforming the average by 21 points. Columbia also had the top ranking among mid-sized eastern gas utilities in the Billing and Payment category. Columbia St. No. 1, p. 32.

Columbia has been successful in implementing Chapter 14 regulations. Columbia has reduced its net residential write-offs from 3.48% in 2004 to 1.20% in 2018. Columbia St. No. 1,

p. 33. Columbia has achieved this while maintaining successful and well-managed Universal Service programs. The 2018 Universal Service and Collections Report indicated that Columbia had the most affordable Customer Assistance Program (“CAP”) payments with a lower default rate, at each poverty level, than other gas utilities. Columbia St. No. 1, p. 33. An independent evaluation of Columbia’s universal services has found that Columbia’s Universal Services programs are well-managed and efficient, with CAP administrative costs among the lowest in the state. Columbia St. No. 1, p. 33.

Columbia continues to examine ways to improve the customer experience, with online information and payment options responsive to the needs of new generations of customers. These include improved messaging services, expanded paperless billing and additional payment processes. Columbia St. No. 1, pp. 35-36.

Columbia and its employees are dedicated to investing in the communities they serve. These include donations of time and money to assist those in need and to improve the business climate in those communities. Columbia St. No. 1, pp. 36-37. In 2019, over 210 Columbia employees participated in over 70 different Company-organized volunteer events, representing over 1700 hours of volunteer work. These efforts also include programs designed to expand the availability of natural gas in underserved areas in Pennsylvania. Columbia St. No. 1, pp. 37-38.

Columbia is committed to diversity. Its parent, NiSource is one of only 325 companies, and one of only 24 utility companies, included in the 2020 Bloomsburg Gender-Equality Index (“GEI”). The GEI measures gender equality across five measures: female leadership and talent pipeline, equal pay and gender pay parity, inclusive culture, sexual harassment policies and pro-women brand. Columbia St. No. 1, p. 5.

The foregoing clearly demonstrates Columbia's efforts to improve operations to strengthen reliability, enhance customer satisfaction, respond to customer needs and reinforce safety. For these reasons, the cost of common equity should include an increment for management performance.

b. Other parties' arguments against any allowance for management effectiveness should be rejected

Several parties oppose any allowance for management effectiveness. Such arguments are without merit and should be rejected.

I&E has a basic opposition to any recognition in the rate of return for management effectiveness. Mr. Keller states:

Ultimately, for any company, true management effectiveness is earning a higher return through its efficient use of resources and cost cutting measures. The greater net income resulting from cost savings and true efficiency in management and operations is available to be passed on to shareholders. Columbia, or any utility should not be awarded additional basis points for doing what they are required to do in order to provide adequate, efficient, safe, and reasonable service under 66 Pa.C.S.A. § 1501. For these reasons, I recommend that there be no addition of basis points to the cost of equity for management effectiveness.

I&E St. No. 2, p. 50. However, as explained previously, I&E's position is contrary to Section 523 of the Public Utility Code and numerous Commission decisions.

Several witnesses seek to disparage Columbia's management effectiveness by pointing to instances in which Columbia's efforts may not have been top in class. However, the Commission has never employed a standard that limits recognition to only companies with leading performance in every possible measure. Indeed, such a standard would effectively write Section 523 of the Public Utility Code out of existence, as no utility could be expected to be perfect in every conceivable measure.

Various claims of suboptimal performance do not present a full or accurate description. For example, OCA witness Colton asserts that Columbia's collection performance, "while not amongst the worst performing natural gas utilities in Pennsylvania on collections from residential customers," is not "exemplary." OCA St. No. 5, p. 79. However, Mr. Colton's analysis only considered raw data, unadjusted for the size of the utility. As Columbia witness Mr. Tubbs explained in rebuttal, adjusted collections data presents a different view:

- Columbia has the lowest percentage of customers in debt
- The Company has the highest percentage of debt on payment arrangements, demonstrating its commitment to work with customers who are behind on bills
- Columbia has the lowest termination rate per customer of any utility
- Columbia's gross residential write off ratio is the lowest of any Pennsylvania gas utility.

Columbia St. No. 1-R, pp. 29-31.

OSBA witness Knecht points to the over pressurization incident that occurred on the Columbia Gas of Massachusetts system in 2018, as evidence of poor management. However, Columbia Gas of Massachusetts is a stand-alone company with its own management separate from Columbia. Further, that incident has not affected Columbia's cost of capital, as suggested by Mr. Knecht, as NiSource has retained its same credit rating. Columbia St. No. 8-SR, p. 3.

For these reasons, other parties' contentions that Columbia should receive no recognition for management effectiveness in the rate of return are incorrect and should be rejected.

E. CONCLUSION AS TO RATE OF RETURN

Columbia has an ongoing need to raise capital at reasonable cost rates to support its ongoing main replacement program. Proposals to employ a hypothetical capital structure, and to adopt cost rates for common equity well below levels seen in modern regulatory times will work in opposition to that need. The Commission should continue to support the funding of

accelerated infrastructure improvement and the continued provision of high-quality gas service by adopting Columbia's actual capital structure and its proposed cost of common equity of 10.95%.

IX. MISCELLANEOUS ISSUES

A. LOW-INCOME CUSTOMER ISSUES

Columbia is a strong supporter of Universal Service Programs ("USP") and is committed to helping ensure that bills are affordable for the Company's low-income customers. Eligible customers have a variety of programs available to provide financial assistance, including the Customer Assistance Program ("CAP"), Customer Assistance, Referral and Evaluation Services ("CARES"), Hardship Fund, Low Income Home Energy Assistance Program ("LIHEAP") and Low-Income Usage Reduction Program ("LIURP"). CAP offers affordable payment plans for income eligible customers. Customers participating in CAP are billed a monthly amount based on their payment plan rather than the full bill. LIHEAP is a federal program that helps eligible households maintain utility service during winter months in the form of a cash grant. An additional LIHEAP CRISIS grant is available in emergency circumstances. Columbia's LIURP provides weatherization services at no cost to eligible high-use customers.

Columbia engages in extensive outreach to its customers to promote these programs. Columbia's outreach efforts include community meetings, CAP screening agencies, web site updates, targeted mail solicitations, paid social media advertisements, advertisements on the Company website, television advertisements, advertisements on busses, billboards and radio advertisements. Each year, the Company also participates in fifteen to twenty legislative and/or senior events and three Be Utility Wise events to promote programs to individuals, community advocates and caseworkers. Columbia accepts CAP applications in the communities where its

customers live and work. Columbia also partners with community-based agencies to accept applications and promote low-income programs. Columbia Statement No. 13-R, pp. 5-8.

Various parties have offered recommendations regarding Columbia's low-income customer programs. Those recommendations are addressed in the following sections of this Brief. Columbia's efforts specific to COVID-related relief are discussed in Section III of this Brief.

1. Customer Assistance Program

a. CAP Collections

OCA witness Mr. Colton contends that Columbia's CAP collection policy is inadequate and does not comply with the Commission's CAP Policy Statement. OCA Statement No. 5, pp. 6-10. Mr. Colton is wrong on both points.

The Commission's CAP Policy Statement provides, in pertinent part, as follows:

Utilities should initiate collection activity for CAP accounts when a customer has no more than two (2) in-program payments in arrears. Customers should not be removed or defaulted from CAP as a precursor to termination for non-payment.

52 Pa. Code § 69.265; *2019 Amendments to Policy Statement on Customer Assistance Program, Final Policy Statement Order*, Docket No. M-2019-3012599 (Order entered November 5, 2019) ("*CAP Policy Statement Order*"). Columbia's CAP collection policy is set forth in its Commission-approved Universal Service and Energy Conservation Plan ("USECP"):

Columbia will issue a termination notice no sooner than 10 days after a customer fails to pay two missed CAP budget payments by the due date.

If a CAP customer does not make up all missed CAP payments within 10 days of the date of the termination notice, Columbia will attempt to terminate service for non-payment of the CAP budget bill. Columbia, in its sole discretion, may delay termination in the event of extenuating circumstances.

Columbia Statement No. 13-R, p. 2. The Company's USECP is consistent with the Commission's CAP Policy Statement.

Mr. Colton offers no support for his assumption that Columbia's collections policy is insufficient other than data comparing (1) the total number of CAP bills issued to the number of full payments received and (2) the percentage of CAP customer service terminations to the percentage of CAP bill collections. According to Mr. Colton, Columbia is unsuccessful at collecting approximately 25%-35% of CAP bills but only about 5% of CAP customers had their service terminated. OCA Statement No. 5, pp. 7-10. As Columbia explained, the data Mr. Colton cites to support his conclusion is provided as part of Columbia's annual Universal Service Reporting Requirements ("USRR"), and by definition, the data reflects the receipt of all payments **excluding** LIHEAP grant credits and Hardship Funds. Because LIHEAP funds supplement past, current and future customer payments, it is possible that a customer may be "current" on their CAP bill without having paid twelve on-time and in full payments in a year. The result is that more customers are current on their CAP bill than are represented in the data used by Mr. Colton for his analysis. Therefore, the data cited by Mr. Colton cannot be relied upon to draw a conclusion regarding the validity of Columbia's CAP collection policy. Columbia Statement No. 13-R, p. 2.

Moreover, there are several reasons why a CAP customer's service may not be terminated for nonpayment, which would cause the percentage of total service terminations to be less than the percentage of total CAP payments not received.²⁷ Columbia complies with the Commission's regulations regarding service terminations. Columbia does not terminate service (1) when a dispute is filed with the Commission (52 Pa. Code § 56.92), (2) when a customer

²⁷ Columbia currently is not removing any customers from CAP for missed payments or terminating service, as explained in Section III of this brief.

confirms via a medical certificate that service is critical to their health (52 Pa. Code § 56.111), and (3) during the winter moratorium from December 1 through March 31 (52 Pa. Code § 56.100). Columbia's compliance with these Residential service termination regulations does not mean that the Company's CAP collection policy is ineffective or noncompliant with the Commission's CAP Policy Statement.

Based on his faulty analysis, Mr. Colton recommends that Columbia should submit to its Universal Service Advisory Council ("USAC") the question of how customer payments on CAP bills can be pursued through a reasonable collections process. Columbia disagrees that the Company's CAP collections policies are inadequate. In fact, Columbia is outperforming other utilities in Pennsylvania when it comes to the CAP default rate and percentage of CAP bills paid. According to the Commission's 2018 Report on Universal Service Programs & Collections Performance, Columbia's default rates are consistently the lowest compared to other Pennsylvania gas and electric utilities.²⁸ Columbia's percentage of CAP bills paid (calculated by dividing the total annual CAP payments by the total annual CAP amount billed) was the third highest of all Pennsylvania gas utilities.²⁹ Mr. Colton's recommendation that Columbia's CAP collections process be considered by its USAC is unnecessary given Columbia's already exemplary performance in this area.

Columbia's CAP collections policies are already effective at collecting customer payments on CAP bills. Mr. Colton's arguments to the contrary are without merit and should be rejected.

²⁸ Pennsylvania Public Utility Commission Report on 2018 Universal Service Programs & Collections Performance (published December 2019), available at

http://www.puc.state.pa.us/General/publications_reports/pdf/EDC_NGDC_UniServ_Rpt2018.pdf.

²⁹ *Id.*

b. CAP Protections

OCA witness Mr. Colton contends that Columbia's existing low-income customer programs will not adequately protect low-income customers from the proposed customer charge increase. OCA Statement No. 5, pp. 62-65. Similarly, CAUSE-PA witness Mr. Miller states that the Company's Universal Service Programs are inadequate to protect low-income customers from the proposed rate increase. CAUSE-PA Statement No. 1, p. 21-22. Columbia disagrees with Mr. Colton's and Mr. Miller's assertions that programs are not in place to adequately protect low-income customers from the proposed rate increase.

All low-income customers who are not enrolled in CAP and who meet the eligibility criteria will be able to enroll in CAP. Thus, if a low-income customer's bill becomes unaffordable due to a change in rates or for any other reason, the customer can apply for CAP. The customer and CAP administrators select an affordable option for the customer at the time of enrollment. If a customer currently enrolled in CAP becomes unable to afford their bill, they have the opportunity to adjust their CAP payment so that the bill will be affordable. This includes unaffordability caused by changes in rates. A customer can contact Columbia at any time to determine if a lower payment plan option is available. In addition, the Company conducts a review of CAP accounts on a bi-annual basis to determine if a payment plan needs to be lowered. Columbia Statement No. 13-R, p. 10.

CAP offers different payment options, including a Percent of Budget payment option, a Percent of Income payment option, an Average of Bills payment option, and a Minimum payment option. The majority of CAP customers will experience no impact or very little impact from any increase in rates because their monthly CAP payment is based on factors unrelated to rates. Columbia Statement No. 13-R, pp. 9-10. In other words, the CAP payment amount is based on the amount the customer is able to pay rather than the otherwise applicable bill amount.

For example, those customers on the Percent of Budget currently pay between 3.44% and 5.24% of their income for their utility bill. With the rate increase, the average customer currently on the CAP Percent of Budget Plan would pay approximately 5.23% of their income for their utility bill. Columbia Statement No. 13-R, p. 10. The Commission's 2018 Report on Universal Service Programs & Collections Performance identified Columbia's "asked-to-pay" amount as the lowest average payment of all Pennsylvania utilities. Columbia Statement No. 13-R, p. 11.

In addition to CAP, Columbia offers other programs to provide financial assistance to low-income customers, such as its Hardship Fund and LIHEAP. Customers who need assistance and are willing to apply will receive adequate assistance to afford their gas bill. Columbia Statement No. 13-R, p. 11. Therefore, Mr. Colton and Mr. Miller are wrong in asserting that CAP and other USP will not protect low-income customers who become unable to afford their bills.

c. CAP Participation Rate

CAUSE-PA witness Mr. Miller recommends that Columbia design a plan to reach 50% of confirmed low-income customer enrollment in CAP by 2025. CAUSE-PA Statement No. 1, p. 44. Columbia disagrees with Mr. Miller's assertion that existing outreach and enrollment levels are too low. Columbia also disagrees that the metric to evaluate CAP enrollment should be based on the percentage of customers enrolled in CAP compared to the number of confirmed low-income customers reported.

Columbia's CAP places no limits on the number of eligible customers who may enroll in the program. Columbia's current, Commission-approved USECP states on page 23 that the Company was required to remove any ceiling of the CAP program enrollment in 2015. The Company undertakes extensive outreach to its low-income customers through social media, targeted outbound calls and e-mails to customers, bill inserts and customer newsletters.

Columbia Exhibit No. 1-R, p. 5; Columbia Exhibit No. AST-1R. Columbia strives to promote CAP enrollment through everyday customer interaction. In addition, the Company's call center scripting states that CAP is the best option for low-income customers. Therefore, all identified low-income customers who need assistance with their gas bill are offered CAP. Columbia Statement No. 13-R, p. 11. Columbia's CAP has experienced a steady state of enrollment over the last decade, which indicates that the Company's program is mature and is assisting those newly in need while maintaining assistance for the vast majority of customers who have already applied. Columbia Statement No. 13-R, p. 12.

The effectiveness of CAP outreach should not be based on the percentage of confirmed low-income customers enrolled in CAP. Such a metric is inappropriate for several reasons. First, the reported number of "confirmed" low-income customers include customers who self-declare their income. Under traditional CAP guidelines, which require income verification, it is not uncommon for a customer to report their income but refuse CAP participation when they are required to provide income verification. The self-declared income provided by the customer remains "confirmed" low income even though the customer has refused to provide supporting documentation and is not enrolled in CAP. The confirmed low-income count is not a true reflection of customers eligible for CAP because not all self-declared low-income customers actually qualify for CAP based on documented income. Thus, the number of confirmed low-income customers does not provide an accurate basis for evaluation. Columbia Statement No. 13-R, pp. 12, 14.

Second, not all low-income customers need or want to participate in CAP, and participation in CAP is entirely voluntary. Many low-income customers are able to afford their bill with the help of LIHEAP and CAP is not necessary. Some customers combine LIHEAP and

a Hardship Fund grant to cover their annual gas bill. Other customers have relatively low-usage and can afford their bill without any assistance. For these reasons, any metric should be based on the activities that work toward the result of increased CAP participation, not the end result of enrollment. Columbia Statement No. 13-R, p. 14.

Finally, Mr. Miller's suggestion is unnecessary because Columbia is already outperforming other gas utilities in Pennsylvania with respect to CAP participation. In 2017 and 2018, Columbia's CAP participation rate was the second highest according to the Commission's USRR. Furthermore, only one gas utility has reached 50% of confirmed low-income customer participation in the last three years and, unlike Columbia, that utility only counts customers as confirmed low-income if there is a documented income verification on file. Columbia Statement No. 13-R, p. 15.

d. CAP Percent of Income Payment Plan

CAUSE-PA witness Mr. Miller proposes that Columbia reduce the maximum energy burden for CAP customers on the Percent of Income payment plan, which bases customer bills on a percentage of their income. Specifically, Mr. Miller recommends that the maximum energy burden for customers on the Percent of Income payment plan be reduced to 4% for customers with income at or below 50% of the Federal Poverty Level and 6% for customers with income between 51-150% of the Federal Poverty Level.³⁰ CAUSE-PA Statement No. 1, p. 26. Current energy burdens for customers on the Percent of Income payment plan range from 7.64% to 8.02% as compared to other CAP payment options which range from having energy burdens of 2.92% to 5.34%. Columbia disagrees with Mr. Miller's suggestion to reduce the energy burden for the Percent of Income payment plan for several reasons.

³⁰ These are the guidelines suggested in the Commission's CAP Policy Statement.

First, reduction of the energy burden for customers on the Percent of Income payment plan is not necessary. Columbia's current removal rate from CAP for failure to pay is less than 5%. Of the removals for non-payment in 2019, 25% were on the Percent of Income payment plan, 12% were on the Minimum payment plan and the remaining 63% were on the Percent of Budget and Average of Payment options. If a customer's energy burden is too high and their bill becomes unaffordable, other CAP payment plans are available that would reduce the customer's energy burden. Other CAP payment plans offer energy burdens as low as 2.92%, which is well below the Commission's suggested guidelines in the CAP Policy Statement. *CAP Policy Statement Order*, p. 4. In addition, Mr. Miller's recommendation does not account for other programs that are available to provide financial assistance in addition to CAP. For example, the average LIHEAP cash grant of a customer on the Percent of Income payment plan during the 2018/2019 program year was \$280.00. The average customer's monthly CAP payment is \$56.00 or \$672.00 annually. If a customer receives an average LIHEAP grant of \$280.00, their monthly CAP payment drops to \$32.00. The average monthly income for this group is \$765.00. With a LIHEAP grant, their energy burden falls to 4.18%. This does not include a minimum CRISIS grant of \$300 that can be used in the event these customers fall behind. The CAP was designed to work in conjunction with these programs and should not be revised to eliminate the usefulness of these programs. Columbia Statement No. 13-R, pp. 16-17.

Second, the cost to implement Mr. Miller's recommended changes would have a significant financial impact on Columbia's non-CAP ratepayers. The cost to reduce the Percent of Income payment plan option to 4%-6% would be more than \$1 million per year in CAP credits (the "shortfall" amount). This cost is paid for by non-CAP customers and would result in an approximate 5% annual increase to non-CAP customers. Importantly, non-CAP customers

include low-income customers who do not participate in CAP and those who are slightly above the CAP income guidelines. To make this costly change when only 4% of existing Percent of Income customers are removed from service for not paying their CAP payment and a LIHEAP grant would reduce the average energy burden to 4.18% is not good public policy. Columbia Statement No. 13-R, p. 18; Columbia Exhibit No. DAD-1R.

Finally, Columbia's USECP, including the CAP Percent of Income payment plan, was just approved by the Commission in January 2020. *See Columbia Gas of Pennsylvania, Inc.'s 2019-2021 Universal Service and Energy Conservation Plan*, Docket No. M-2018-2645401 (Order entered January 16, 2020) ("2020 USECP Order"). During that proceeding, interested parties, including CAUSE-PA had an opportunity to comment and participate. Columbia is in the process of implementing costly program changes to comply with the Commission's Final Order in its USECP proceeding. Implementing changes to the design of the program twice within a two-year period is inefficient and creates confusion for participating customers. It also makes evaluation difficult when there is no consistency from year to year. Columbia Statement No. 13-R, p. 16. OCA witness Mr. Colton agreed with the Company that this issue should be addressed in a USECP proceeding and should not be revisited so quickly. OCA Statement No. 5S, p. 19. Changing the program before the Company even has an opportunity to implement the most recently approved changes to its USECP is not in customers' best interests.

2. Low-Income Customer Outreach

Last year, Columbia began the process of developing an Outreach Strategy and Communication Plan ("Outreach Plan") for its low-income customers. The process began with an internal meeting of various stakeholders in which an outline of targeted groups and strategies was developed. In April 2020, a detailed review of the Outreach Plan was conducted with the Company's USAC members, which include representatives from the community. Columbia

revised the Outreach Plan further based upon feedback from the USAC. Columbia Statement No. 13-R, pp. 6-7.

OCA witness Mr. Colton recommends that Columbia implement four principles as part of its Outreach Plan: (1) use the community as a means of identifying and engaging the hard to reach population; (2) focus on relationship building as opposed to relying on staff contacts; (3) go to the community rather than making the community come to you; and (4) rather than relying primarily on Company communications, rely on trusted messengers from within the community. OCA Statement No. 5, pp. 26-27. These principles are already embodied in Columbia's existing outreach efforts.

Columbia utilizes a variety of venues and methods to reach customers outside of Columbia's call center, including community meetings, CAP screening agencies, web site updates, targeted mail solicitations, paid social media advertisements, advertisements on the Company website, television advertisements, advertisements on busses, billboards and radio advertisements. Each year, the Company develops a strategy for outreach that includes an advertising component, at least one Company sponsored community engagement opportunity, and identifies a new audience to specifically target, such as the elderly, veterans or the working poor. In addition, the Company participates in fifteen to twenty legislative and/or senior events and three Be Utility Wise events to promote programs to individuals, community advocates and caseworkers. Columbia has accepted CAP applications in the community at worship sites, unemployment offices, banks, stores, community action agencies, senior centers, Salvation Army offices, and in customer homes when necessary. The Company has partnered with various community resources, including housing authorities, veterans' groups, career training centers, medical clinics, Department of Human Services, and other local community based agencies.

Columbia Statement No. 13-R, pp. 5-8. Therefore, Columbia is already following Mr. Colton's suggestion as the Company is actively engaged in outreach activities in the community.

Columbia believes that the Outreach Plan should be a living document that evolves over time with experience, results of activities, community input from the USAC, and the ever-changing dynamics of targeted groups. While many of Columbia's existing outreach strategies will be included in the Company's overall plan, based on the Company's experience, Columbia has found that certain outreach methods are not as successful or efficient as other methods. The experience of both Company personnel and community advisors will facilitate the development and implementation of a solid plan to reach all potential customers in need. Columbia Statement No. 13-R, p. 8.

Mr. Colton also recommended four specific outreach mechanisms, all of which Columbia already utilizes in its customer outreach strategy. Mr. Colton's first recommendation is to offer CAP when establishing a payment arrangement. The Company already offers CAP to all Level 1³¹ customers in arrears. The second recommendation is to offer CAP prior to involuntary service disconnection. The Company's current 10-day notice of termination informs customers to contact the Company to determine what programs and payment options are available to them. Mr. Colton's third recommendation is to offer CAP when a disconnected customer calls requesting to be reconnected. When a customer calls requesting reconnection, financial information is requested and all Level 1 customers are referred to CAP. The fourth recommendation is to offer CAP when contacting a customer through the cold weather survey. When a customer on the cold weather survey calls to connect service, financial information and household information is requested. All customers identifying themselves as Level 1 are referred

³¹ Level 1 refers to all customers at or below 150% of the Federal Income Poverty Guidelines.

to CAP. Therefore, all of Mr. Colton's specific recommendations are already in practice. Columbia Statement No. 13-R, pp. 5-6.

3. Health and Safety Pilot

Columbia's Health and Safety Pilot Program serves high-usage CAP customers who reside in homes that are unable to be weatherized without first correcting existing health and safety issues in the home. The Pilot is open to homeowners who are enrolled in CAP and have high usage and high CAP credit shortfalls but are unable to obtain LIURP weatherization due to health and safety issues, such as knob and tube wiring, presence of moisture, mold or mildew. Through the Pilot, Columbia will remediate health and safety issues if weatherization is expected to result in usage reductions greater than 18%. The Pilot was approved in January 2020 and will continue through December 2022. Columbia's budget for the Pilot is \$200,000 per year, which the Company projects can serve thirty homes per year. The Pilot was approved as part of Columbia's USECP. *See Columbia Gas of Pennsylvania, Inc. Universal Service and Energy Conservation Plan for 2019-2021*, Docket No. M-2018-2645401 (Order entered August 8, 2019).

CAUSE-PA witness Mr. Miller recommends that Columbia increase the Health and Safety Pilot funding by \$600,000 and extend the Pilot until 2023. CAUSE-PA Statement No. 1, p. 32. Columbia is not opposed to extending the Pilot until 2023 but does not support increasing the Pilot funding by \$600,000, or from the current budget of \$200,000 to \$800,000. Increasing funding for the Pilot is not prudent at this time. The Pilot was just approved in January 2020. In March 2020, all in-home activity for LIURP was suspended due to the ongoing COVID-19 pandemic. Columbia is still working through implementation issues and needs time to build gradually and adapt to lessons learned while implementing the Pilot on a smaller scale. The earliest results measuring the costs and benefits of the Pilot will not be available until late 2021.

The purpose of a pilot is to test new programs, to determine if they in fact will achieve the results desired in a cost-effective manner. Given that the Pilot has been in place for less than a year with the majority of that time having no in-home activity, it is premature to make changes to the Pilot's funding when it is unknown whether the program will achieve desired objectives. Columbia Statement No. 13-R, p. 19.

4. LIURP

Columbia's LIURP, WarmWise, provides high-usage low-income customers with needed weatherization services. Annual funding for WarmWise is set at \$4,875,000 for the years 2020 and 2021. CAAP witness Ms. Moore recommends that the WamWise budget be increased by \$420,000. CAAP Statement No. 1, p. 5. Columbia disagrees that Ms. Moore's proposed increase to the WarmWise budget is necessary.

The Commission's 2018 USRR lists Columbia's LIURP budget as the second highest of all utilities behind Philadelphia Gas Works and the highest in western Pennsylvania. The Company's evaluation of program spending since 2018 indicates that Company contractors have not spent their entire budget, which has resulted in carrying over funds to the following year. The Company utilizes county weatherization providers throughout its service territory. These providers often find it difficult to spend their annual county Department of Community and Economic Development and Company allotted funds. The current level of LIURP funding is not an impediment in providing weatherization services. Increasing the LIURP budget would only exacerbate the problem of carry over funding and is unnecessary. Columbia Statement No. 13-R, pp. 21-22.

5. Hardship Fund

Columbia's Hardship Fund is a Company-sponsored fuel fund that provides financial assistance through grants to low-income, payment troubled Residential customers. Columbia's

Hardship Fund provides cash assistance to eligible customers to reduce arrears, reconnect service or stay a termination of service. Columbia Statement No. 13, p. 2. CAAP witness Ms. Moore recommends that Columbia increase the Hardship Fund from \$650,000 to \$800,000 annually, with the Company contributing any amount necessary to reach \$800,000 in funding after customer contributions.³² CAAP Statement No. 1, p. 7. Columbia disagrees with Ms. Moore's proposal to increase funding for the Hardship Fund.

If the Commission were to direct a shareholder contribution to the Hardship Fund, Columbia would have a right to seek recovery of those funds. Columbia is entitled to recover in rates all expenses reasonably necessary to provide service to its customers. *Butler Township v. Pa. PUC*, 473 A.2d 219, 221 (Pa. Cmwlth. 1984); *T.W. Phillips Gas and Oil Co. v. Pa. P.U.C.*, 81 Pa. Cmwlth. 205, 474 A.2d 355 (Pa. Cmwlth. 1984). Directing the Company to undertake a "voluntary" contribution results in the contribution no longer being voluntary. The costs incurred as a direct result of complying with the Commission's directive to provide funding for a low-income customer program is a prudently incurred expense.

Columbia continues to find new ways to promote customer contributions through Company sponsored events and fundraising activities. In addition, the Company supports fundraising activities sponsored by the Dollar Energy Fund, which increases customer contributions. The Company also promotes customer contributions to the Hardship Fund through bill inserts and social media messaging. Columbia's shareholder match at \$150,000 annually is the third highest donation of all Pennsylvania natural gas utilities. Currently, Columbia's shareholder match is more than all of the funds raised by Columbia customers through these fundraising activities. Even with the gap between shareholder funds and funds

³² If the Commission were to direct a shareholder contribution, Columbia would have a right to seek recovery of those funds.

voluntarily raised, the Company has a current surplus in its Hardship Fund balance of more than \$700,000. Columbia Statement No. 13-R, pp. 22-23. This is primarily because Columbia also has in place a Commission-approved mechanism that enables the Company to use pipeline penalty credits to fund its Hardship Fund, up to a maximum balance of \$750,000. *Petition of Columbia Gas of Pennsylvania, Inc. For Approval to Use Penalty Credit and Refund Proceeds for Its Residential Hardship Fund*, Docket No. P-2018-3000160 (Order entered June 14, 2018). Ms. Moore's suggestion to increase Hardship Fund funding is unnecessary because the program is already adequately funded.

6. Universal Service Programs Review

In his rebuttal testimony, PSU witness Mr. Crist recommended that a review of Columbia's USP be conducted to determine "cuts and limits" to the programs. PSU Statement No. 1-R, p. 29. While Columbia believes that it is necessary and appropriate for the Company's USP and their costs to be routinely reviewed, Columbia does not believe that a review is warranted at this time.

Every three to five years, utilities are required to submit a new USECP to the Commission for approval, which undergoes review by the Commission's Bureau of Consumer Service ("BCS") and interested parties. The BCS and interested parties submit questions regarding the USECP and provide comments to the Commission. Columbia's current USECP was submitted to the Commission for review in February 2018 and ultimately approved in January 2020. *See 2020 USECP Order*. Thus, the Company's universal service programs were reviewed and approved by the Commission within the past year and another review is not necessary at this time. Columbia Statement No. 13-SR, p. 2.

In addition, the Commission requires that an evaluation of a utility's USP be conducted by a third party every six years. Columbia's most recent third-party evaluation was filed with

the Commission on September 1, 2017. The evaluation was conducted over a period of six months with a thorough review of data and processes. Columbia Statement No. 13-SR, p. 3.

B. PIPELINE REPLACEMENT ISSUES

I&E witnesses Niambele and Apetoh raised several pipeline replacement issues in their direct testimony. I&E St. No. 4; I&E St. No. 5. Columbia responded to these issues, explaining that the Company already has implemented or will implement certain recommendations but opposing other recommendations as unnecessary or duplicative of other actions taken by Columbia.

1. DIMP

The Distribution Integrity Management Program (“DIMP”) is mandated by Federal Regulation. Columbia St. No. 7-R, p. 2; I&E St. No. 4, p. 3. DIMP is a company-specific plan, prepared by Columbia, for the purpose of identifying risks, developing plans and implementing actions to address those risks and to evaluate the effectiveness of risk reduction efforts. Columbia began its efforts to examine and implement pipeline replacement even before the DIMP Regulations were adopted. As a result, Columbia has developed a very robust DIMP that exceeds the minimum standards of the Regulations. Columbia has been asked by I&E to share its DIMP and best practices with other Pennsylvania gas utilities. Columbia St. No. 7-R, pp. 1-2. Columbia has fulfilled and adhered to all requirements mandated under the Federal Regulations. Columbia St. No. 7-R, p. 2.

I&E’s first recommendation is that Columbia continues its pipeline replacement efforts and O&M activities based on its DIMP to reduce system risk. I&E St. No. 4, p. 6; I&E St. No. 5, p. 6. Columbia fully agrees with this recommendation and has been successful in implementing the recommendation. Columbia’s efforts to meet and exceed its pipeline replacement goals as set forth in its LTIIP, and its ongoing and proposed efforts to address other DIMP issues, such as

replacement of field-assembled risers, are a testament to its success. *See* Sections VI.G.1 (a-d) of this brief.

I&E also expressed concern with the risk ranking results presented in Columbia's DIMP. I&E contended that by the use of "High," "Medium" and "Low" risk categories, Columbia was relying upon qualitative risk measures rather than quantitative risk measures. As a result, I&E claimed, the Company cannot demonstrate if system risks are decreasing. I&E St. No. 4, p. 2; I&E St. No. 5, p. 7. I&E recommended that Columbia "normalize" its two risk ranking systems.

In rebuttal, Columbia explained that I&E misunderstood Columbia's risk characterization process. Columbia does maintain quantitative risk data that is used in developing the "High," "Medium" and "Low" characterizations of risk that are presented in its DIMP. Columbia explained that it uses the three characterizations in the DIMP to impress upon its Subject Matter Experts ("SMEs")³³ the importance of treating all High risks as urgent. As Columbia's General Manager and Vice President Mr. Davidson explained:

The Company does have quantitative risk ranking. The DIMP system level risk model is a data-driven/numerical, SME-validated risk model. The risk scores are calculated numerically from leakage rates, damage data, and other sources. This numerical data is incorporated into a separate probability and consequence score, which is then further calculated into a total risk score. The final risk score is a quantitative value, and it determines which risk level (High, Medium, Low) that each asset-threat combination is given. The risk score is not shown in the published risk model in order to encourage SMEs to treat all High risks with the same urgency. Nevertheless, the Company's risk ranking is quantitative.

Q. Can you further clarify the Company's position as it relates to DIMP and what DIMP is for?

³³ SMEs are persons knowledgeable about design, construction, operations, or maintenance activities, or the system characteristics of a particular distribution system. SMEs may be employees, consultants or contractors, or any appropriate combination. They are selected based on their ability to drive change and thus are provided such information in order to look at trends for analysis. Columbia St. No. 7-R, p. 2 n 1.

A. Yes. The Company utilizes its DIMP to identify its riskiest asset groups and then to prioritize and focus its efforts to address its riskiest asset groups. Seemingly, I&E views DIMP as only a scoring mechanism to measure risk from year to year. The Company notes that DIMP is not just a tool to assess risk on individual pipe segments and determine yearly project plans. DIMP is a tool to assess and prioritize risk on asset groupings over time, especially taking into account that risks can and do change over time.

Columbia St. No. 7-R, pp. 3-4. Columbia further clarified that it does not use two different risk scores for risk ranking but uses quantitative data and qualitative data to develop one DIMP risk level. Columbia St. No. 7-R, p. 9.³⁴

In surrebuttal, I&E amended its DIMP recommendation, and proposed that Columbia amend its DIMP to explain its method of using quantitative risk ranking and SME validation to generate the DIMP risk score. I&E St. No. 5-SR, p. 5. Columbia does not oppose clarifying in its DIMP its process of using quantitative data and SME validation to develop DIMP risk levels.

Another DIMP matter raised by I&E concerned an assertion that Columbia is not using pre-2016 historical data to evaluate trends and risks. I&E recommended that Columbia update Section 7.1.2.2 of its DIMP to reflect inclusion of historical data in evaluation of its risks. I&E St. No. 5, p. 7. However, in rebuttal Columbia explained that it already has updated its use of historical data, with the exception of leakage data. Pre-2016 leakage data is not reliable for trending purposes, due to issues with the quality of data, as Columbia explained:

Q. Mr. Apetoh recommends that the Company conduct risk rankings with its historical data prior to 2016 to better evaluate trends and changes in risks to its system. Has Columbia conducted risk rankings with its historical data in order to better evaluate trends and changes in risks to its system?

³⁴ SME qualitative assessments are developed through a Risk Evaluation Form, which documents risk evaluation through a numeric risk matrix. See Ex. MLD-2R.

A. Yes. However, midway through 2016, a significant number of process changes were made to the collection of leakage data and the leakage data quality assurance/quality control processes. The changes affected the threat and/or asset with which each leak is compared. Therefore, it is not possible to make a fair comparison of risk rankings for the current year's leakage data against leakage data prior to 2016. So, the Company does use historical leakage data for trending analysis, but only from 2016 forward.

Q. Mr. Apetoh also recommends that the Company update Section 7.1.2.2 of its DIMP Plan. Has Columbia updated Section 7.1.2.2 of its DIMP Plan to reflect the inclusion of historical data in the evaluation of its risks?

A. Yes. Columbia has updated Section 7.1.2.2: Actual Consequence of Failure (COF) of its DIMP Plan as recommended by I&E. The update expands the use of incident data by giving a higher consequence of failure score to asset-threat combinations that are related to incidents in the Company occurring over the past five years.

Columbia St. No. 7-R, pp. 10-11. Therefore, Columbia has already complied and will continue to comply with this recommendation to include all available historical data.

2. Pipeline Replacement

Columbia has a target to replace bare steel and cast iron pipe in its system by 2029. This target is known by the Commission, and the Commission has approved two LTIP filings for Columbia with this knowledge. *See Petition of Columbia Gas of Pennsylvania, Inc. for Approval of its Long-Term Infrastructure Improvement Plan*, Docket No. P-2012-2338282 (Order entered March 14, 2013); *Petition of Columbia Gas of Pennsylvania, Inc. for Approval of a Major Modification to its Existing Long-Term Infrastructure Improvement Plan and for Approval of its Second Long-Term Infrastructure Improvement Plan*, Docket No. P-2017-2602917 (Order entered September 21, 2017), pp. 5-6.

I&E is concerned that Columbia may not meet its 2029 target. I&E's sole basis for this concern is that Columbia's current pace of pipeline replacement, if it continues, will not replace

all of the bare steel and cast iron pipe by the end of 2029. I&E St. No. 4, p. 8. I&E recommends that Columbia increase its pipeline replacement.

I&E's concern and recommendation should be presented and examined in the context of Columbia's LTIP and not in this proceeding. The LTIP is a statutorily-prescribed process for the Commission to review and approve DSIC-eligible investments, including main replacement. 66 Pa. C.S. § 1351, 1352. Before approving an LTIP filing, the Commission must determine if the proposed planned replacement of eligible property is sufficient to ensure and maintain adequate, efficient, safe, reliable, and reasonable service. 52 Pa. Code § 121.4(e)(4). Major modifications to the LTIP must be approved by the Commission. 52 Pa. Code § 121.5.

I&E has a full opportunity to participate in LTIP proceedings and to offer comments regarding the appropriateness of the LTIP. 52 Pa. Code § 1231.4(a), (c). In addition, as required by statute, 66 Pa. C.S. § 1352(b), the Commission has established a process to undertake a periodic review of a utility's LTIP. In Columbia's case, the Commission recently notified the Company that it would undertake a mid-plan review of Columbia's LTIP this year. Columbia St. No. 1-R, p. 15. I&E may submit comments as part of that mid-plan review. The Commission has the power to direct changes to the LTIP if "necessary to maintain and improve the efficiency, safety, adequacy and reliability of its existing infrastructure." 52 Pa. Code § 121.7(b)(2).

I&E's generic proposal that Columbia increase its pipeline replacement is without merit. I&E has not offered any identification of the amount of increase it recommends, nor has it proposed any increase to the projected capital spend presented by Columbia in this case. Therefore, a directive to increase capital spending in the context of this case may deprive

Columbia of a fair return on its investment, by directing Columbia to undertake additional investment in 2021 that is not reflected in the FPFTY in this case.

I&E's proposal that Columbia be directed to increase pipeline replacement in this case also potentially exposes Columbia to contradictory orders. As stated above, the Commission is currently undertaking a mid-term review of Columbia's LTIP. An order in that review proceeding potentially could contradict a recommendation in this case on the pace of pipe replacement. There is no reason to issue a generic directive about pipeline replacements in this case when the Commission already has opened a proceeding to examine Columbia's currently-approved LTIP.

Finally, it is important to recognize that Columbia has an extensive record of complying with its LTIP. *See* Section IV.A of this brief. It is unnecessary to adopt generic directions regarding future pipeline replacements where Columbia has been diligent in complying with its commitments. Moreover, the record demonstrates that Columbia already has plans to further increase its spending on pipeline replacement. Columbia's five-year budget plans show a nearly \$100 Million increase from its 2020 budget for replacements (over \$250 Million) to its 2024 capital budget for replacements (over \$348 Million). Columbia St. No. 1, p. 11.

I&E's proposal to increase Columbia's pipeline replacements is inappropriate and unnecessary and should not be adopted. Issues concerning the pace of future pipeline replacements should be considered in the context of LTIP reviews.

3. Pipeline Replacement Costs

In its direct testimony, I&E expressed concerns about the increasing average cost of pipeline replacements. I&E identified potential cost drivers and savings to include increased municipal restoration requirements, paving costs and increased use of private rights-of-way. I&E recommended that Columbia review its 10 largest projects each year, to see if there are

ways to reduce costs. I&E also recommended that Columbia review its contracting process, coordinate with other entities that are also replacing infrastructure to control costs and consider a competitive bidding process for paving. I&E further recommended that Columbia prepare a cost reduction plan for review by I&E's Pipeline Safety Division. I&E St. No. 4, pp. 12-14.

In rebuttal, Columbia explained that the recommendations offered by I&E have already been considered and, where appropriate, adopted by Columbia. As Columbia's Vice President Construction Services explained:

The recommendations made by Mr. Niambele are already part of the Company's existing processes to plan and execute pipeline replacement projects. Further, these processes are continuously evolving based on the current nature and circumstances of the long term effort undertaken by the Company in replacing its infrastructure. Accordingly, Columbia disagrees with Mr. Niambele that his four suggestions would result in decreases to restoration costs, and disputes any suggestion that it fails to spend prudently on restoration costs. Additionally, the Company does not believe that the cost reduction plan recommended by Mr. Niambele is necessary for the same reasons that the individual recommendations are not necessary. The Company is already working on Mr. Niambele's suggestions as it is working to reduce restoration and replacement costs by negotiating competitive contracts, tracking pipeline project costs and coordinating with other utilities and municipalities.

Q. Can you provide details as to Columbia's existing processes of the four categories identified by witness Niambele?

A. Yes. Columbia employs reputable contractors to support its accelerated infrastructure replacement program. Additionally, the Company is focused on negotiating with these contractors to obtain fair pricing, while ensuring the contract language clearly defines costs covered in the unitized pricing. However, any revisions to existing blanket contract language, due to process or procedural changes which are essential to providing safe and reliable services to our customers, continue to contribute to rising contractor costs. The efforts to minimize costs associated with such changes is ongoing.

Second, Columbia's current practice of coordinating projects with other utility companies and local governments is already part of our planning process. Our ability to collaborate with these parties is largely contingent upon their willingness to do so, which is not directly within the Company's control. As represented in my direct testimony on pages 9 through 14, Columbia provides examples of its efforts to proactively engage in addressing municipal issues as well as successful outcomes relating to challenging restoration requirements that the Company considers to be atypical. In addition to these examples, Columbia has also successfully reached agreements regarding restoration requirements with the following local governments: the City of New Castle, Gettysburg Borough, West Manchester Township, Dallastown Borough, City of Washington, Peters Township, Edgeworth Borough, Coraopolis, East Washington Borough, Emsworth Borough, Bellevue Borough, Ben Avon, Berlin and California. Further, the internal audit of the 10 largest projects competed following the Company's 2014 base rate proceeding independently confirmed that coordination with other utilities and municipalities is an existing part of the Company's project planning process. Additional discussion of this audit can be found in Company Witness Tubbs' rebuttal testimony at Columbia Statement 1-R.

Third, Columbia already tracks its expenses for pipeline replacement projects, as all costs, including restoration costs, are subject to Commission review for prudence. Columbia continuously monitors the progress of each project (expenditures year-to-date) and what remains to complete each project (projected forecast) inclusive of restoration. Changes in projected costs are then accounted for accordingly for each particular project.

In consideration of a competitive bid process for paving, Columbia evaluates restoration costs, but has to balance cost containment strategies to ensure the opportunities meet the needs of both the infrastructure replacement program as well as general operations and maintenance activities. By negotiating area specific contracts, Columbia may be able to lessen the cost of scattered restoration generated from routine operations and maintenance work, but this process could adversely impact infrastructure replacement efforts. Currently, Columbia's contractors coordinate and manage restoration activity based off projected project completion and overall scope, which is also reflected in their unitized pricing. An inherent risk of a competitive bid process or paving is scoping restoration requirements well before projects are completed. The Company cannot wait until after pipe installation is completed to

bid a paving project, as this would result in delayed completion that would be unacceptable to customers and local communities. However, undertaking a bid process before the project is completed presents substantial risk of inaccurate assumptions due to the nature of construction and the potential to change project design because of unforeseen circumstances. After the bid process, any scope changes would require a change order for bid work and would also add risk to on-time completion.

Columbia St. No. 14-R, pp. 10-13. Columbia also explained that it investigates the potential to use private rights-of-way and will use them where feasible. However, private rights-of-way are often not feasible or cost-effective. Columbia St. No. 14-R, p. 14.

Columbia has been concerned for some time about the restoration requirements imposed by municipalities. Columbia St. No. 1-R, p. 18. Columbia has been proactive in working with municipalities to control restoration costs and has had notable success. Columbia St. No. 14, pp. 8-14; Columbia Ex. AST-2-R, Columbia Ex. AST-3R. However, as the Commission recognized in its approval of Columbia's current LTIP, municipal restoration requirements are substantially outside of Columbia's control:

Based on this information provided by Columbia, it appears that these changing restoration requirements are a significant driver of Columbia's cost increases. It is likely that a portion of Columbia's 97% cost increase in 2017 over its original projections is attributable to these restoration cost increases. Columbia has demonstrated that it has put measures in place in an attempt to control these costs and restoration requirement changes when possible. However, the Company cannot prevent a local government body or official from enacting ordinances as they see fit to govern their township, borough, or city. While Columbia is attempting to do as much as it can to mitigate these costs, the Commission recognizes that such costs are, to some extent, out of the Company's control.³⁵

After review of the foregoing, I&E modified its recommendation regarding pipeline replacement costs. I&E now recommends that Columbia meet with I&E's Pipeline Safety Division annually for a status update on cost control efforts. I&E St. No. 4-SR, p. 10. Columbia

³⁵ Docket Nos. P-2012-2338282; P-2017-2602917, Opinion and Order entered September 21, 2017, p. 8.

does not oppose this revised recommendation as a replacement of the original I&E recommendations regarding pipeline replacement costs.

4. Leaks/Risk Reduction

I&E has made several recommendations related to leaks and specific risk reduction efforts that Columbia should undertake. Columbia agrees in substantial part with these recommendations.

I&E reviewed data on leaks found for the period 2015-2019. For the five-year period, total leaks found trended downward by 15.6%, from 5,610 total leaks found in 2015 to 4,735 total leaks found in 2019. However, there was an 8.5% increase in leaks found from 2017 to 2019. Grade 2 leaks decreased 21.96% from 2015 to 2019, with a 3% increase from 2017 to 2019. I&E further claimed that leaks per mile of priority pipe increased from 2015 to 2019. I&E St. No. 5, pp. 3-4. Based upon this data, I&E recommended that Columbia perform a root cause analysis of why the number of leaks found is not trending downward commensurate with the amount of priority pipe replaced and provide this analysis to I&E's Pipeline Safety Division by September 30, 2021. I&E St. No. 5, p. 13.

Leak detection and repair is a priority for Columbia. Since 2007, Columbia has reduced the number of open Type-2 leaks on its system by 91%. Columbia St. No. 7, p. 28. Columbia is also planning to increase its efforts to identify leaks, through its deployment of a vehicular-based Picarro Leak Detection Program. Columbia St. No. 7, p. 25. However, Columbia does not believe that the data identified by I&E justifies the need for a formal root cause analysis of why leaks found are not trending in direct correlation to priority pipe replacement.

There are several reasons why a formal root cause analysis presented to I&E is not necessary. First, the number of leaks found in a year are affected by more than just the amount of at-risk pipe in the system. Each year, the remaining at-risk pipe in the system ages, and

degrades further. Columbia St. No. 7-R, p. 13. As a result, new leaks can form on pipe that remains to be replaced. Second, the number of leaks found is affected by the amount of pipe surveyed in a year, which varies. Columbia surveyed 13.8% more pipe in 2019 than it did in 2017, which would have contributed to the small percentage increase in the number of leaks identified from 2017 to 2019. Columbia St. No. 7-R, p. 12. Third, I&E's calculation of leaks per mile of priority pipe is flawed. The leaks found, which I&E used in its calculation, were not limited to priority pipe leaks. They included leaks found on non-priority pipe services and station piping, as well as leaks caused by facility damage. Columbia St. No. 7-R, pp. 12-13.

Columbia has evaluated its trending data regarding leakage and will continue to analyze data to assess whether the small percentage increase in leaks found over the past three years are a problem or a short-term phenomenon. These analyses are currently undertaken through Columbia's DIMP and operations work planning processes. Columbia St. No. 7-R, p. 13. Pending further review of data and trends, Columbia does not believe a formal root cause analysis is necessary at this time. Columbia St. No. 7-R. pp. 14-15.

I&E also is concerned about leaks on field-assembled risers. *See* Section IV.G.1.d of this brief for information on field-assembled risers. I&E offers two recommendations: 1) that Columbia identify at-risk risers; and 2) that Columbia develop a plan to replace all at-risk company-owned and customer-owned field-assembled risers. I&E St. No. 5, p. 12.

Columbia agrees with these recommendations and has already begun to implement the recommendations. With respect to identifying at-risk risers, Columbia started to survey its system for both Company-owned and customer-owned field-assembled risers in 2015 and completed its survey in 2017. Following completion of this survey, Columbia proactively sought Commission approval to replace customer-owned field assembled risers, which was granted in

late 2018. Columbia St. No. 7-R, pp. 19-20. Columbia has also developed plans for replacement, by first addressing certain field-assembled risers from certain manufacturers that are more prone to failure. Columbia St. No. 7-R, p. 20. Columbia has also proposed to accelerate the replacement of field-assembled risers by increasing spending by an additional \$1.7 million over the 2021 budget for replacement of customer-owned field-assembled risers. However, as explained in Section IV.G.1.d of this brief, OCA opposes this claim. Without additional funding for this work, Columbia cannot further accelerate replacement of field-assembled risers. Columbia cannot satisfy I&E's safety concerns at OCA's spending level.

I&E's third risk reduction recommendation is for Columbia to complete the updating of its maps and records, which should reduce facilities damages. I&E St. No. 5-R, p. 12. Columbia also supports this recommendation, with the condition that the time for completion will be substantially affected by the manpower that can be dedicated to this effort. As explained in Section IV.G.1.c of this brief, Columbia has requested an additional \$491,000 to add personnel to update maps and records. I&E recognized that the time for completion of this project is contingent on approval of additional funding. I&E. St. No. 5-R, p. 12. However, OCA opposes the proposed \$491,000 in additional spending. Columbia commits to keep I&E apprised of its progress in updating its maps and records, but a disallowance of the additional expense to hire employees to undertake the update will delay the work.

Finally, I&E recommends that Columbia tailor damage prevention training to better suit Columbia's needs and that facility locating personnel be trained on the same equipment used in the field. In response, Columbia explained its substantial damage prevention efforts:

Columbia employs eight Damage Prevention Specialists ("DPS") with responsibility to focus on meeting contractors on site to discuss 811 (call before you dig) laws and to train them on hand digging responsibilities related to the Pa One Call law in order to

avoid damaging buried facilities. Recently, the DPS employees have been utilizing an internal process within our One Call ticket management system, UtiliSphere, which utilizes an algorithm to grade the level of risk on a given One Call ticket. The algorithm utilizes certain criteria to perform the risk modeling, for example, the Contractor's history, pressure of gas in the area, type of material of gas line, and type of work being completed. This provides Columbia's DSP's with the opportunity to identify and get ahead of high risk types of excavation to complete a job site visit.

In addition, Columbia has added one Damage Prevention Consultant who focuses primarily on Alleged Violations Reports ("AVR"). The AVR is a reporting requirement that went into effect April 28, 2017 when enforcement transferred from the Pennsylvania Department of Labor and Industry to the Commission due to a legislative change of the Pa One Call Law. This enforcement change requires all damages to a facility owner's lines to be reported through the Pa One Call system by all parties involved (e.g. Facility Owner, Project Owner and/or Designer). The Company's Damage Prevention Consultant is responsible for compiling facility damage data submitted through the Pa One Call system and then submitting a completed AVR to the Commission's Damage Prevention Committee for evaluation.

Columbia St. No. 7-R, pp. 15-16.

Columbia further explained that the vast majority of its facility-locating work is done by Columbia personnel, who are trained at the Company's training facility with the same equipment used in the field. Once that initial training is completed, these employees continue on the job training with a seasoned locator. Columbia St. No. 7-R, p. 17.

With respect to outside contractors, the only locating they perform is with respect to locating facilities on capital projects. Contractors use their own personnel and own equipment for their locating needs. Columbia notes that it maintains a written Operator Qualification Plan that is applicable to contractors. This plan ensures contractors are qualified in all aspects of their operations. *2017 LTIP Order*, at p. 21.

Columbia is continually focused on improving training, and has in fact proposed the addition of two new specialists whose focus is to be on training. See Section IV.G.1.b of this brief for an explanation of this proposal, which has been opposed by OCA. Columbia believes its current training requirements satisfactorily train locating personnel on the equipment and processes to locate facilities.

X. RATE STRUCTURE

A. INTRODUCTION

Columbia's proposed allocation of the \$100.4 million increase in annual operating revenues is provided in Exhibit 103, Schedule 8, page 4, line 14. Columbia's proposed revenue allocation fairly considers the results of the allocated cost of service ("ACOS") studies in determining customer classes' total revenue responsibility, while also taking into account other important principles such as gradualism and value of service. In designing rates to recover the proposed revenue increase, Columbia's primary objective was to create an efficient rate design that produces an accurate basis for customers' decisions and affords Columbia the opportunity to recover the cost of providing service.

B. COST OF SERVICE

1. Allocated Cost of Service Principles

Columbia's proposed allocation of revenue among the rate classes is primarily driven by the cost to serve each class. As indicated by the Commonwealth Court in *Lloyd*, cost of service is the "polestar" of utility rates. *Lloyd v. Pa. P.U.C.*, 904 A.2d 1010, 1020 (Pa. Cmwlth. 2006) *appeal denied*, 591 Pa. 676, 916 A.2d 1104 (2007) ("*Lloyd*"). While other factors, such as gradualism, may be considered, these factors are not permitted to trump cost of service as the primary basis for allocating the revenue increase. *Id.* At 1020-21. Consistent with the Commonwealth Court's directive in *Lloyd*, a proposed revenue allocation will only be found to

be reasonable where it moves distribution rates for each class closer to the full cost of providing service. *Pa. Publ. Util. Comm'n, et al. v. PPL Electric Utilities Corporation*, Docket Nos. R-00049255, et al., 2007 Pa. PUC LEXIS 55 (Order on Remand entered July 25, 2007).

Even prior to *Lloyd*, Pennsylvania appellate courts recognized the importance of properly allocating a proposed revenue increase among a utility's rate classes. In *Philadelphia Suburban Water Company v. Pa. Pub. Util. Comm'n*, the court stated that:

in order for a rate differential to survive a challenge brought under Section 1304 of the Public Utility Code [bar against rate discrimination], the utility must show that the differential [different rates among the classes] can be justified by the difference in costs required to deliver service to each class. The rate cannot be illegally high for one class and illegally low for another.

808 A.2d 1044, 1060 (Pa Cmwlth. 2002). Indeed, any significant departure from the results of a cost of service study requires the proponent to fully justify the deviation.

Although cost of service studies may appear to have great precision, the Commission has repeatedly recognized that the cost of service study is a guide to designing rates and is only one factor, albeit an important one, to be considered in the rate setting process. *See, e.g., Aqua 2008*, 2008 Pa. PUC LEXIS 50; *Pa. P.U.C. v. West Penn Power Co.*, Docket Nos. R-901609, et al., 1990 Pa. PUC LEXIS 142, 73 Pa. PUC 454, 119 P.U.R.4th 110 (Order dated Dec. 13, 1990); *Pa. P.U.C. v. Pennsylvania Power & Light Co.*, 55 PUR 4th 185, 249 (Order dated Aug. 19, 1983). Cost allocation studies require a considerable amount of judgment and are described as more of an accounting/engineering art rather than science. *Application of Metropolitan Edison Co.*, R-00974008 (Order dated June 30, 1998); *Pa. P.U.C. v. Pennsylvania Power & Light Co.*, 55 PUR 4th 185 (Order dated Aug. 19, 1983).

In addition to the goal of moving rates toward the cost of service, Columbia considered the rate design principles of efficiency, simplicity, continuity, fairness and earnings stability in

setting rates. An efficient and stable rate design produces an accurate basis for consumers' decisions and affords the Company the opportunity to recover the cost of service. A fair rate design considers the results of the ACOS studies in determining customer classes' total revenue responsibility. Columbia St. No. 3, pp. 29-30.

2. Allocated Cost of Service Studies

Columbia prepared three ACOS studies in support of its proposed rates: the Customer-Demand Study (Columbia Exhibit No. 111, Schedule 1), the Peak & Average Study (Exhibit No. 111, Schedule 2) and the Average Study (Exhibit No. 111, Schedule 3). The ACOS studies are based on the FPFTY ending December 31, 2021. Columbia St. No. 11, p. 2. The results of Columbia's three ACOS studies are provided in Appendix "A" to this Brief.

Columbia has presented the results of three ACOS studies in order to demonstrate the range of generally accepted cost allocations. As explained previously, cost allocation is not an exact science, and multiple principles can drive cost incurrence. As Columbia explained:

It is broadly accepted that a single allocated cost of service study cannot and should not be relied upon to determine the exact cost to serve each class of customers. The National Association of Regulatory Utility Commissioners, in its June 1989 Gas Distribution Rate Design Manual, stated that "there is no one correct cost of service, but rather a range of reasonable alternatives." Clearly, if Columbia or any other party to this case were to simply choose a single study as the basis for allocating costs, doing so would produce an outcome that unfairly favors or disfavors a specific class of customers.

Columbia St. No. 11-R, p. 2.

The Customer-Demand and Peak & Average studies provide the outside limits of possible allocations of mains to the various classes of service. Columbia S. No. 11, p. 3. Since the cost of mains represents the majority of plant costs, mains allocation has a critical effect on the assignment of costs of service to the customer classes. Columbia St. No. 11, pp. 13-14. The

Customer-Demand study allocates mains cost based on the number of customers (“Customer”) and the Company’s peak day design (“Demand”). In the Peak & Average study, mains costs are allocated 50% based on the Company’s peak design day (“Peak”) and 50% based on the Company’s throughput (“Average”). The Average Study is a combination of the Customer-Demand and Peak & Average studies and gives equal weight to both methods. Columbia S. No. 11-R, p. 3. The three factors, number of customers, peak demand and average use, are generally accepted as drivers of mains costs. The cost of a main is substantially defined by its size, which is based upon the length of a main and its diameter. Peak demand determines the diameter of a main, and the number of customers will drive its length. The average use has generally been considered as a driver of cost as it represents load placed upon mains. Columbia St. No. 11-R, p. 6. The Customer-Demand study produces results that are generally more favorable to the Industrial class, while the Peak & Average Study produces results that are generally more favorable to the Residential class. Columbia recognizes that no one ACOS study is the “right” study and submits that the results of these two studies provide a reasonable range of returns for use as a guide in establishing appropriate rates. Columbia submits, consistent with its practice in past rate cases, that the Average study with its equal weighting of the Customer-Demand study and the Peak & Average study provides a set of returns that can be used as an appropriate benchmark in revenue allocation. Columbia St. No. 11, p. 3. The Average Study is the study that Columbia relied upon to guide the revenue allocation and rate design process Columbia St. No. 3, p. 31.

Where possible, Columbia directly assigned costs that could be identified as being incurred solely to serve a class of customers. This direct assignment of costs improves the accuracy of the ACOS studies in meeting their purpose to assess whether rates are recovering the

cost of service. Before allocating mains to the rate classes in the ACOS studies, Columbia separated low-pressure and two-inch mains and allocated those mains only to the Residential and SGS/SGDS class since the remaining rate classes are not physically served from and do not benefit from those systems. Columbia St. No. 11, p. 7. Columbia also performed a detailed analysis of its intermediate-pressure, medium-pressure and high-pressure systems in order to allocate the cost of those systems to the customers who use them. Customers served under rate schedules MLS/MLDS were excluded from the allocations of mains under all studies because these customers are served directly from or in close proximity to an interstate pipeline. Columbia Statement No. 11, p. 13. MLS/MLDS customers are directly assigned the cost of mains used to serve the class. Columbia St. No. 11, p. 8.

Columbia notes that other witnesses in this proceeding have identified preferences for one type of ACOS study over another. OSBA witness Mr. Knecht's 75%/25% weighting of the Peak & Average and Customer-Demand studies most closely matches the Company's preference to use a study that includes both a customer and throughout component, though Mr. Knecht recommends applying a smaller weighting to the customer component. Columbia St. No. 11-R, p. 5; Highly Confidential OSBA St. No. 1, p. 27. I&E witness Mr. Cline and OCA witness Mr. Mierzwa advocate for the use of a Peak & Average study. Mr. Mierzwa preferred to modify the Company's Peak & Average Study to eliminate the Company's separation of mains investment by operating pressure. OCA also presented a Proportional Responsibility study for comparison purposes. OCA St. No. 4, pp. 31-33. Mr. Cline relied solely on the Company's Peak & Average Study. I&E St. No. 3, p. 16.

OCA's and I&E's preferred Peak & Average studies include a throughput component in lieu of the customer component. Throughput is a measurement of a customer's utilization of the

distribution main throughout the year, which does not impact the size or length of a distribution main or the cost Columbia incurs to purchase and install the main. Columbia St. No. 11-R, pp. 5-6. It is the combination of the cost to extend a distribution main to a new customer (“Customer” component) and the cost of the diameter of the pipe to serve the customer at design day temperatures (“Demand” component) that determines the cost of the main. Columbia Statement No. 11-R, p. 7. Because 50% of mains cost in the Peak & Average Study is based on throughput, the results of the Peak & Average study are not as reflective of how the Company incurs costs to provide service. Columbia St. No. 11-R p. 19. Therefore, the Peak & Average Study should not be the only study relied upon to design rates.

OCA’s and I&E’s rejection of a customer component to mains is contrary to the opinion of various recognized authorities. As Columbia explained:

Dr. Charles F. Phillips, Jr., in The Regulation of Public Utilities,³⁶ states on page 406 that “customer costs vary with the number of customers. These costs include a portion of the distribution system, local connection facilities, metering equipment, billing and accounting. Customer costs, moreover, are independent of consumption.”

Also, the American Gas Association published Gas Rate Fundamentals,³⁷ in which it is stated that customer-related costs are primarily distribution and customer accounting costs. Among other things, it is also stated on page 136 that:

the closer a plant item (e.g., a meter and service line) is located to a customer, the more that particular item is related to the specific requirements of that customer. Thus, the customer component of distribution costs reflects the theoretical distribution system that would be needed to serve customers at nominal or minimum load conditions.

³⁶ The Regulation of Public Utilities, Charles F. Phillips, Jr., Public Utility Reports, 1984.

³⁷ Gas Rate Fundamentals, Fourth Edition, American Gas Association, 1987.

In regard to the many different functions and cost causative components attributable to the gas distribution operations, these authorities support the concept that the main cost causation component for distribution costs is one that is customer-related.

Columba St. No. 11-R, pp. 13-14.

In concluding that there is no customer allocation component to the distribution system, OCA and I&E wrongly assume that the size and design of the distribution system would be exactly the same regardless of the number of customers. OCA's and I&E's recommended approach is fundamentally at odds with the basic principles of cost causation and has previously been rejected by the Commission. The Commission has recognized that a proper ACOS study recognizes both a customer component and a peak demand component of distribution plant. *See Pa. PUC v. PPL Electric Utilities Corp.*, Docket No. R-2012-2290597, at 113 (Order entered December 28, 2012) citing *Pa. PUC v. PPL Electric Utilities Corp.*, Docket No. R-2010-2161694, at 46 (Order entered December 21, 2010).

Mr. Mierzwa also suggests that under the Customer-Demand study, the Residential class should be entitled to a credit for their demand that can be met with the minimum system. OCA St. No. 4, pp. 16-17. Mr. Mierzwa assumes that the entire requirements of Residential customers can be accommodated by minimum-sized equipment, and because of that, the Residential class should not contribute toward the cost of facilities that are larger in size than the minimum system. According to Mr. Mierzwa, to do so would be a "double" allocation of costs because a Residential customer will have paid for the distribution costs associated with their load through the customer charge and through the demand charge. OCA St. No. 4, pp. 16-17. Such an approach fails to recognize that most Residential customers are served downstream from larger sized facilities, and the use of upstream larger diameter pipe is the most efficient and economical means to deliver gas to these customers. Without the larger upstream facilities, it would not be

possible to serve the Residential customers. Therefore, the Residential customers benefit from and should contribute to the costs of these facilities. If a Residential demand credit were used in the allocation of mains investment, it would result in a severe under-allocation of the capacity that the larger diameter pipe provides to the Residential class. Columbia St. No. 11-R, pp. 15-16. Moreover, the current residential customer charge of \$16.75 that Mr. Mierzwa proposes the Company maintain does not recover any mains investment, much less mains capacity investment caused by load requirements. A demand credit is not needed because there is no “double” allocation of costs to Residential customers under the Customer-Demand study.

OCA witness Mr. Mierzwa recommends that the cost of major account representatives be allocated to the large customer classes, not Residential customers in the ACOS studies. OCA St. No. 4, p. 29. Mr. Mierzwa is selectively identifying an expense that the Company incurs to negotiate flex rate agreements, accommodate billing inquiries, manage operational needs and provide marketing for large competitive customers. OCA’s proposed allocation should be rejected.

Residential customers benefit when Columbia can retain a large customer who has alternative fuel capabilities because the large customer contributes to the recovery of shared costs. Columbia St. No. 3, p. 34. As for billing inquiries, the Residential customer class has the benefit of the Company’s call center. If the cost of major account representatives were assigned only to large customers, it would only be fair to credit the large customers in some way to recognize that they do not use the call center for billing inquiries. The same argument applies to marketing activities. The Residential class has specific representatives who are experts in residential marketing and, arguably, provide no benefit to large customers. Under Mr. Mierzwa’s recommended approach, it would only be fair to credit the large customers for this

expense. With respect to operational needs, it is equally beneficial to Residential customers as it is to large customers that usage is managed during peak periods. Because the Residential class benefits from the major account representatives and because, like the major accounts, Residential accounts have their own representatives whose costs are equally assigned to the major accounts, it does not make sense to allocate these costs differently than based on the number of customers. Columbia St. No. 11-R, pp. 27-28.

Finally, Mr. Mierzwa challenges the Company's separation of mains by pressure group in the ACOS study because, according to Mr. Mierzwa, the allocation uses original cost and not net investment. Mr. Mierzwa states that the separation of pressure groups based on gross plant investment does not take into account the age of the pipe, and low-pressure pipe is generally older and therefore more depreciated than regulated pressure pipe. Mr. Mierzwa speculates that because 53% of the low-pressure system is constructed of steel, and because steel pipe is generally older and therefore more depreciated than plastic pipe, customers served off low pressure pipe should be assigned less net investment than regulated pressure customers. OCA St No. 4, p. 9. Mr. Mierzwa's criticisms of Columbia's assigns of mains by pressure group are without merit.

Assigning distribution mains into separate categories results in a mains cost allocation that is more consistent with cost incurrence. Using the Company's Graphical Information System ("GIS"), the Company can identify which premises are served off which pipe segments, the operating pressures of those pipe segments, the size of the pipe and the pipe material. This further refinement allows Columbia to identify the specific mains being used to serve specific customers more accurately, and therefore, more accurately assign mains when determining the revenue responsibility for each rate class. Columbia St. No. 11-R, p. 24. With respect to the use

of original cost versus net investment, Mr. Mierzwa criticizes Columbia's ACOS studies because the Company matches the allocation of depreciation reserve with the allocation of plant in service to arrive at net plant. However, Mr. Mierzwa's ACOS study does the same thing. The difference is that Columbia first identifies mains cost by operating pressure on a customer by customer basis using customer and engineering information. Columbia's ACOS studies, which allocate distribution mains investment by operating pressure and by pipe size, do account for the assignment of steel versus plastic pipe to the rate class based upon customer and engineering information. To the extent Mr. Mierzwa is correct that steel pipe is older, under Columbia's ACOS studies, the original cost allocated to the rate classes will be lower to those customers who utilize steel mains than those who utilize plastic mains. Mr. Mierzwa's Peak & Average study does not allocate costs in that manner. In fact, the net plant based on original cost in Mr. Mierzwa's study gives no weight to customers served by a low-pressure system or even steel pipe in general. Columbia St. No. 11-R, pp. 25-26.

3. Customer Charge Studies

In addition to the ACOS studies, Columbia prepared a cost analysis supporting the minimum or system charges for all rate schedules. Columbia St. No. 11, p. 2. The cost analysis contains two studies Columbia Exhibit No. 111, Schedule 1, pp. 14-30. The first study is the Company's traditional customer charge study based on the Customer-Demand study and includes the customer portion of mains costs. The second study was conducted for comparison purposes and excludes the customer component of mains.

It is appropriate to include a customer component of mains in the Minimum System Customer Charge study because of the way the distribution system is designed. The customer component of mains represents a minimum fixed cost investment to attach a customer to the distribution system, and therefore, has a direct relationship to the number of customers served by

the Company. At a minimum, fixed costs that have a direct relationship to number of customers served by the Company should be recovered equally from all customers within a rate class. This is exactly what the customer charge is designed to do. Columbia St. No. 11, pp. 18-19.

Columbia recognizes that the Commission has, in various cases, rejected the use of a customer component of mains in defining customer costs, and this is why Columbia prepared its alternative customer cost study that excluded mains. Columbia St. No. 11, p. 18. As explained in Section X.D of this brief, Columbia's alternative customer cost study fully supports its proposed Residential customer charges.

C. REVENUE ALLOCATION

1. Proposed Revenue Allocation and Alternatives

a) Columbia's Proposed Revenue Allocation

Columbia allocated the proposed revenue requirement to the rate schedules using the FPFTY non-gas revenues for each customer group being allocated a portion of the increase. In order to develop allocation percentages, rate schedules were assigned to groups. All Residential rate schedules (Residential Sales Service ("RSS") and Residential Distribution Service ("RDS" or "Choice")) were grouped together. The following Commercial and Industrial ("C&I") customers using less than 6,440 therms annually were combined: Small General Service-1 ("SGS-1"), Small Commercial Distribution-1 ("SCD-1") and Small General Distribution Service-1 ("SGDS-1"). The other customer groups include Small General Service-2 ("SGS-2"), Small Commercial Distribution-2 ("SCD-2") and Small General Distribution Service-2 ("SGDS-2") (those with annual usage between 6,440 and 64,400 therms); Small Distribution Service ("SDS") and Large General Sales Service ("LGSS") (commercial and industrial customers using between 64,400 and 540,000 therms annually); Large Distribution Service ("LDS") and LGSS (commercial and industrial customers using greater than 540,000 therms annually); Main Line

Distribution Service (“MLDS”); and Negotiated Contract Service (“NCS” or “Flex”) (Columbia St. No. 3, pp. 30-31).

The table below summarizes Columbia’s revenue allocation proposal.

| <u>Columbia’s Final Revenue Allocation Proposal of Revenue Requirement</u> | | | | | | |
|--|-------------|-------------|-------------|-------------|------|----------|
| RS/RDS | SGS/DS-1 | SGS/DS-2 | SDS/LGSS | LDS/LGSS | MLDS | Flex |
| \$73,989,928 | \$8,615,322 | \$9,889,590 | \$5,722,321 | \$4,167,686 | \$0 | \$14,117 |
| 72.27% | 8.41% | 9.66% | 5.59% | 4.07% | 0.0% | 0.01% |

The foregoing allocation reflects Columbia’s proposed rate increase of \$100.4 million. To the extent the allowed increase is less than that proposed by Columbia, Columbia proposes to use its revenue allocation and rate design to scale back rates proportionally. Columbia St. No. 3-R, p. 16.

As discussed in Section B above, the Company selected the Average ACOS study to guide the revenue allocation and rate design process, while using all three ACOS studies to evaluate the reasonableness of the proposed revenue allocation. Columbia St. No. 3, p. 31. Columbia made certain adjustments to the revenue allocation based upon the initial results of the Average ACOS study. The results of the ACOS study indicated that four rate classes – SGS-1/SGDS-1, SGS-2/SGDS-2, SDS/LGSS and MLDS – are overcontributing compared to the rate of return earned on rate base and three rate classes – RD, LDS and Flex – are under contributing. Columbia Exhibit No. 111, Schedule 3, p. 1, ln. 13. The following table shows the unitized return results for the classes at present rates:

| <u>Unitized Return at Present Rates</u> | | | | | | |
|---|----------|----------|----------|----------|---------|---------|
| RS/RDS | SGS/DS-1 | SGS/DS-2 | SDS/LGSS | LDS/LGSS | MLDS | Flex |
| 4.734% | 5.045% | 8.703% | 8.349% | 4.051% | 81.361% | -3.272% |
| 0.97 | 1.04 | 1.79 | 1.72 | 0.83 | 16.75 | (0.67) |

Columbia shifted revenue between the classes in an effort to move each class toward the system average. This resulted in an additional \$468,497 being reallocated to the Residential class, which was capped at the system average. An additional \$313,389 was reallocated to the LDS class. Columbia St. No. 3, p. 32. Even with the additional revenue allocation, the LDS class remains below the system average rate of return using the Average cost of service study as a guide. This is a result of Columbia’s efforts to strike a balance between the competing rate design goals of fairness and gradualism. Columbia St. No. 3, pp. 34-25. Under the Customer-Demand study, the LDS class is overcontributing. Columbia Exhibit No. 111, Schedule 1.

Columbia proposes that certain customer groups do not receive a revenue increase. MLDS customers cover more than their allocated share of the revenue requirement at present rates under all three ACOS studies. Therefore, Columbia proposes to shift the revenue increase for the MLDS class to the Residential and LDS classes. Columbia St. No. 2, p. 32. The Company is proposing not to assign any increase to Flex customers other than what would be collected through the increased customer charge. Columbia St. No. 3, p. 33.³⁸ As explained in greater detail in Section C.2. of this brief, flex customers receive negotiated rates to maximize the revenues that can be obtained from these customers with competitive alternatives, in lieu of losing the customers entirely. In addition, the Company proposes that the revenue increment

³⁸ The flexible rate provisions of Columbia’s tariff provide that the customer charge is not eligible for adjustment. See Supplement No. 221 to Tariff Gas – Pa. PUC No. 9, Sixth Revised Sheet No. 68.

assigned to CAP customers who will not receive an increase in their required payment amount continue to be collected from other Residential customers through Rider USP Columbia St. No. 3, p. 35.

Columbia's proposed revenue allocation represents a fair allocation of the proposed revenue increase among the customer classes considering the range of outcomes produced by the ACOS studies and should be accepted.

b) Other Parties' Revenue Allocation Proposals

Various parties have presented alternative and conflicting recommendations for how to allocate revenue to the various customer classes. For the reasons explained below, other parties' revenue allocation proposals are without merit and should be rejected.

CII witness Mr. Plank suggests that any increase to the LDS class be limited even though the LDS rate class is underperforming when compared to the other rate classes using the Average study. CII St. No. 1, p. 19; Columbia St. No. 3-R, p. 36. Mr. Plank did not offer a specific revenue allocation proposal among the customer classes and did not present any type of cost analysis to support his recommendation. His recommendation appears to be based entirely on the goal of minimizing or eliminating a rate increase for the LDS class. Such an approach is arbitrary and inconsistent with the cost of service principles in *Lloyd* and should not be accepted.

OSBA witness Mr. Knecht recommends that no rate increase be assigned to the SGS-2 and Medium General class and instead suggests that most of the rate increase be assigned to the Residential and Large General classes. OSBA St. No. 1, p. 27. Mr. Knecht would assign \$6,655,000 to the Large General Class as compared to Columbia's proposed assignment of \$4,167,686. OSBA St. No. 1, p. 30. Mr. Knecht's proposal would increase rates for the Large General Class by approximately 34%. OSBA's proposed allocation violates the rate design principle of gradualism. Columbia's proposed allocation, on the other hand, brings the classes

toward the cost of service while recognizing that rate increases should be tempered by gradualism.

OCA witness Mr. Mierzwa recommends that the Residential class receive less of an increase based on the results of OCA's Peak & Average Study. OCA St. No. 4, pp. 34-36. Mr. Mierzwa would allocate \$62,613,739 to the Residential class as compared to the Company's proposed increase of \$73,521,431. OCA St. No. 4, p. 33. As explained above, Mr. Mierzwa's reliance on solely the Peak & Average study to set rates is flawed because it fails to take into account the customer component of costs. Contrary to Columbia's proposal to allocate revenues neutrally, consistent with the cost to serve each class, OCA attempts to allocate revenues in a manner that ignores the cost to serve each class simply to allocate less of the proposed revenue increase to the Residential class. Such a proposal violates the cost of service principles that the Commonwealth Court articulated in *Lloyd*. Therefore, OCA's improper allocation should be rejected.

2. Flex Customers

a) OSBA's Challenge to Columbia's Flex Rate Discounts is Without Merit and Should be Rejected

Pursuant to the flexible rate provisions of Columbia's Tariff, the Company may under certain competitive conditions negotiate discounts from the regular tariff rate in order to retain customers who have lower cost options (e.g., alternative fuel, pipeline bypass and natural gas distribution utilities with overlapping service territories). Rates are lowered only to the extent necessary to meet the demonstrated competitive alternative. *See* Supplement No. 221 to Tariff Gas – Pa. PUC No. 9, Sixth Revised Sheet No. 68. Flex rate agreements benefit Columbia's non-flex customers because revenue collected from flex rate customers contributes to the recovery of the Company's fixed costs. Absent flex rates, the Company may lose these

customers to alternatives. Without the revenues from flex rate customers, the Company's non-flex customers would be assigned additional fixed cost recovery responsibility and their rates would increase. Columbia St. No. 3, p. 34.

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Moreover, it is incorrect to conclude that the rate under these pre-existing contracts violate Commission policy. The Commission’s most recent order regarding gas-on-gas competition was issued on June 13, 2019. *Joint Petition for Generic Investigation or Rulemaking Regarding “Gas-On-Gas” Competition Between Jurisdictional Natural Gas Distribution Companies*, Docket Nos. P-2011-277868 and I-2012-2320323 (Order entered June 13, 2019) (“*Gas-On-Gas Order*”). In the *Gas-On-Gas Order*, the Commission deferred to a collaborative working group the following unresolved issues: (1) the appropriate methodology to calculate the lowest applicable gas-on-gas flex tariff rates available to customers who participate in gas-on-gas competition and (2) the uniform tariff provisions to be utilized by jurisdictional natural gas distribution companies in implementing gas-on-gas flex rates. Until those issues are resolved by the Commission, it is not possible to determine what are the applicable rates of

Peoples to be compared to Columbia’s flexed rates.³⁹ Mr. Knecht is wrong in concluding that Columbia’s remaining gas-on-gas flex rates violate the Commission’s policy.

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Columbia does not offer negotiated rates to competitive customers without verifying that the discounts are justified. Columbia St. No. 1-R Redacted, pp. 63-64. For example, CII witness Mr. Plank stated in his direct testimony that, although CII member Knouse Foods has been served under a flexible rate contract in the past, Columbia is no longer willing to offer Knouse Foods a flexible rate contract. CII St. No. 1, p. 5. At this time, Knouse Foods is not entitled to a flexible rate contract because Knouse Foods has not provided documentation verifying the lower

³⁹ For example, Peoples recently increased its base rates effective October 29, 2019. *See Pa. PUC v. Peoples Natural Gas Company LLC*, Docket Nos. R-2018-3006818 et al. (Order entered October 3, 2019). The effect of an increase in base rates of a competitor NGDC on pre-existing flex rate contracts is one issue to be determined in defining “applicable” rates.

cost competitive option as required by Columbia's Tariff. Columbia St. No. 1-R Redacted, pp. 64-65. From Mr. Plank's testimony, it appears that the alternate source of fuel that previously supported the flexible rate agreement has increased in price and is no longer a competitive alternative to natural gas. Columbia St. No. 1-R Redacted, p. 65. Columbia's unwillingness to offer Knouse Foods a flexible rate contract demonstrates Columbia's diligence in ensuring that flex rates are justified based on the circumstances.

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Mr. Knecht's position that certain of Columbia's flex rate discounts are not justified amounts to nothing more than unsupported speculation and should be rejected.

b) **I&E's Request for a Competitive Alternative Analysis Should be Rejected**

I&E witness Cline recommends that Columbia provide a competitive alternative analysis for customers whose alternative fuel source has not been verified for a period of ten years or more when Columbia files its next base rate case I&E St. No. 3, p. 6. I&E's request for such an analysis is unnecessary and should be rejected.

As part of the settlement of Columbia's rate case at Docket No. R-2018-2647577, Columbia agreed to provide updated competitive alternative analyses for six flex rate customers whose alternative supply had not been verified since 2008 and one flex rate customer whose alternative supply had not been verified since 2010.⁴⁰ At the time, these agreements were up for renegotiation, and the evaluations would have been conducted in the course of Columbia's normal renegotiation process even absent the settlement commitment. Columbia St. No. 1-R, p. 62.

Columbia does not believe that the analysis requested by I&E in this case is necessary moving forward. The terms of Columbia's flex agreements typically do not extend beyond ten years, at which time competitive alternatives would be verified as part of the renegotiation process. While there are a limited number of customers whose agreements are longer, those agreements are based on the unique circumstances of the customer, with the economic analysis for the bypass performed at the time the contract is entered. While circumstances may change over time, absent a specific provision to update the contract, the contractual rate will remain the same throughout the duration of the contract as dictated by the circumstances at the time the agreement was entered. Thus, the results of any analysis performed now would not impact Columbia's ability to change the terms of the previously-negotiated contract, and I&E's

⁴⁰ *Pennsylvania Public Utility Commission, et al. v. Columbia Gas of Pennsylvania, Inc.*, Docket Nos. R-2018-2647577 et al. (Order entered December 6, 2018).

requested analysis would not provide information that could be acted upon Columbia St. No. 1-R, pp. 62-63. Columbia should not be required to invest the time and expense required to undertake such an analysis that serves no useful purpose.

3. Allocation of Universal Service Costs

OCA witness Mr. Colton and CAUSE-PA witness Mr. Miller recommend that the costs of the Company's Universal Service Programs ("USP") be borne by all ratepayers, not just the Residential class. OCA St. No. 5, p. 57; CAUSE-PA St. No. 1, pp. 83-43. CII, PSU, OSBA and Columbia oppose allocating USP costs outside of the Residential class. CII St. No. 1-R, p. 2; PSU St. No. 1-R, pp. 16, 29; OSBA St. No. 1-R, p. 6; Columbia St. No. 1-R, p. 23. The Commission has previously held, and the Commonwealth Court has affirmed, that USP costs should not be allocated outside of the Residential class. *See Metropolitan Edison Company and Pennsylvania Electric Company*, Docket Nos. R-00061366 and R-00061367, *aff'd Met-Ed Indus. Users Group v. Pa. PUC*, 960 A.2d 189 (Pa. Cmwlth. 2008) (upholding the Commission's decision to limit recovery of universal service costs to Residential customers). Consistent with this precedent and for the reasons explained below, OCA's and CAUSE-PA's proposal should be rejected.

Columbia does not support its C&I customers paying for USP. Only Residential customers are eligible to participate in USP. These programs were created to reduce Residential customer arrearages and, in turn, reduce the costs that are incurred by Residential ratepayers as a result of arrearages and collections. The Residential class is the class that benefits from the reduction in such arrearages and collection costs and should be the customer class that bears the costs of these programs. C&I customers do not cause the Company to incur any costs in relation to Residential customer arrearages and do not receive any reduction in costs as a result of reduced customer arrearages. Columbia St. No. 1-R, p. 25.

OCA's and CAUSE-PA's proposal would impose an obligation on Columbia's C&I customers that is not placed on the C&I customers of other utilities in Pennsylvania. Columbia St. No. 1-R, p. 23. In Pennsylvania, most Residential customers pay the costs of USP. Singling out Columbia's C&I customers is inappropriate, as other similar customers, including customers of Columbia's competitors, are not required to pay for these programs. In this regard, OCA's and CAUSE-PA's proposal is discriminatory and violates the neutrality requirements in the Natural Gas and Competition Act, which prohibits unreasonable discrimination against one customer class for the benefit of another. *See* 66 Pa. C.S. § 2203(5). Moreover, requiring only Columbia's large C&I customers, and not the customers of other NGDCs, to contribute to the costs of these programs could prompt these customers to seek to bypass Columbia where they have the option to do so. C&I customers with existing flex rate contracts either will have the USP charges flexed, or will receive a further discount to their distribution rate discounts. If the latter occurs, then the revenue allocation would have to account for this, or else Columbia's rates will not recover the revenue allowance in this case.

OCA's and CAUSE-PA's proposals also fail to take into account that universal service costs are recovered pursuant to a reconciled recovery mechanism, Rider USP. Columbia St. No. 1-R, p.24. The vast majority of these costs are either Customer Assistance Program ("CAP") discounts or pre-program arrearage forgiveness, the amounts of which are outside the Company's control. Neither OCA nor CAUSE-PA has explained how the mechanism will be modified to account for class reconciliation of amounts to be recovered.

D. RATE DESIGN

Columbia's rate design proposal in this case is designed to recover the Company's total cost of service. In designing its proposed rates, the Company pursued three objectives to establish the amount of revenue to be recovered through the customer charge. First, Columbia

analyzed the percent of revenue recovery by the customer charge, as compared to base rate revenue recovery as a whole. Columbia's goal was to align the percentage of customer charge recovery to total base rate recovery. Second, Columbia compared the currently approved customer charge to the Minimum System Customer Charge Study (Columbia Exhibit No. 111, Schedule 1, p. 14-18), with the goal of progressing toward a customer charge that would recover the cost of a minimum system. Third, Columbia has proposed that any increase in the customer charge be gradual to avoid rate shock Columbia St. No. 3-R, p. 14.

1. Residential Rate Design

Columbia's current Residential rate structure includes a customer charge, a volumetric charge and a Weather Normalization Adjustment ("Rider WNA") Columbia St. No. 3, p. 15. As explained below, Columbia is proposing to increase the Residential customer charge, recover the remaining revenue allocated to the Residential customer class through the commodity (distribution) charge, modify the currently effective WNA and implement a Revenue Normalization Adjustment ("Rider RNA").

a) Columbia's Proposed Increase to the Residential Customer Charge Should be Approved

Columbia proposes to increase the Residential customer charge from \$16.75 to \$23.00. The remaining Residential revenue increase was assigned to the volumetric charge for a resulting rate of \$7.3323 per Dth. Columbia St. No. 3, p. 35.

As explained in Section B above, Columbia performed two customer charge calculations, one including mains and the other excluding mains. Columbia St. No. 3, p. 36. The monthly Residential customer cost excluding mains is \$23.05. Columbia Exhibit No. 111, Schedule 1, p. 25. The monthly Residential customer cost including a mains component is \$54.16. Exhibit No. 111, Schedule 1, p. 16. Based on these customer charge calculations, Columbia proposes a

Residential customer charge of \$23.00. The proposed customer charge is slightly below the monthly customer-based cost excluding mains and would not recover the full Residential customer related costs of service. Nevertheless, the proposed increase represents a meaningful movement toward cost recovery.

The Commission has recognized that it is appropriate to set a customer charge that ensures the recovery of those fixed costs that are “clearly more customer-related than usage-related, while still allowing some revenue to be recovered through usage-based charges.” *Pa. PUC v. PPL Electric Utilities Corporation*, Docket No. R-2012-2290597, 2012 Pa. PUC LEXIS 1757 (October 19, 2010 R.D.; Order entered December 28, 2012) (rejecting I&E’s and OCA’s position of “no increase” to the customer charge because it was not based on a proper cost analysis) citing *Pa. Publ. Util. Comm’n v. Aqua Pennsylvania, Inc.*, Docket No. R-00038805, 2004 Pa. PUC LEXIS 39, 236 P.U.R.4th 218 (August 5, 2004). In particular, the Commission noted that an increase to the customer charge is reasonable when usage-based charges still comprise a greater portion of the total bill so that customers will still have a clear opportunity to reduce their total bills through conservation. Even when the cost of mains is excluded, Columbia’s proposed customer charge is still slightly below the customer-based cost, and the majority of an average Residential customer’s bill will be comprised of volumetric charges. Columbia St. No. 3, p. 36; Columbia St. No. 3-R, pp. 19-20.

The Company’s proposed Residential customer charge is within the range of Residential customer charges proposed by other parties. I&E did not recommend any change to the Company’s proposed Residential customer charge because it is consistent with the Company’s customer cost analysis I&E St. No. 3, p. 23. OSBA’s calculated Residential customer cost is \$40.00 OSBA St. No. 1, p. 32. OCA, CAUSE-PA and CAAP are opposed to increasing the

Residential customer charge above the current customer charge of \$16.75. The customer charge has not increased in several years. At \$16.75, the Residential customer charge would be well below the customer related costs of service. As OSBA witness Mr. Knecht explained, if customer charges are set below the customer-related costs, the result is that customers with higher usage will subsidize customers with lower usage OSBA St. No. 1, p. 32. For the reasons explained below, OCA's, CAUSE-PA's and CAAP's arguments against increasing the Residential customer charge are without merit and should be rejected.

OCA witness Mr. Mierzwa states that Columbia's Residential customer charge is higher than the other natural gas distribution utilities in Pennsylvania OCA St. No. 4, p. 38. Mr. Mierzwa's comparison of other utilities' customer charges in isolation is not meaningful. OCA presented no evidence regarding the customer related costs of service of other utilities. Thus, no conclusion can be reached as to the extent that other utilities' customer charges are recovering the customer related costs from Residential customers.

Examining the customer charge alone does not indicate how customers are impacted at a non-weather sensitive "base load" level where all Residential customers are generally consuming the same minimum amount per month. Differences in rate structures can distort the comparison when looking at just one component in isolation. For example, National Fuel Gas Distribution Corporation has a multiple declining block rate. The multiple declining block rate structure results in more fixed costs being recovered in a higher first rate block, which is effectively a minimum monthly charge for base load. Under this rate design, the customer charge may be lower but the cost per Mcf for the base load gas is higher, resulting in a total higher cost for base load gas. Instead of examining only the customer charge, a more reasonable comparison of the

impact on customers would be to include a customer's base load usage along with the customer charge. Columbia St. No. 3-R, pp. 18-19.

OCA witness Mr. Mierzwa, CAAP witness Mr. Miller and CAUSE-PA witness Ms. Moore contend that a higher fixed monthly customer charge is inconsistent with energy conservation. OCA St. No. 4, p. 38; CAPP St. No. 1, p. 3; CAUSE-PA St. No. 1, p. 35. Their position assumes that an increase to the customer charge necessarily reduces the increase to the volumetric charge, thereby eliminating any incentive to conserve energy. This assumption is unfounded. Columbia is proposing to increase volumetric rates in this case. Thus, the proposed rate design will charge more for greater Residential usage. Also, a large portion of a customer's bill is for recovery of gas costs. Gas costs are recovered on a volumetric basis and therefore reductions in usage from conservation will produce savings. At proposed rates, the Residential customer charge of \$23.00 represents approximately 21.9% of the total monthly bill of a typical Residential customer. It is unreasonable to assume that a customer would decide not to invest in conservation when approximately three quarters of the total monthly bill is volumetrically driven. Columbia St. No. 3-R, pp. 19-20.

OCA witness Mr. Colton expresses concern with respect to the impacts of the proposed customer charge on low-income customers. Mr. Colton concludes that low-income customers consume less gas than the average Residential customer, and therefore, low-income customers will experience a greater increase in their gas bills than the average Residential customer. OCA St. No. 5, p. 77. However, not all low-income customers have low usage. For example, some low-income customers reside in older, large, poorly insulated homes with less efficient furnaces. These customers would use more than the average Residential customer consumption. Therefore, Mr. Colton's conclusion regarding low-income customers is incorrect. Regardless of

income status, a higher fixed component of the bill will benefit customers who consume more gas than the average. Columbia St. No. 3-R, pp. 28-29. In addition, Columbia has in place a variety of programs designed to assist low-income customers. See Section IX.A. Customer charges should not be held artificially below cost, to lower the bill for some low income customers while increasing the bill for other low income, high usage customers.

Columbia recognizes the need to strike a balance between gradually increasing fixed charges and moving toward the cost to serve Residential customers. In the spirit of gradualism, the Company's proposed Residential customer charge of \$23.00 is lower than the results produced by both customer cost studies. Columbia's proposed Residential customer charge represents reasonable movement toward recovering the customer costs of service and should be approved.

b) Columbia's Proposal to Remove the 3% Deadband from the Weather Normalization Adjustment Should be Approved

Rider WNA adjusts Residential customers' monthly charges based on the actual temperature experienced during the month. Under the existing WNA, the Company and customers are protected, in part, from usage variations due to weather. The WNA adjusts only the temperature sensitive portion of customers' bills to reflect normal weather levels. By distinguishing between base load and temperature sensitive load, each customer bill is calculated to mitigate the undesirable impacts of warmer than normal or colder than normal weather. Columbia St. No. 3, p. 16.

Rider WNA is applied to the bills of Residential customers for the months of November through May. The following calculation demonstrates the adjustment that is applied to customers' bills:

| | |
|------|--|
| WNA | = WNAT x Distribution Usage Charge, where: |
| WNAT | = WNBT – AMT |
| WNBT | = BLMT + [(NHDD / AHDD) x (AMT-BLMT)] |
| WANT | = Weather Normalized Adjustment Therms |
| WNBT | = Weather Normalized Billing Therms |
| BLMT | = Base Load Monthly Therms |
| NHDD | = Normal Heating Degree Days |
| AHDD | = Actual Heating Degree Days |
| AMT | = Actual Monthly Therms |

BLMT are established for each Residential customer using the customer’s actual average daily consumption from the billing system, for the two months with the lowest consumption per billing day for the three billing months of July, August and September. Columbia St. No. 3, pp. 16-17.

Columbia’s existing Rider WNA includes a 3% deadband, which means that a billing adjustment occurs only if the variation of actual heating degree days is lower than 97% or higher than 103% of the normal heating degree days for an individual billing cycle. While the WNA has been effective in mitigating weather impacts, the 3% deadband means that a portion of revenue variation due to weather continues to be unaddressed. Thus, the goal of the WNA, to improve revenue stability, is not fully realized. This is because the deadband ignores the true effect of weather. For example, if a billing cycle is 2% colder than normal, no adjustment will be made under the current mechanism Columbia St. No. 3, p. 19. To address this issue, Columbia proposes to eliminate the 3% deadband from the WNA.

I&E and OCA oppose Columbia's proposal to eliminate the 3% deadband. I&E claims that the WNA should apply only in extraordinary circumstances (Cline p. 9). Similarly, OCA claims that the WNA should not apply if a particular day is only slightly colder or warmer than normal. OCA St. No. 4, p. 39. I&E's and OCA's arguments are without merit and should be rejected.

The purpose of the WNA is not only to address the revenue and billing impacts of extreme weather conditions. By design, the WNA includes every daily temperature variation within a billing month, not just "extreme days." The goal of the WNA is to eliminate revenue and bill variations due to fluctuations in weather. Columbia St. No. 3-R, p. 4. The deadband undermines this goal by limiting when a billing adjustment occurs.

In a base rate proceeding, Residential rates are set using normal weather. Removal of the deadband from the WNA would allow the Company to bill customers for the approved level of revenue by eliminating the effects of weather on a real time basis. If the deadband is eliminated and the weather is 2.5% colder than normal, the Company would be able to lower customers' bills to reflect the abnormal weather. With the 3% deadband in place, those revenues would be retained by the Company. Columbia St. No. 3-R, p. 4.

The revenues potentially affected by the 3% deadband are not immaterial. For example, if actual weather were 2.5% colder than normal during the peak winter billing months of January through March, an average residential customer would pay over \$8 more in bills than they would if no deadband were in place. Columbia St. No. 3-R, pp. 5-7. Calculated across Columbia's approximately 400,000 residential customers, this approximates \$3.2 Million in revenues that would be returned to customers if the deadband were eliminated. It is in the interest of the

Company and customers to eliminate the 3% deadband to further normalize bills for weather variations. Columbia's proposal to eliminate the 3% deadband should be approved.

c) **Columbia's Proposal to Implement the Revenue Normalization Adjustment Should be Approved**

In this proceeding, Columbia proposes to implement Rider RNA. The RNA provides benchmark distribution revenue levels regardless of changes in customers' actual usage levels. Rider RNA would adjust actual non-gas distribution revenue for the non-CAP Residential customer class. The proposed RNA is designed to promote revenue stability by "breaking the link" between Residential non-gas revenue received by the Company and gas consumed by non-CAP Residential customers. Columbia St. No. 3, p. 20.

Act 58 of 2018 amended the Public Utility Code by providing the Commission with express statutory authority to approve alternative rate mechanisms, such as revenue decoupling, in a utility's base rate proceeding. 66 Pa. C.S. §§ 1330(b). The RNA is a "decoupling mechanism" as defined by Section 1330 of the Code.

"Decoupling mechanism." As follows:

(1) A rate mechanism that reconciles authorized distribution rates or revenues for differences between the projected sales used to set rates and actual sales, which may include, but not be limited to, adjustments resulting from fluctuations in the number of customers served and other adjustments deemed appropriate by the commission.

66 Pa. C.S. §§ 1330(b). The Commission, recognizing that there are considerable shifts in the rate-setting environments for utilities, issued a Policy Statement inviting utilities within the context of a base rate proceeding to propose ratemaking mechanisms and rate designs that further the policy objective of promoting the efficient use of energy. *Fixed Utility Distribution Rates Policy Statement, Final Policy Statement Order*, Docket No. M-2015-2518883 (Order entered July 18, 2019). The Commission's Policy Statement sets forth fourteen factors that the

Commission will consider when evaluating alternative ratemaking proposals. Although the Commission's Policy Statement is not mandatory,⁴¹ Columbia has considered each of the factors listed in the Policy Statement that are applicable to the Company's proposal to implement the RNA. These factors are explained in the direct testimony and rebuttal testimony of Columbia witness Bell. *See* Columbia St. No. 3, p. 21; Columbia St. No. 3-R, pp. 23-25.

The RNA promotes revenue stabilization because it relies on distribution revenue per customer, not usage per customer. Once the Company's revenue requirement is set through a base rate proceeding, a benchmark revenue per residential customer is established. Because the link between level of throughput and base revenue recoveries is broken, reduced throughput will not lead to revenue and earnings erosion due to under-recovery. In this way, the RNA aligns the Company's and its customers' interests as they pertain to energy efficiency and conservation initiatives. Columbia St. No. 3-R, p. 24.

Through Rider RNA, the Company would refund any amount over the benchmark revenue per Residential customer and would collect any amount below the benchmark revenue per customer Columbia St. No. 3, p. 20. By design, the Company cannot retain revenue in excess of the Benchmark Distribution Revenue per Bill ("BDRB"), which protects customers from being over-charged. The Company will submit two filings per year for the RNA mechanism, which can be reviewed by the Commission, similar to the process for the Company's PGC and Rider USP filings. Columbia St. No. 3-R, p. 25. Columbia proposes to reconcile RNA collections or credits in the next corresponding Peak and Off-Peak RNA filing. Columbia St. No. 3, pp. 28-29.

⁴¹ Policy Statements are not binding and do not have the force of law. *See Petition of Philadelphia Gas Works for a Statement of Policy on the Application of Philadelphia Gas Works' Cash Flow Ratemaking Method*, 2009 Pa. PUC LEXIS 2018, *20 (December 30, 2009) (policy statements are only an indication of how the PUC intends to proceed); *Pa. Associated Builders & Contrs., Inc. v. Commonwealth Dep't of Gen. Servs.*, 996 A.2d 576, 583 (Pa. Cmwlth. 2010); *R.M. v. Pennsylvania Hous. Fin. Agency*, 740 A.2d 302, 308 (Pa. Cmwlth. 1999).

Columbia proposes to calculate Rider RNA and adjust non-CAP Residential customers' bills every six months based upon a comparison of benchmark distribution revenue to actual billed distribution revenue. The proposed benchmark distribution revenues are computed for two separate six-month periods. The "Peak Period" includes billing cycles for October through March. The "Off-Peak Period" includes billing cycles for April through September. Using these two periods minimizes rate fluctuations for customers and aligns Rider RNA rate changes with the gas cost rate changes. The RNA computed for the Peak Period will apply to the next Peak Period, and the RNA computed for the Off-Peak Period will apply to the next Off-Peak Period. Lagging the adjustment until the next corresponding time period moderates the impact of any adjustment because Peak Period adjustments are applied to Peak Period volumes. Columbia St. No. 3, pp. 21-22.

Columbia proposes to set the Peak and Off-Peak BDRD using weather normalized test year revenues for the FPFTY approved in this proceeding divided by the number of Residential bills for the applicable six-month period. For each period, the difference between the BDRB and the Actual Distribution Revenue per Bill ("ADRB") would be multiplied by the actual number of non-CAP Residential bills to compute base revenues to be charged or refunded to non-CAP Residential customers. Columbia proposes the following Peak and Off-Peak BDRB levels based on the Company's filed-for revenue requirement:

| <u>Peak BDRB</u> | | <u>Off-Peak BDRB</u> | |
|------------------|-----------------|----------------------|----------------|
| January | \$144.08 | April | \$86.08 |
| February | \$142.79 | May | \$51.98 |
| March | \$122.42 | June | \$37.64 |
| October | \$38.53 | July | \$32.11 |
| November | \$61.68 | August | \$31.46 |
| December | <u>\$109.86</u> | September | <u>\$31.72</u> |
| 6-Month Total | \$619.36 | | \$270.99 |

The proposed BDRD levels would need to be revised for the final revenue requirement approved by the Commission. Columbia proposes that new BDRB levels be established with each base rate case filing. Columbia St. No. 3, pp. 22-23. The proposed RNA formula for the Peak Period is as follows:

$$\text{Peak Period: } \text{RNA}_p = \frac{[\text{ANB}_p \times (\text{BDRB}_p - \text{ADRB}_p)]}{\text{FT}_p}$$

RNA is the Revenue Normalization Adjustment for non-CAP residential customers for the applicable period.

BDRB is the Benchmark Distribution Revenue per Bill for non-CAP residential customers for the applicable period.

ADRB is the Actual Distribution Revenue per Bill for non-CAP residential customers for the applicable period. ADRB includes Rider WNA adjustments in the applicable months.

ANB is the Actual Number of non-CAP residential Bills for the applicable period. ANB will be computed using a six-month average.

FT is the Forecast Therms for residential non-CAP customers for the six-month period that the RNA will be applied.

The equation is the same for the six-month Off-Peak RNA (“RNAo”). Columbia St. No. 3, p. 26.

I&E, OCA, CAAP and CAUSE-PA oppose implementation of the RNA. For the reasons explained below, other parties’ arguments against the RNA are without merit and should be rejected.

I&E witness Mr. Cline contends that there is no demonstrated need for greater revenue stability, nor is there any guarantee that the RNA will result in fewer rate cases (Cline p. 11). Mr. Cline’s argument fails to recognize that rate case timing is dependent upon many factors, including capital additions, fluctuations in the cost of capital and operation and maintenance expenses. However, the stability provided by the RNA is beneficial for both the Company and its Residential customers because the Company would credit or collect any distribution revenues over or under the benchmark revenue per customer that is established as part of a base rate proceeding.

In criticizing the proposed RNA, Mr. Cline incorrectly states that the RNA is contrary to conservation efforts because customers would need to use more gas to trigger a refund. I&E contends that customers who invest in conservation will not experience the full savings of their investment if the Company is permitted to increase rates in response to declining usage. I&E St. No. 3, p. 11. CAUSE-PA witness Mr. Miller and CAAP witness Ms. Moore express similar concerns regarding low-incomes customers’ incentive to conserve. CAUSE-PA St. No. 1, p. 6. I&E’s, CAUSE-PA’s and CAAP’s claims regarding the RNA’s effects on conservation efforts are misplaced for several reasons.

First, the RNA is not contrary to conservation efforts. Residential consumption patterns could change for many reasons from consuming more gas heat while working from home to replacing electric appliances with gas appliances. These uses are not incompatible with

conservation. Second, the RNA, unlike the WNA, does not result in real time billing adjustments. Instead, billing adjustments for the RNA are made in a future period. If a Residential customer reduces consumption unrelated to weather variations, the customer will experience immediate savings on their bill and the customer will be able to associate the reduced bill with the conservation measure. Columbia St. No. 3-R, p. 11. Third, the RNA is designed to reflect what would normally happen in a rate case when customer usage declines – fixed costs are spread over lower volumes and Residential rates increase. Currently, when customer usage declines between rate cases, the Company’s actual recovery of its costs declines, and the Company will file a new rate case to reset the billing units to recover expenses. This process continues from case to case. The RNA captures this decline and adjusts recoveries, avoiding the need to use a base rate case to reset the billing components. RNA adjustments, unlike WNA adjustments, are not calculated on a customer-specific basis but rather on a class-wide basis. Conservation savings from individual residential customers is spread among all Residential customers. Finally, the RNA adjustment will not be applied to CAP customers’ bills, and all non-CAP Residential customers will continue to pay a customer charge, a volumetric rate (which Columbia is proposing to increase) and the commodity cost of gas. The Company’s rate design proposal does not significantly impact the ratio of fixed to volumetric charges for Residential customers. Therefore, Residential and low-income customers’ incentive to conserve should not be impacted by the Company’s proposed rate design. Columbia St. No. 3-R, p. 31.

OCA expressed concern that the RNA could increase earnings beyond those that the Company would otherwise be entitled. OCA St. No. 4, p. 41. OCA witness Mr. Mierzwa stated that a new customer is likely to have purchased more energy-efficient appliances than the average existing customer and would have lower usage than the average customer, all else being

equal. According to Mr. Mierzwa, this scenario would increase the Company's earnings beyond what they would have been without Rider RNA because Columbia's margins would be based on average Residential customer margins. OCA St. No. 4, p. 42. Mr. Mierzwa fails to recognize the many possibilities that would have the opposite effect, such as a new customer purchasing a larger than average home or installing more gas appliances compared to the average Residential customer. New customers could have consumption levels that are at, above or below the average usage amount, and this is precisely why the RNA benchmark uses an average customer as its basis. Further, the Company's new customer projections assume average usage, which is consistent with the Company's RNA benchmark approach. Columbia St. No. 3-R, p. 25.

Mr. Mierzwa also expressed concern that the RNA would unreasonably apply to customers with constant usage over time. OCA St. No. 4, p. 42. Mr. Mierzwa's argument is flawed because it fails to recognize that the cost to serve a Residential customer is relatively static despite usage differences among Residential customers. Because the cost to serve Residential customers does not significantly vary with usage, it is reasonable to apply the RNA to all Residential customers regardless of usage. Columbia St. No. 3-R, p. 26. Moreover, under current ratemaking procedures, customers who maintain constant usage already pay for the lost revenues from customers who install conservation measures, as the same level of costs are recovered over a smaller volumetric base.

Mr. Mierzwa inappropriately attempts to analogize the RNA to a "take-or-pay" arrangement. OCA St. No. 4, pp. 42-42. A "take-or-pay" arrangement may be applicable to the purchase of a commodity, such as gas. However, the same argument does not make sense for providing distribution service. Columbia must have the same infrastructure in place to serve a Residential customer regardless of consumption. Columbia St. No. 3-R, p. 26.

Mr. Mierzwa claims that Rider RNA could lead to inappropriate rate adjustments if Residential usage per customer were to fall over time while Small C&I customer usage increased. In that case, according to Mr. Mierzwa, Residential rates would be increased under Rider RNA without recognition of the increased Small C&I distribution service revenues. OCA St. No. 4, p. 43. Mr. Mierzwa's argument relies on the flawed assumption that lower Residential use per customer implies lower distribution costs. However, a drop in average Residential customer usage does not simply translate to lower costs for Columbia as the cost to serve a Residential customer remains relatively static with usage fluctuations. Columbia St. No. 3-R, p. 27.

Mr. Mierzwa's final argument against the RNA is that Columbia's current rate structure, which includes a fixed monthly customer charge, a purchased gas adjustment, Rider WNA, and a Distribution System Improvement Charge ("DSIC") provides for adequate revenue stability without the RNA. OCA St. No. 4, p. 44. However, none of these rate mechanisms serve the same purpose as the RNA. Columbia's current and proposed customer charges do not fully recover the fixed costs incurred to serve Residential customers. The purchased gas adjustment is a tracker to collect costs related to the gas commodity. It does not help stabilize distribution service revenue. The DSIC includes a cap equal to 5% of distribution revenues, which limits its usefulness for Columbia due to the Company's high rate of infrastructure replacement. Columbia St. No. 3-R, p. 27. Finally, Rider RNA and Rider WNA serve different purposes and do not overlap.

Rider WNA and Rider RNA effectively work together to provide revenue stability. By recovering or refunding the impact of weather through the WNA, the RNA would be limited to recovering distribution revenues that deviate from test year benchmark distribution revenues

exclusive of distribution revenues adjusted through Rider WNA. The WNA and RNA mechanisms avoid double counting adjustments in the RNA because BDRB levels are based upon normal weather and ADRB will include monthly Rider WNA adjustments. Thus, the RNA will only capture any difference net of weather. Columbia St. No. 3, p. 24.

Although Rider RNA could serve the purpose of adjusting revenues for normal weather, Rider WNA does it more efficiently. The WNA applies to each individual customer's consumption and usage patterns thereby avoiding any cross-subsidization. The WNA is billed in real time, so there is no lag in refund or recovery due to weather variances. There is also no need for a reconciliation adjustment through the WNA. Columbia St. No. 3, p. 24.

Contrary to the arguments of OCA, I&E, CAAP and CAUSE-PA, the RNA benefits Columbia and its customers by achieving greater revenue stability while allowing customers to experience the benefit of controlling their usage and conserving. Columbia's proposed RNA should be approved.

2. Small C&I Customer Rate Design

For Small General Service customers using less than or equal to 6,440 therms annually, the customer charge studies produce a range of customer costs from \$25.87 (excluding mains) to \$60.16 (including mains). Columbia Exhibit No. 111, Schedule 1, pp. 16, 25. Columbia's proposed customer charge of \$30.00 falls just above the bottom of the range of costs. Columbia proposes a volumetric rate of \$5.4497/Dth for SGS-1/SCD-1 service and \$5.3413/Dth for SGDS-1 service. Columbia St. No. 3, pp. 36-37.

For Small General Service customers using between 6,440 and 64,400 therms annually, Columbia proposes a customer charge of \$60.00, which is \$12.00 more than the current \$48.00 customer charge. The customer charge studies produced a range of costs from \$43.99 (excluding

mains) to \$108.42 (including mains). The Company proposes a volumetric charge of \$4.7467/Dth for SGS-2/SCD-2 service and \$4.6384/Dth for SGDS service.

OSBA witness Mr. Knecht agrees with the Company's proposed customer charges for Small C&I customers because they are cost justified at the full revenue requirement. OSBA St. No. 1, pp. 32-33. I&E recommends that the customer charges for these classes be lowered to reflect a customer charge that does not include the cost of mains. I&E St. No. 3, pp. 21-23. As explained above, it is appropriate to include a customer component of mains in the minimum system charge study. Moreover, I&E's recommendation is inconsistent with sound ratemaking principles because I&E proposes a customer charge for SGS-2 customers (\$45) that is **lower** than the customer charges at present rates (\$48). Columbia Exhibit MJB-2R.

Columbia's current and proposed customer charges for these classes fall within the range of the two customer charge studies and are well below the minimum system charges shown in the customer charge study including mains. Columbia Exhibit No. 111, Schedule 1, p. 16, ln. 41. Columbia's proposed customer charges for Small C&I customers are reasonable and should be approved.

3. Large C&I Customer Rate Design

The proposed SDS/LGSS customer charge for customers whose usage is between 64,400 therms and 110,000 therms is \$290.00. The \$290.00 is \$60.25 more than the current SDS/LGSS customer charge of \$229.75. The proposed SDS/LGSS customer charge for customers whose usage is between 110,000 therms and 540,000 therms is \$940.00. The \$940.00 is \$182.66 more than the current SDS/LGS customer charge of \$757.34. The volumetric base rate will be \$3.3081/Dth for SDS/LGSS customers whose usage is between 64,400 therms and 110,000 therms and \$3.0928/Dth for SDS/LGSS for customers whose usage is between 110,000 therms and 540,000 therms. Columbia St. No. 3, pp. 37-38. As with the Small C&I class, I&E

recommends that the proposed customer charges for the SDS/LGSS class be reduced based on a customer cost analysis that does not include the cost of mains. I&E St. No. 3, p. 23. Again, as explained in Section B above, it is appropriate to include a customer component of mains in the minimum system charge study.

The table below shows the proposed and current customer charges for the LDS/LGSS rate class:

| Annual Usage Levels | Current Cust. Charge | Proposed Cust. Charge |
|-----------------------------------|----------------------|-----------------------|
| > 540,000 to ≤ 1,074,000 Therms | \$1,947.06 | \$2,419.00 |
| > 1,074,000 to ≤ 3,400,000 Therms | \$3,028.76 | \$3,759.00 |
| > 3,400,000 to ≤ 7,500,000 Therms | \$5,841.18 | \$7,248.00 |
| > 7,500,000 Therms | \$8,653.60 | \$10,728.00 |

Columbia St. No. 3, p. 38. Columbia proposes that the volumetric base rate revenue requirement be split among the LDS/LGSS annual usage groups proportionately based on revenue produced from current volumetric base rates. See Exhibit 103, Schedule 8, Page 8, Lines 29 through 32. I&E stated that it is not recommending any changes to the proposed customer charges for the LDS class because higher usage customers generally favor a higher fixed charge and lower usage charges. I&E St. No. Cline, p. 23. Aside from CII witness Mr. Plank expressing his general view that the overall proposed increase in charges to Rate LDS customers should be limited, no other party recommended any changes to the proposed customer charges for the LDS/LGSS class. CII St. No. 1, p. 7.

Columbia's proposed customer charges for the Large C&I class are reasonable and should be approved.

4. Gas Procurement Charge Rider

Columbia proposes a Gas Procurement Charge (“GPC”) of \$0.00102 per therm. Columbia Exhibit No. MJB-3 shows the calculation of the proposed GPC. No party challenged the Company’s proposed GPC. The GPC of \$0.00102 per therm should be approved.

E. BILL IMPACTS

At the Company’s proposed revenue requirement, a typical Residential sales customer using 70 therms of gas per month will see an increase in their monthly bill from \$89.13 at current rates to \$104.80, or by 17.58%. A Small C&I customer using 150 therms of gas per month will see an increase in their monthly bill from \$142.35 to \$164.18, or by 15.34%. The class average bill impacts of the Company’s proposed rate increase are shown on Exhibit No. 103, Schedule 8, page 1, column 7. Graphs of the bill impacts for Residential and C&I customers are provided in Exhibit No. 111, Schedule 5, pages 1-10.

On August 20, 2020, the Commission issued an Order in this docket granting Columbia’s Petition for Reconsideration and ordering that the base rates resulting from this proceeding be effective as of the end of the statutory suspension period under Section 1308(d) of the Public Utility Code. Thus, the effective date of rates is January 23, 2021. *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2020-3018835 (Order entered August 20, 2020). In its Order, the Commission directed that the parties address the following two items: 1) the appropriate amount of rate recovery starting from the end of the Section 1308(d) suspension period, January 23, 2021, until the date the final rates are approved in a final Commission order and take effect in the utility’s compliance tariff filing; and (2) the appropriate mechanism for implementing such rate recovery. *Id.*

As Columbia explained, the appropriate amount of rate recovery for the period between the effective date of rates and the date on which new rates go into effect is not known at this time

and is not needed in advance of back billing. Back billing will not change the amount of rate recovery for this period. It will only delay the billing of any incremental revenue due to a Commission-approved rate increase until a customer's bill is issued for the subsequent month. Simply put, the Company will apply the Commission-approved rates to prior billed usage, and the back billing amount will be the difference between the amount calculated at new rates and amounts actually billed previously at old rates. Columbia St. No. 3-R, p. 37.

Columbia will not need a special rate mechanism to accomplish its proposed recovery method. Once new base rates are approved and entered in Columbia's billing system, customer-specific billing adjustments will be calculated and added to each customer's bill. The individual billing adjustments will be computed using each customer's consumption for the appropriate period. Notably, this is the same process that is used when compliance rates are not approved until after the effective date of new rates in a base rate case. Although the back billing amount will be specific to each customer, for illustrative purposes, at the Company's proposed rates, a Residential customer using 10 therms in a winter month would owe an additional \$7.59. Columbia St. No. 3-R, p. 38. No party objected to Columbia's proposed method of recovery, and it should be approved.

XI. CONCLUSION

For all of the foregoing reasons, Columbia Gas of Pennsylvania, Inc. respectfully request that Administrative Law Judge Katrina L. Dunderdale and the Pennsylvania Public Utility Commission approve the rate increase and other proposals set forth in Supplement No, 307 to Tariff Gas – PA. P.U.C. No. 9.

Respectfully submitted,

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Date: October 16, 2020

APPENDIX “A”

COLUMBIA GAS OF PENNSYLVANIA, INC.
RATE OF RETURN BY CLASS - PROFORMA @ PROPOSED RATES
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2021

**ALLOCATED COST OF SERVICE
CUSTOMER/DEMAND**

111, SCHEDULE 1
PAGE 1 OF 30
WITNESS: C. E. Notestone

| LINE NO. | ACCOUNT TITLE (A) | ALLOC ACTO! (B) | TOTAL COMPANY (C) \$ | RSS/RDS (D) \$ | SGS/DS-1 (E) \$ | SGS/DS-2 (F) \$ | SDS/LGSS (G) \$ | LDS/LGSS (H) \$ | MLDS (I) \$ | FLEX (J) \$ |
|----------|--|-----------------------|-------------------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------|-------------------|
| 1 | TOTAL REVENUE [PAGE 6] | | 673,206,904 | 492,315,933 | 58,303,248 | 66,104,071 | 31,280,980 | 19,530,575 | 769,015 | 4,903,083 |
| 2 | PRODUCTS PURCHASED [PAGE 7] | | 138,934,976 | 101,762,719 | 15,832,726 | 17,393,102 | 3,729,634 | 0 | 216,795 | 0 |
| 3 | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] | | 199,414,378 | 165,866,884 | 14,078,921 | 8,785,572 | 4,347,085 | 3,095,105 | 16,768 | 3,224,042 |
| 4 | DEPRECIATION & AMORTIZATION [PAGE 5] | | 98,832,789 | 77,632,412 | 8,150,496 | 5,769,807 | 2,874,296 | 2,032,673 | 29,146 | 2,343,959 |
| 5 | TAXES OTHER THAN INCOME [PAGE 9] | | <u>3,829,403</u> | <u>3,069,198</u> | <u>315,850</u> | <u>201,069</u> | <u>97,479</u> | <u>69,461</u> | <u>272</u> | <u>76,074</u> |
| 6 | TOTAL EXPENSES & TAXES OTHER THAN INCOME | | 441,011,546 | 348,331,213 | 38,377,993 | 32,149,550 | 11,048,494 | 5,197,239 | 262,981 | 5,644,076 |
| 7 | OPERATING INCOME BEFORE TAXES | | 232,195,358 | 143,984,720 | 19,925,255 | 33,954,520 | 20,232,486 | 14,333,336 | 506,034 | (740,993) |
| 8 | INCOME TAXES | | 40,818,965 | 23,837,884 | 3,530,086 | 6,773,201 | 4,100,219 | 2,911,168 | 103,769 | (437,362) |
| 9 | INVESTMENT TAX CREDIT | 12 | <u>(257,415)</u> | <u>(200,887)</u> | <u>(21,293)</u> | <u>(15,569)</u> | <u>(7,759)</u> | <u>(5,475)</u> | <u>(57)</u> | <u>(6,376)</u> |
| 10 | NET INCOME TAXES | | 40,561,550 | 23,636,998 | 3,508,793 | 6,757,633 | 4,092,460 | 2,905,693 | 103,712 | (443,739) |
| 11 | OPERATING INCOME | | 191,633,808 | 120,347,722 | 16,416,463 | 27,196,887 | 16,140,026 | 11,427,643 | 402,322 | (297,255) |
| 12 | RATE BASE [PAGE 10] | | 2,401,427,019 | 1,868,575,092 | 197,728,098 | 148,737,903 | 73,768,688 | 51,614,826 | 494,255 | 60,508,156 |
| 13 | RATE OF RETURN EARNED ON RATE BASE | | 7.980% | 6.441% | 8.303% | 18.285% | 21.879% | 22.140% | 81.400% | -0.491% |
| 14 | UNITIZED RETURN | | 1.00 | 0.81 | 1.04 | 2.29 | 2.74 | 2.77 | 10.20 | (0.06) |

COLUMBIA GAS OF PENNSYLVANIA, INC.
RATE OF RETURN BY CLASS - CURRENT @ CURRENT RATES
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2021

**ALLOCATED COST OF SERVICE
CUSTOMER/DEMAND**

**111, SCHEDULE 1
PAGE 2 OF 30
WITNESS: C. E. Notestone**

| <u>LINE NO.</u> | <u>ACCOUNT TITLE</u> (A) | <u>ALLOC FACTOR</u> (B) | <u>TOTAL COMPANY</u> (C) \$ | <u>RSS/RDS</u> (D) \$ | <u>SGS/DS-1</u> (E) \$ | <u>SGS/DS-2</u> (F) \$ | <u>SDS/LGSS</u> (G) \$ | <u>LDS/LGSS</u> (H) \$ | <u>MLDS</u> (I) \$ | <u>FLEX</u> (J) \$ |
|-----------------|--|----------------------------|-----------------------------------|-----------------------------|------------------------------|------------------------------|------------------------------|------------------------------|--------------------------|--------------------------|
| 1 | TOTAL REVENUE [PAGE 6] | | 572,769,575 | 419,776,113 | 49,915,129 | 56,451,064 | 25,614,810 | 15,356,388 | 768,756 | 4,887,314 |
| 2 | PRODUCTS PURCHASED [PAGE 7] | | 138,934,976 | 101,762,719 | 15,832,726 | 17,393,102 | 3,729,634 | 0 | 216,795 | 0 |
| 3 | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] | | 198,274,043 | 165,043,289 | 13,983,685 | 8,675,975 | 4,282,753 | 3,047,713 | 16,765 | 3,223,863 |
| 4 | DEPRECIATION & AMORTIZATION [PAGE 5] | | 98,832,789 | 77,632,412 | 8,150,496 | 5,769,807 | 2,874,296 | 2,032,673 | 29,146 | 2,343,959 |
| 5 | TAXES OTHER THAN INCOME [PAGE 9] | | <u>3,829,403</u> | <u>3,069,198</u> | <u>315,850</u> | <u>201,069</u> | <u>97,479</u> | <u>69,461</u> | <u>272</u> | <u>76,074</u> |
| 6 | TOTAL EXPENSES & TAXES OTHER THAN INCOME | | 439,871,211 | 347,507,618 | 38,282,757 | 32,039,953 | 10,984,162 | 5,149,847 | 262,978 | 5,643,897 |
| 7 | OPERATING INCOME BEFORE TAXES | | 132,898,364 | 72,268,496 | 11,632,372 | 24,411,111 | 14,630,648 | 10,206,541 | 505,778 | (756,582) |
| 8 | INCOME TAXES [PAGE 11] | | 16,511,959 | 6,282,402 | 1,500,063 | 4,437,061 | 2,728,940 | 1,900,966 | 103,706 | (441,178) |
| 9 | INVESTMENT TAX CREDIT | 12 | <u>(257,415)</u> | <u>(200,887)</u> | <u>(21,293)</u> | <u>(15,569)</u> | <u>(7,759)</u> | <u>(5,475)</u> | <u>(57)</u> | <u>(6,376)</u> |
| 10 | NET INCOME TAXES | | 16,254,544 | 6,081,515 | 1,478,770 | 4,421,492 | 2,721,181 | 1,895,491 | 103,649 | (447,555) |
| 11 | OPERATING INCOME | | 116,643,820 | 66,186,981 | 10,153,602 | 19,989,619 | 11,909,467 | 8,311,050 | 402,129 | (309,028) |
| 12 | RATE BASE [PAGE 10] | | 2,401,427,019 | 1,868,575,092 | 197,728,098 | 148,737,903 | 73,768,688 | 51,614,826 | 494,255 | 60,508,156 |
| 13 | RATE OF RETURN EARNED ON RATE BASE | | 4.857% | 3.542% | 5.135% | 13.439% | 16.144% | 16.102% | 81.361% | -0.511% |
| 14 | UNITIZED RETURN | | 1.00 | 0.73 | 1.06 | 2.77 | 3.32 | 3.32 | 16.75 | (0.11) |

COLUMBIA GAS OF PENNSYLVANIA, INC.
RATE OF RETURN BY CLASS - PROFORMA @ PROPOSED RATES
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2021

**ALLOCATED COST OF SERVICE
PEAK & AVERAGE**

111, SCHEDULE 2
PAGE 1 OF 13
WITNESS: C. E. Notestone

| LINE NO. | ACCOUNT TITLE (A) | ALLOC FACTOR (B) | TOTAL COMPANY (C) \$ | RSS/RDS (D) \$ | SGS/DS-1 (E) \$ | SGS/DS-2 (F) \$ | SDS/LGSS (G) \$ | LDS/LGSS (H) \$ | MLDS (I) \$ | FLEX (J) \$ |
|----------|--|---------------------|----------------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------|-------------------|
| 1 | TOTAL REVENUE [PAGE 6] | | 673,206,904 | 492,315,735 | 58,303,250 | 66,104,117 | 31,281,018 | 19,530,633 | 769,015 | 4,903,135 |
| 2 | PRODUCTS PURCHASED [PAGE 7] | | 138,934,976 | 101,762,719 | 15,832,726 | 17,393,102 | 3,729,634 | 0 | 216,795 | 0 |
| 3 | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] | | 199,414,378 | 146,505,736 | 14,229,580 | 13,299,238 | 8,120,416 | 8,854,746 | 16,768 | 8,387,893 |
| 4 | DEPRECIATION & AMORTIZATION [PAGE 5] | | 98,832,789 | 62,623,904 | 8,267,407 | 9,267,936 | 5,799,762 | 6,497,432 | 29,146 | 6,347,201 |
| 5 | TAXES OTHER THAN INCOME [PAGE 9] | | <u>3,829,403</u> | <u>2,607,850</u> | <u>319,458</u> | <u>308,626</u> | <u>187,399</u> | <u>206,694</u> | <u>272</u> | <u>199,105</u> |
| 6 | TOTAL EXPENSES & TAXES OTHER THAN INCOME | | 441,011,546 | 313,500,209 | 38,649,171 | 40,268,902 | 17,837,211 | 15,558,872 | 262,981 | 14,934,199 |
| 7 | OPERATING INCOME BEFORE TAXES | | 232,195,358 | 178,815,526 | 19,654,079 | 25,835,214 | 13,443,807 | 3,971,761 | 506,034 | (10,031,064) |
| 8 | INCOME TAXES | | 40,818,965 | 33,003,633 | 3,458,779 | 4,636,668 | 2,313,663 | 184,549 | 103,769 | (2,882,096) |
| 9 | INVESTMENT TAX CREDIT | 12 | <u>(257,415)</u> | <u>(159,072)</u> | <u>(21,618)</u> | <u>(25,314)</u> | <u>(15,911)</u> | <u>(17,914)</u> | <u>(57)</u> | <u>(17,530)</u> |
| 10 | NET INCOME TAXES | | 40,561,550 | 32,844,561 | 3,437,161 | 4,611,354 | 2,297,752 | 166,635 | 103,712 | (2,899,626) |
| 11 | OPERATING INCOME | | 191,633,808 | 145,970,965 | 16,216,917 | 21,223,860 | 11,146,055 | 3,805,126 | 402,322 | (7,131,437) |
| 12 | RATE BASE [PAGE 10] | | 2,401,427,019 | 1,468,675,352 | 200,843,925 | 241,949,142 | 151,712,948 | 170,576,794 | 494,255 | 167,174,603 |
| 13 | RATE OF RETURN EARNED ON RATE BASE | | 7.980% | 9.939% | 8.074% | 8.772% | 7.347% | 2.231% | 81.400% | -4.266% |
| 14 | UNITIZED RETURN | | 1.00 | 1.25 | 1.01 | 1.10 | 0.92 | 0.28 | 10.20 | (0.53) |

COLUMBIA GAS OF PENNSYLVANIA, INC.
RATE OF RETURN BY CLASS - CURRENT @ CURRENT RATES
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2021

**ALLOCATED COST OF SERVICE
PEAK & AVERAGE**

111, SCHEDULE 2
PAGE 2 OF 13
WITNESS: C. E. Notestone

| LINE NO. | ACCOUNT TITLE (A) | ALLOC FACTOR (B) | TOTAL COMPANY (C) \$ | RSS/RDS (D) \$ | SGS/DS-1 (E) \$ | SGS/DS-2 (F) \$ | SDS/LGSS (G) \$ | LDS/LGSS (H) \$ | MLDS (I) \$ | FLEX (J) \$ |
|----------|--|---------------------|----------------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------|-------------------|
| 1 | TOTAL REVENUE [PAGE 6] | | 572,769,575 | 419,775,916 | 49,915,131 | 56,451,110 | 25,614,848 | 15,356,446 | 768,756 | 4,887,367 |
| 2 | PRODUCTS PURCHASED [PAGE 7] | | 138,934,976 | 101,762,719 | 15,832,726 | 17,393,102 | 3,729,634 | 0 | 216,795 | 0 |
| 3 | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] | | 198,274,043 | 145,682,141 | 14,134,344 | 13,189,641 | 8,056,084 | 8,807,354 | 16,765 | 8,387,714 |
| 4 | DEPRECIATION & AMORTIZATION [PAGE 5] | | 98,832,789 | 62,623,904 | 8,267,407 | 9,267,936 | 5,799,762 | 6,497,432 | 29,146 | 6,347,201 |
| 5 | TAXES OTHER THAN INCOME [PAGE 9] | | <u>3,829,403</u> | <u>2,607,850</u> | <u>319,458</u> | <u>308,626</u> | <u>187,399</u> | <u>206,694</u> | <u>272</u> | <u>199,105</u> |
| 6 | TOTAL EXPENSES & TAXES OTHER THAN INCOME | | 439,871,211 | 312,676,614 | 38,553,935 | 40,159,305 | 17,772,879 | 15,511,480 | 262,978 | 14,934,020 |
| 7 | OPERATING INCOME BEFORE TAXES | | 132,898,364 | 107,099,303 | 11,361,195 | 16,291,805 | 7,841,969 | (155,034) | 505,778 | (10,046,653) |
| 8 | INCOME TAXES [PAGE 11] | | 16,511,959 | 15,448,150 | 1,428,756 | 2,300,528 | 942,384 | (825,653) | 103,706 | (2,885,912) |
| 9 | INVESTMENT TAX CREDIT | 12 | <u>(257,415)</u> | <u>(159,072)</u> | <u>(21,618)</u> | <u>(25,314)</u> | <u>(15,911)</u> | <u>(17,914)</u> | <u>(57)</u> | <u>(17,530)</u> |
| 10 | NET INCOME TAXES | | 16,254,544 | 15,289,078 | 1,407,139 | 2,275,214 | 926,473 | (843,567) | 103,649 | (2,903,442) |
| 11 | OPERATING INCOME | | 116,643,820 | 91,810,224 | 9,954,057 | 14,016,591 | 6,915,496 | 688,533 | 402,129 | (7,143,210) |
| 12 | RATE BASE [PAGE 10] | | 2,401,427,019 | 1,468,675,352 | 200,843,925 | 241,949,142 | 151,712,948 | 170,576,794 | 494,255 | 167,174,603 |
| 13 | RATE OF RETURN EARNED ON RATE BASE | | 4.857% | 6.251% | 4.956% | 5.793% | 4.558% | 0.404% | 81.361% | -4.273% |
| 14 | UNITIZED RETURN | | 1.00 | 1.29 | 1.02 | 1.19 | 0.94 | 0.08 | 16.75 | (0.88) |

COLUMBIA GAS OF PENNSYLVANIA, INC.
RATE OF RETURN BY CLASS - PROFORMA @ PROPOSED RATES
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2021

ALLOCATED COST OF SERVICE
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3
PAGE 1 OF 13
WITNESS: C. E. Notestone

| LINE NO. | ACCOUNT TITLE (A) | ALLOC ACTOR (B) | TOTAL COMPANY (C) \$ | RSS/RDS (D) \$ | SGS/DS-1 (E) \$ | SGS/DS-2 (F) \$ | SDS/LGSS (G) \$ | LDS/LGSS (H) \$ | MLDS (I) \$ | FLEX (J) \$ |
|----------|--|--------------------|----------------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------|-------------------|
| 1 | TOTAL REVENUE [PAGE 6] | | 673,206,904 | 492,315,834 | 58,303,249 | 66,104,094 | 31,280,999 | 19,530,604 | 769,015 | 4,903,109 |
| 2 | PRODUCTS PURCHASED [PAGE 7] | | 138,934,976 | 101,762,719 | 15,832,726 | 17,393,102 | 3,729,634 | 0 | 216,795 | 0 |
| 3 | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] | | 199,414,378 | 156,186,657 | 14,154,077 | 11,043,228 | 6,233,234 | 5,974,199 | 16,768 | 5,806,215 |
| 4 | DEPRECIATION & AMORTIZATION [PAGE 5] | | 98,832,789 | 70,127,438 | 8,209,042 | 7,519,141 | 4,337,029 | 4,265,143 | 29,146 | 4,345,850 |
| 5 | TAXES OTHER THAN INCOME [PAGE 9] | | <u>3,829,403</u> | <u>2,838,519</u> | <u>317,641</u> | <u>254,864</u> | <u>142,438</u> | <u>138,079</u> | <u>272</u> | <u>137,589</u> |
| 6 | TOTAL EXPENSES & TAXES OTHER THAN INCOME | | 441,011,546 | 330,915,334 | 38,513,486 | 36,210,335 | 14,442,335 | 10,377,421 | 262,981 | 10,289,654 |
| 7 | OPERATING INCOME BEFORE TAXES | | 232,195,358 | 161,400,500 | 19,789,763 | 29,893,759 | 16,838,664 | 9,153,183 | 506,034 | (5,386,546) |
| 8 | INCOME TAXES | | 40,818,965 | 28,420,952 | 3,494,453 | 5,704,702 | 3,206,993 | 1,547,992 | 103,769 | (1,659,895) |
| 9 | INVESTMENT TAX CREDIT | 12 | <u>(257,415)</u> | <u>(179,977)</u> | <u>(21,456)</u> | <u>(20,441)</u> | <u>(11,836)</u> | <u>(11,694)</u> | <u>(57)</u> | <u>(11,954)</u> |
| 10 | NET INCOME TAXES | | 40,561,550 | 28,240,975 | 3,472,997 | 5,684,261 | 3,195,157 | 1,536,297 | 103,712 | (1,671,849) |
| 11 | OPERATING INCOME | | 191,633,808 | 133,159,525 | 16,316,766 | 24,209,498 | 13,643,507 | 7,616,886 | 402,322 | (3,714,696) |
| 12 | RATE BASE [PAGE 10] | | 2,401,427,019 | 1,668,608,228 | 199,286,473 | 195,353,641 | 112,738,740 | 111,096,260 | 494,255 | 113,849,421 |
| 13 | RATE OF RETURN EARNED ON RATE BASE | | 7.980% | 7.980% | 8.188% | 12.393% | 12.102% | 6.856% | 81.400% | -3.263% |
| 14 | UNITIZED RETURN | | 1.00 | 1.00 | 1.03 | 1.55 | 1.52 | 0.86 | 10.20 | (0.41) |

COLUMBIA GAS OF PENNSYLVANIA, INC.
RATE OF RETURN BY CLASS - CURRENT @ CURRENT RATES
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2021

ALLOCATED COST OF SERVICE
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3
PAGE 2 OF 13
WITNESS: C. E. Notestone

| <u>LINE NO.</u> | <u>ACCOUNT TITLE</u> (A) | <u>ALLOC FACTOR</u> (B) | <u>TOTAL COMPANY</u> (C) \$ | <u>RSS/RDS</u> (D) \$ | <u>SGS/DS-1</u> (E) \$ | <u>SGS/DS-2</u> (F) \$ | <u>SDS/LGSS</u> (G) \$ | <u>LDS/LGSS</u> (H) \$ | <u>MLDS</u> (I) \$ | <u>FLEX</u> (J) \$ |
|-----------------|--|----------------------------|-----------------------------------|-----------------------------|------------------------------|------------------------------|------------------------------|------------------------------|--------------------------|--------------------------|
| 1 | TOTAL REVENUE [PAGE 6] | | 572,769,575 | 419,776,015 | 49,915,130 | 56,451,087 | 25,614,829 | 15,356,417 | 768,756 | 4,887,341 |
| 2 | PRODUCTS PURCHASED [PAGE 7] | | 138,934,976 | 101,762,719 | 15,832,726 | 17,393,102 | 3,729,634 | 0 | 216,795 | 0 |
| 3 | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] | | 198,274,043 | 155,363,062 | 14,058,841 | 10,933,630 | 6,168,902 | 5,926,806 | 16,765 | 5,806,036 |
| 4 | DEPRECIATION & AMORTIZATION [PAGE 5] | | 98,832,789 | 70,127,438 | 8,209,042 | 7,519,141 | 4,337,029 | 4,265,143 | 29,146 | 4,345,850 |
| 5 | TAXES OTHER THAN INCOME [PAGE 9] | | <u>3,829,403</u> | <u>2,838,519</u> | <u>317,641</u> | <u>254,864</u> | <u>142,438</u> | <u>138,079</u> | <u>272</u> | <u>137,589</u> |
| 6 | TOTAL EXPENSES & TAXES OTHER THAN INCOME | | 439,871,211 | 330,091,739 | 38,418,250 | 36,100,737 | 14,378,003 | 10,330,028 | 262,978 | 10,289,475 |
| 7 | OPERATING INCOME BEFORE TAXES | | 132,898,364 | 89,684,276 | 11,496,880 | 20,350,350 | 11,236,826 | 5,026,389 | 505,778 | (5,402,135) |
| 8 | INCOME TAXES [PAGE 11] | | 16,511,959 | 10,865,469 | 1,464,430 | 3,368,562 | 1,835,713 | 537,790 | 103,706 | (1,663,711) |
| 9 | INVESTMENT TAX CREDIT | 12 | <u>(257,415)</u> | <u>(179,977)</u> | <u>(21,456)</u> | <u>(20,441)</u> | <u>(11,836)</u> | <u>(11,694)</u> | <u>(57)</u> | <u>(11,954)</u> |
| 10 | NET INCOME TAXES | | 16,254,544 | 10,685,492 | 1,442,974 | 3,348,120 | 1,823,877 | 526,095 | 103,649 | (1,675,665) |
| 11 | OPERATING INCOME | | 116,643,820 | 78,998,784 | 10,053,906 | 17,002,229 | 9,412,948 | 4,500,293 | 402,129 | (3,726,469) |
| 12 | RATE BASE [PAGE 10] | | 2,401,427,019 | 1,668,608,228 | 199,286,473 | 195,353,641 | 112,738,740 | 111,096,260 | 494,255 | 113,849,421 |
| 13 | RATE OF RETURN EARNED ON RATE BASE | | 4.857% | 4.734% | 5.045% | 8.703% | 8.349% | 4.051% | 81.361% | -3.273% |
| 14 | UNITIZED RETURN | | 1.00 | 0.97 | 1.04 | 1.79 | 1.72 | 0.83 | 16.75 | (0.67) |

APPENDIX “B”

TABLE I
Columbia Gas of Pennsylvania
INCOME SUMMARY
R-2020-3018835

| | Pro Forma Present Rates (1) | Company Adjustments (1) | Pro Forma Proposed Rates (1) | ALJ Adjustments | ALJ Pro Forma Present Rates | ALJ Revenue Increase | Total Allowable Revenues |
|-------------------------------|--------------------------------|----------------------------|---------------------------------|--------------------|-----------------------------------|----------------------------|--------------------------------|
| | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| Operating Revenue | 572,769,574 | 100,366,797 | 673,136,371 | 0 | 673,136,371 | 0 | 673,136,371 |
| Expenses: | | | | | | | |
| O & M Expense | 336,662,770 | 1,139,534 | 337,802,304 | 0 | 337,802,304 | 0 | 337,802,304 |
| Depr. & Amort. | 98,832,789 | 0 | 98,832,789 | 0 | 98,832,789 | 0 | 98,832,789 |
| Taxes, Other | 3,825,546 | 0 | 3,825,546 | 0 | 3,825,546 | 0 | 3,825,546 |
| Income Taxes: | | | | | | | |
| State | 42,372 | 4,372,962 | 4,415,334 | 0 | 4,415,334 | 0 | 4,415,334 |
| Federal | 16,226,834 | 19,919,403 | 36,146,237 | 0 | 36,146,237 | 0 | 36,146,237 |
| Total Expenses | 455,590,310 | 25,431,899 | 481,022,210 | 0 | 481,022,210 | 0 | 481,022,210 |
| Net Inc. Available for Return | 117,179,264 | 74,934,898 | 192,114,162 | 0 | 192,114,162 | 0 | 192,114,162 |
| Rate Base | 2,401,427,019 | 0 | 2,401,427,019 | 0 | 2,401,427,019 | | 2,401,427,019 |
| Rate of Return | 4.88% | | 8.00% | | | | 8.00% |

(1) Company Main Brief

TABLE I(A)
Columbia Gas of Pennsylvania
RATE OF RETURN
R-2020-3018835

| | <u>Structure</u> | <u>Cost</u> | <u>After-Tax Weighted Cost</u> | <u>Effective Tax Rate Complement</u> | <u>Pre-Tax Weighted Cost Rate</u> |
|-----------------------------|------------------|-------------|--|--|---|
| Total Cost of Debt | | | 2.07% | | |
| Long-term Debt | 42.22% | 4.73% | 2.00% _{/1} | | 2.00% |
| Short-term Debt | 3.59% | 2.06% | 0.07% _{/1} | | |
| Preferred Stock | 0.00% | 0.00% | 0.00% _{/1} | 0.753726 | 0.00% |
| Common Equity | <u>54.19%</u> | 10.95% | <u>5.93%_{/1}</u> | 0.753726 | <u>7.87%</u> |
| | <u>100.00%</u> | | <u>8.00%</u> | | <u>9.87%</u> |
| Pre-Tax Interest Coverage | 4.94 | | | | |
| After-Tax Interest Coverage | 4.00 | | | | |

_{/1} The Company used different rounding of 4 decimal places versus 8 decimal places that were originally in this presentation.

| As filed by Columbia Gas of Pennsylvania: | | | |
|---|------------------|-------------|--|
| | <u>Structure</u> | <u>Cost</u> | <u>After-Tax Weighted Cost</u> |
| Total Cost of Debt | | | 2.07% |
| Long-term Debt | 42.22% | 4.73% | 2.00% |
| Short-term Debt | 3.59% | 2.06% | 0.07% |
| Preferred Stock | 0.00% | 0.00% | 0.00% |
| Common Equity | <u>54.19%</u> | 10.95% | <u>5.93%</u> |
| | <u>100.00%</u> | | <u>8.00%</u> |

TABLE I(B)
Columbia Gas of Pennsylvania
REVENUE FACTOR
R-2020-3018835

| | |
|---|--------------------------|
| 100% | <u>1.00000000</u> |
| Less: | |
| Uncollectible Accounts Factor (*) | 0.01135370 |
| Forfeited Discounts (*) | -0.00191300 |
| Gross Receipts Tax | 0.00000000 |
| Other Tax Factors | <u>0.00000000</u> |
| | 0.99055930 |
| State Income Tax Rate (*) | <u>0.04591630</u> |
| Effective State Income Tax Rate | <u>0.04548282</u> |
| Factor After Local and State Taxes | 0.94507648 |
| Federal Income Tax Rate (*) | <u>0.21000000</u> |
| Effective Federal Income Tax Rate | <u>0.19846606</u> |
| Revenue Factor (100% - Effective Tax Rates) | <u><u>0.74661042</u></u> |

(*) Company Main Brief

TABLE III
Columbia Gas of Pennsylvania
INTEREST SYNCHRONIZATION
R-2020-3018835

| | Amount \$ |
|-------------------------------|-------------------|
| Company Rate Base Claim | 2,401,427,019 |
| ALJ Rate Base Adjustments | <u>0</u> |
| ALJ Rate Base | 2,401,427,019 |
| Weighted Cost of Debt | <u>2.07%</u> |
| ALJ Interest Expense | 49,709,539 |
| Company Claim (1) | <u>49,709,539</u> |
| Total ALJ Adjustment | 0 |
| Company Adjustment | <u>0</u> |
| Net ALJ Interest Adjustment | 0 |
| State Income Tax Rate | <u>4.59%</u> |
| State Income Tax Adjustment | <u>0</u> |
| Net ALJ Interest Adjustment | 0 |
| State Income Tax Adjustment | <u>0</u> |
| Net ALJ Adjustment for F.I.T. | 0 |
| Federal Income Tax Rate | <u>21.00%</u> |
| Federal Income Tax Adjustment | <u><u>0</u></u> |

(1) Company Main Brief

TABLE IV
Columbia Gas of Pennsylvania
CASH WORKING CAPITAL - Interest and Dividends
R-2020-3018835

| Accrued Interest | | | Preferred Stock Dividends | |
|--------------------------------|---------------------|--------------------|---------------------------|-----------------|
| | Long-Term Debt | Short-Term Debt | | |
| Company Rate Base Claim | \$2,401,427,019 | \$2,401,427,019 | Company Rate Base Claim | \$2,401,427,019 |
| ALJ Rate Base Adjustments | <u>\$0</u> | <u>\$0</u> | ALJ Rate Base Adjustments | <u>\$0</u> |
| ALJ Rate Base | \$2,401,427,019 | \$2,401,427,019 | ALJ Rate Base | \$2,401,427,019 |
| Weighted Cost of Debt | <u>2.00%</u> | <u>0.07%</u> | Weighted Cost Pref. Stock | <u>0.00%</u> |
| ALJ Annual Interest Exp. | <u>\$48,028,540</u> | <u>\$1,680,999</u> | ALJ Preferred Dividends | <u>\$0</u> |
| Average Revenue Lag Days | 0.0 | 0.0 | Average Revenue Lag Days | 0.0 |
| Average Expense Lag Days | <u>0.0</u> | <u>0.0</u> | Average Expense Lag Days | <u>0.0</u> |
| Net Lag Days | <u>0.0</u> | <u>0.0</u> | Net Lag Days | <u>0.0</u> |
| Working Capital Adjustment | | | | |
| ALJ Daily Interest Exp. | \$131,585 | \$4,605 | ALJ Daily Dividends | \$0 |
| Net Lag Days | <u>0.0</u> | <u>0.0</u> | Net Lag Days | <u>0.0</u> |
| ALJ Working Capital | \$0 | \$0 | | \$0 |
| Company Claim (1) | <u>\$0</u> | <u>\$0</u> | Company Claim (1) | <u>\$0</u> |
| ALJ Adjustment | <u>\$0</u> | <u>\$0</u> | | <u>\$0</u> |
| Total Interest & Dividend Adj. | <u>\$0</u> | | | |

(1) Company Main Brief.

TABLE V
Columbia Gas of Pennsylvania
CASH WORKING CAPITAL - TAXES
R-2020-3018835

| Description | Company Proforma Tax Expense Present Rates | ALJ Adjustments | ALJ Pro forma Tax Expense Present Rates | ALJ Allowance | ALJ Adjusted Taxes at Present Rates | Daily Expense | Net Lead/Lag Days | Accrued Tax Adjustment |
|-----------------------|--|-----------------|---|---------------|-------------------------------------|-------------------|-------------------|------------------------|
| PUC Assessment | \$0 | \$0 | \$0 | \$0 | \$0 | \$0.00 | 0.00 | \$0 |
| Public Utility Realty | \$0 | \$0 | \$0 | | \$0 | \$0.00 | 0.00 | \$0 |
| Capital Stock Tax | \$0 | \$0 | \$0 | | \$0 | \$0.00 | 0.00 | \$0 |
| State Income Tax | \$4,415,334 | \$0 | \$4,415,334 | \$0 | \$4,415,334 | \$12,096.81 | 0.00 | \$0 |
| Federal Income Tax | \$36,146,237 | \$0 | \$36,146,237 | \$0 | \$36,146,237 | \$99,030.79 | 0.00 | \$0 |
| | <u>\$40,561,571</u> | <u>\$0</u> | <u>\$40,561,571</u> | <u>\$0</u> | <u>\$40,561,571</u> | | | |
| | | | | | | ALJ Allowance | | 0 |
| | | | | | | Company Claim (1) | | <u>0</u> |
| | | | | | | ALJ Adjustment | | <u>0</u> |

(1) Company Main Brief

TABLE VI
Columbia Gas of Pennsylvania
CASH WORKING CAPITAL -- O & M EXPENSE
R-2020-3018835

| Description | Company Pro forma F.T.Y. Expense | ALJ | ALJ Pro forma Expenses | Lag Days | Lag Dollars |
|--|---|------------|------------------------------|----------------|-------------|
| Service Company | \$0 | \$0 | \$0 | 0.00 | \$0 |
| Chemicals | \$0 | \$0 | \$0 | 0.00 | \$0 |
| Group Insurance | \$0 | \$0 | \$0 | 0.00 | \$0 |
| Insurance, Other | \$0 | \$0 | \$0 | 0.00 | \$0 |
| Labor | \$0 | \$0 | \$0 | 0.00 | \$0 |
| Leased Equip./Rent | \$0 | \$0 | \$0 | 0.00 | \$0 |
| Leased Vehicles | \$0 | \$0 | \$0 | 0.00 | \$0 |
| Miscellaneous | \$0 | \$0 | \$0 | 0.00 | \$0 |
| Natural Gas | \$0 | \$0 | \$0 | 0.00 | \$0 |
| Power | \$0 | \$0 | \$0 | 0.00 | \$0 |
| Purchased Water | \$0 | \$0 | \$0 | 0.00 | \$0 |
| Telephone | \$0 | \$0 | \$0 | 0.00 | \$0 |
| Waste Disposal | \$0 | \$0 | \$0 | 0.00 | \$0 |
| Post Retirement Benefits | \$0 | \$0 | \$0 | 0.00 | \$0 |
| Pensions | \$0 | \$0 | \$0 | 0.00 | \$0 |
| | <u>\$0</u> | <u>\$0</u> | <u>\$0</u> | <u>#DIV/0!</u> | <u>\$0</u> |
| ALJ Average Revenue Lag | 0.0 | | | | |
| Less: ALJ Avg. Expense Lag | <u>#DIV/0!</u> | | | | |
| Net Difference | #DIV/0! | Days | | | |
| ALJ Pro forma O & M Expense per Day | <u>\$0</u> | | | | |
| ALJ CWC for O & M | #DIV/0! | | | | |
| Less: Company Claim (1) | <u>\$0</u> | | | | |
| ALJ Adjustment | <u>#DIV/0!</u> | | | | |
| (1) Company Main Brief | | | | | |

APPENDIX “C”

Schedule of Statements and Exhibits of Columbia Gas of Pennsylvania, Inc.

| Statement/Exhibit | Date Identified | Date Admitted |
|-------------------|-----------------|--------------------|
| Exhibit 1 | April 24, 2020 | September 24, 2020 |
| Exhibit 2 | April 24, 2020 | September 24, 2020 |
| Exhibit 3 | April 24, 2020 | September 24, 2020 |
| Exhibit 4 | April 24, 2020 | September 24, 2020 |
| Exhibit 5 | April 24, 2020 | September 24, 2020 |
| Exhibit 6 | April 24, 2020 | September 24, 2020 |
| Exhibit 7 | April 24, 2020 | September 24, 2020 |
| Exhibit 8 | April 24, 2020 | September 24, 2020 |
| Exhibit 9 | April 24, 2020 | September 24, 2020 |
| Exhibit 10 | April 24, 2020 | September 24, 2020 |
| Exhibit 11 | April 24, 2020 | September 24, 2020 |
| Exhibit 12 | April 24, 2020 | September 24, 2020 |
| Exhibit 13 | April 24, 2020 | September 24, 2020 |
| Exhibit 14 | April 24, 2020 | September 24, 2020 |
| Exhibit 15 | April 24, 2020 | September 24, 2020 |
| Exhibit 16 | April 24, 2020 | September 24, 2020 |
| Exhibit 17 | April 24, 2020 | September 24, 2020 |
| Exhibit 400 | April 24, 2020 | September 24, 2020 |
| Exhibit 402 | April 24, 2020 | September 24, 2020 |
| Exhibit 403 | April 24, 2020 | September 24, 2020 |
| Exhibit 404 | April 24, 2020 | September 24, 2020 |
| Exhibit 405 | April 24, 2020 | September 24, 2020 |

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| Exhibit 406 | April 24, 2020 | September 24, 2020 |
| Exhibit 407 | April 24, 2020 | September 24, 2020 |
| Exhibit 408 | April 24, 2020 | September 24, 2020 |
| Exhibit 409 | April 24, 2020 | September 24, 2020 |
| Exhibit 410 | April 24, 2020 | September 24, 2020 |
| Exhibit 411 | April 24, 2020 | September 24, 2020 |
| Exhibit 412 | April 24, 2020 | September 24, 2020 |
| Exhibit 413 | April 24, 2020 | September 24, 2020 |
| Exhibit 414 | April 24, 2020 | September 24, 2020 |
| GAS-COS-1 | April 24, 2020 | September 24, 2020 |
| GAS-COS-2 | April 24, 2020 | September 24, 2020 |
| GAS-COS-3 | April 24, 2020 | September 24, 2020 |
| GAS-COS-4 | April 24, 2020 | September 24, 2020 |
| GAS-COS-5 | April 24, 2020 | September 24, 2020 |
| GAS-COS-6 | April 24, 2020 | September 24, 2020 |
| GAS-COS-7 | April 24, 2020 | September 24, 2020 |
| GAS-COS-8 | April 24, 2020 | September 24, 2020 |
| GAS-COS-9 | April 24, 2020 | September 24, 2020 |
| GAS-COS-10 | April 24, 2020 | September 24, 2020 |
| GAS-COS-11 | April 24, 2020 | September 24, 2020 |
| GAS-COS-12 | April 24, 2020 | September 24, 2020 |
| GAS-COS-13 | April 24, 2020 | September 24, 2020 |
| GAS-COS-14 | April 24, 2020 | September 24, 2020 |
| GAS-COS-15 | April 24, 2020 | September 24, 2020 |

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| GAS-COS-16 | April 24, 2020 | September 24, 2020 |
| GAS-COS-17 | April 24, 2020 | September 24, 2020 |
| GAS-COS-18 | April 24, 2020 | September 24, 2020 |
| GAS-COS-19 | April 24, 2020 | September 24, 2020 |
| GAS-COS-20 | April 24, 2020 | September 24, 2020 |
| GAS-COS-21 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-1 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-2 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-3 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-4 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-5 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-6 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-7 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-8 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-9 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-10 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-11 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-12 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-13 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-14 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-15 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-16 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-17 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-18 | April 24, 2020 | September 24, 2020 |

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|------------|----------------|--------------------|
| GAS-ROR-19 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-20 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-21 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-22 | April 24, 2020 | September 24, 2020 |
| GAS-ROR-23 | April 24, 2020 | September 24, 2020 |
| GAS-RR-1 | April 24, 2020 | September 24, 2020 |
| GAS-RR-2 | April 24, 2020 | September 24, 2020 |
| GAS-RR-3 | April 24, 2020 | September 24, 2020 |
| GAS-RR-4 | April 24, 2020 | September 24, 2020 |
| GAS-RR-5 | April 24, 2020 | September 24, 2020 |
| GAS-RR-6 | April 24, 2020 | September 24, 2020 |
| GAS-RR-7 | April 24, 2020 | September 24, 2020 |
| GAS-RR-8 | April 24, 2020 | September 24, 2020 |
| GAS-RR-9 | April 24, 2020 | September 24, 2020 |
| GAS-RR-10 | April 24, 2020 | September 24, 2020 |
| GAS-RR-11 | April 24, 2020 | September 24, 2020 |
| GAS-RR-12 | April 24, 2020 | September 24, 2020 |
| GAS-RR-13 | April 24, 2020 | September 24, 2020 |
| GAS-RR-14 | April 24, 2020 | September 24, 2020 |
| GAS-RR-15 | April 24, 2020 | September 24, 2020 |
| GAS-RR-16 | April 24, 2020 | September 24, 2020 |
| GAS-RR-17 | April 24, 2020 | September 24, 2020 |
| GAS-RR-18 | April 24, 2020 | September 24, 2020 |
| GAS-RR-19 | April 24, 2020 | September 24, 2020 |

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|---------------|-----------------|--------------------|
| GAS-RR-20 | April 24, 2020 | September 24, 2020 |
| GAS-RR-21 | April 24, 2020 | September 24, 2020 |
| GAS-RR-22 | April 24, 2020 | September 24, 2020 |
| GAS-RR-23 | April 24, 2020 | September 24, 2020 |
| GAS-RR-24 | April 24, 2020 | September 24, 2020 |
| GAS-RR-25 | April 24, 2020 | September 24, 2020 |
| GAS-RR-26-REV | August 26, 2020 | September 24, 2020 |
| GAS-RR-27 | April 24, 2020 | September 24, 2020 |
| GAS-RR-28 | April 24, 2020 | September 24, 2020 |
| GAS-RR-29 | April 24, 2020 | September 24, 2020 |
| GAS-RR-30 | April 24, 2020 | September 24, 2020 |
| GAS-RR-31 | April 24, 2020 | September 24, 2020 |
| GAS-RR-32 | April 24, 2020 | September 24, 2020 |
| GAS-RR-33 | April 24, 2020 | September 24, 2020 |
| GAS-RR-34 | April 24, 2020 | September 24, 2020 |
| GAS-RR-35 | April 24, 2020 | September 24, 2020 |
| GAS-RR-36 | April 24, 2020 | September 24, 2020 |
| GAS-RR-37 | April 24, 2020 | September 24, 2020 |
| GAS-RR-38 | April 24, 2020 | September 24, 2020 |
| GAS-RR-39 | April 24, 2020 | September 24, 2020 |
| GAS-RR-40 | April 24, 2020 | September 24, 2020 |
| GAS-RR-41 | April 24, 2020 | September 24, 2020 |
| GAS-RR-42 | April 24, 2020 | September 24, 2020 |
| GAS-RR-43 | April 24, 2020 | September 24, 2020 |

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| GAS-RR-44 | April 24, 2020 | September 24, 2020 |
| GAS-RR-45 | April 24, 2020 | September 24, 2020 |
| GAS-RR-46 | April 24, 2020 | September 24, 2020 |
| GAS-RR-47 | April 24, 2020 | September 24, 2020 |
| GAS-RR-48 | April 24, 2020 | September 24, 2020 |
| GAS-RR-49 | April 24, 2020 | September 24, 2020 |
| GAS-RR-50 | April 24, 2020 | September 24, 2020 |
| GAS-RR-51 | April 24, 2020 | September 24, 2020 |
| GAS-RR-52 | April 24, 2020 | September 24, 2020 |
| GAS-RR-53 | April 24, 2020 | September 24, 2020 |
| GAS-RR-54 | April 24, 2020 | September 24, 2020 |
| GAS-RR-55 | April 24, 2020 | September 24, 2020 |
| Columbia Statement No. 1 | April 24, 2020 | September 24, 2020 |
| Exhibit MWH-1 | April 24, 2020 | September 24, 2020 |
| Columbia Statement No. 1-SR | September 16, 2020 | September 24, 2020 |
| Columbia Statement No. 1-R (Redacted) | September 24, 2020 | September 24, 2020 |
| AST-1R | September 24, 2020 | September 24, 2020 |
| AST-2R | September 24, 2020 | September 24, 2020 |
| AST-3R | September 24, 2020 | September 24, 2020 |
| AST-4R | September 24, 2020 | September 24, 2020 |
| AST-5R | September 24, 2020 | September 24, 2020 |
| AST-6R | September 24, 2020 | September 24, 2020 |
| AST-11R | September 24, 2020 | September 24, 2020 |

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| HIGHLY CONFIDENTIAL Columbia Statement No. 1-RJ (Redacted) | September 24, 2020 | September 24, 2020 |
| Columbia Statement No. 2 | April 24, 2020 | September 24, 2020 |
| Columbia Statement No. 3 | April 24, 2020 | September 24, 2020 |
| Exhibit MJB-1 | April 24, 2020 | September 24, 2020 |
| Exhibit MJB-2 | April 24, 2020 | September 24, 2020 |
| Exhibit MJB-3 | April 24, 2020 | September 24, 2020 |
| Exhibit MJB-4 | April 24, 2020 | September 24, 2020 |
| Exhibit MJB-5 | April 24, 2020 | September 24, 2020 |
| Exhibit MJB-6 | April 24, 2020 | September 24, 2020 |
| Exhibit MJB-7 | April 24, 2020 | September 24, 2020 |
| Columbia Statement No. 3-R | August 26, 2020 | September 24, 2020 |
| Exhibit MJB-1R | August 26, 2020 | September 24, 2020 |
| Exhibit MJB-2R | August 26, 2020 | September 24, 2020 |
| Columbia Statement No. 4 | April 24, 2020 | September 24, 2020 |
| Exhibit KKM-1 | April 24, 2020 | September 24, 2020 |
| Columbia Statement No. 4-R | August 26, 2020 | September 24, 2020 |
| Exhibit KKM-1R | August 26, 2020 | September 24, 2020 |
| CONFIDENTIAL Exhibit KKM-2R | August 26, 2020 | September 24, 2020 |
| Exhibit KKM-3R | August 26, 2020 | September 24, 2020 |
| Exhibit KKM-4R | August 26, 2020 | September 24, 2020 |
| Columbia Statement No. 5 | April 24, 2020 | September 24, 2020 |
| Exhibit JJS-1 | April 24, 2020 | September 24, 2020 |
| Columbia Statement No. 5-R | August 26, 2020 | September 24, 2020 |

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| Columbia Statement No. 6 | April 24, 2020 | September 24, 2020 |
| Exhibit NMS-1 | April 24, 2020 | September 24, 2020 |
| Exhibit NMS-2 | April 24, 2020 | September 24, 2020 |
| Exhibit NMS-3 | April 24, 2020 | September 24, 2020 |
| Exhibit NMS-4 | April 24, 2020 | September 24, 2020 |
| Columbia Statement No. 6-R | August 26, 2020 | September 24, 2020 |
| Columbia Statement No. 7 | April 24, 2020 | September 24, 2020 |
| Columbia Statement No. 7-R | August 26, 2020 | September 24, 2020 |
| Exhibit MJD-1R | August 26, 2020 | September 24, 2020 |
| Exhibit MJD-2R | August 26, 2020 | September 24, 2020 |
| Exhibit MJD-3R | August 26, 2020 | September 24, 2020 |
| Columbia Statement No. 8 | April 24, 2020 | September 24, 2020 |
| Exhibit PRM-1 | April 24, 2020 | September 24, 2020 |
| Columbia Statement No. 8-R | August 26, 2020 | September 24, 2020 |
| Exhibit PRM-1R | August 26, 2020 | September 24, 2020 |
| Exhibit PRM-2R | August 26, 2020 | September 24, 2020 |
| Exhibit PRM-3R | August 26, 2020 | September 24, 2020 |
| Updated Exhibit 400 | August 26, 2020 | September 24, 2020 |
| Columbia Statement No. 8-SR | September 16, 2020 | September 24, 2020 |
| Columbia Statement No. 9 | April 24, 2020 | September 24, 2020 |
| Exhibit NJDK-1 | April 24, 2020 | September 24, 2020 |
| Columbia Statement No. 9-R | August 26, 2020 | September 24, 2020 |
| Exhibit NJDK-1R | August 26, 2020 | September 24, 2020 |
| Exhibit NJDK-2R | August 26, 2020 | September 24, 2020 |

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|-------------------------------------|--------------------|--------------------|
| Exhibit NJDK-3R | August 26, 2020 | September 24, 2020 |
| Exhibit NJDK-4R | August 26, 2020 | September 24, 2020 |
| Exhibit NJDK-5R | August 26, 2020 | September 24, 2020 |
| Exhibit NJDK-6R | August 26, 2020 | September 24, 2020 |
| Exhibit NJDK-7R | August 26, 2020 | September 24, 2020 |
| 2 nd Revised Exhibit 104 | August 26, 2020 | September 24, 2020 |
| Columbia Statement No. 10 | April 24, 2020 | September 24, 2020 |
| Columbia Statement No. 11 | April 24, 2020 | September 24, 2020 |
| Exhibit CEN-1 | April 24, 2020 | September 24, 2020 |
| Exhibit CEN-2 | April 24, 2020 | September 24, 2020 |
| Exhibit CEN-3 | April 24, 2020 | September 24, 2020 |
| Exhibit CEN-4 | April 24, 2020 | September 24, 2020 |
| Columbia Statement No. 11-R | August 26, 2020 | September 24, 2020 |
| Columbia Statement No. 12 | April 24, 2020 | September 24, 2020 |
| Columbia Statement No. 12-R | August 26, 2020 | September 24, 2020 |
| Exhibit SBH-1R | August 26, 2020 | September 24, 2020 |
| Exhibit SBH-2R | August 26, 2020 | September 24, 2020 |
| Columbia Statement No. 13-R | August 26, 2020 | September 24, 2020 |
| Exhibit DAD-1R | August 26, 2020 | September 24, 2020 |
| Exhibit DAD-2R | August 26, 2020 | September 24, 2020 |
| Columbia Statement No. 13-SR | September 16, 2020 | September 24, 2020 |
| Columbia Statement No. 14 | April 24, 2020 | September 24, 2020 |
| Columbia Statement No. 14-R | August 26, 2020 | September 24, 2020 |
| Columbia Statement No. 15-R | August 26, 2020 | September 24, 2020 |

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|------------------------------|--------------------|--------------------|
| Columbia Statement No. 16-R | August 26, 2020 | September 24, 2020 |
| Exhibit JHC-1 | August 26, 2020 | September 24, 2020 |
| Exhibit JHC-2 | August 26, 2020 | September 24, 2020 |
| Columbia Statement No. 16-RJ | September 21, 2020 | September 24, 2020 |
| Exhibit JHC-3 | September 21, 2020 | September 24, 2020 |
| Exhibit JHC-4 | September 21, 2020 | September 24, 2020 |
| Columbia Statement No. 17-R | August 26, 2020 | September 24, 2020 |
| Exhibit TB-1 | August 26, 2020 | September 24, 2020 |
| Exhibit NJDK-1RJ | September 21, 2020 | September 24, 2020 |