



COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
COMMONWEALTH KEYSTONE BUILDING
400 NORTH STREET, HARRISBURG, PA 17120

BUREAU OF
INVESTIGATION
&
ENFORCEMENT

October 16, 2020

Via Electronic Filing

Secretary Rosemary Chiavetta
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

Re: Pennsylvania Public Utility Commission, v.
Columbia Gas of Pennsylvania, Inc.
Docket No: R-2020-3018835
I&E Main Brief

Dear Secretary Chiavetta:

Enclosed for electronic filing please find the **Main Brief of the Bureau of Investigation and Enforcement** for the above-captioned proceeding.

Copies are being served on parties of record per the attached Certificate of Service. *Due to the temporary closing of the PUC's offices, I&E is only providing electronic service.* Should you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Erika L. McLain". The signature is written in a cursive style.

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Enclosures

cc: Hon. Katrina L. Dunderdale, Office of Administrative Law Judge (*via email only*)
Dan Pallas, Legal Secretary, Office of Administrative Law Judge (*via email only*)
Per Certificate of Service

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

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

**MAIN BRIEF
OF THE
BUREAU OF INVESTIGATION AND ENFORCEMENT**

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Dated: October 16, 2020

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I. INTRODUCTION

A. History of the Proceeding

On March 24, 2020, Columbia Gas of Pennsylvania, Inc. (“Columbia” or “Company”) filed for a waiver of 52 Pa. Code § 53.52(b)(2) and requested a 30 day extension granting 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. The Commission granted the Company’s request via Secretarial Letter issued on March 27, 2020.

On April 24, 2020, Columbia Gas filed Supplement No. 307 to Columbia’s Gas Service Tariff – Pa. P.U.C. No. 9 (“Supplement No. 307”) in which, Columbia seeks an increase in annual distribution revenues of \$100.3 million, to become effective June 23, 2020.

On April 27, 2020, the Bureau of Investigation and Enforcement (“I&E”) filed a Notice of Appearance. The Office of Consumer Advocate (“OCA”) filed a formal complaint on May 4, 2020, and the Office of Small Business Advocate (“OSBA”) filed a formal complaint on May 5, 2020. Petitions to Intervene were filed by Communication Action Association of Pennsylvania (“CAAP”), the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (“CAUSE-PA”), the Columbia Industrial Intervenors (“CII”), and the Pennsylvania State University (“PSU”).

On May 21, 2020, the Commission issued an Order suspending Columbia’s filing by operation of law until January 23, 2021.

On May 22, 2020, Administrative Law Judge Katrina L. Dunderdale (“ALJ Dunderdale”) issued a Prehearing Conference Order scheduling a telephonic prehearing conference on June 3, 2020.

On May 29, 2020, I&E filed its Expedited Motion to Extend the Statutory Suspension Period During the Emergency Interruption of Normal Operations of the Pennsylvania Public Utility Commission (“Expedited Motion”). I&E filed its Expedited Motion in response to the ongoing Coronavirus Pandemic requesting a twelve-day extension of the suspension period from January 23, 2021 to February 4, 2021.

On May 29, 2020, ALJ Dunderdale instructed the Parties via email to file answers to I&E’s Expedited Motion by 9 a.m. on June 2, 2020. On June 2, 2020, Columbia and the OCA filed Answers to I&E’s Expedited Motion. A telephonic prehearing conference was held on June 3, 2020 with ALJ Dunderdale presiding and Chief ALJ Rainey participating. During the prehearing conference, the Parties argued their respective positions on the extension proposed in I&E’s Expedited Motion. After deliberation between Chief ALJ Rainey and ALJ Dunderdale, Chief ALJ Rainey delivered his ruling granting I&E’s Expedited Motion and extended Columbia’s statutory suspension by twelve days or until February 4, 2021. On June 3, 2020, Chief ALJ Rainey issued the Order granting I&E’s Expedited Motion.

The Parties agreed upon a procedural schedule in this matter which was presented to ALJ Dunderdale for approval on June 5, 2020. On June 12, 2020, ALJ Dunderdale issued a Prehearing Order that memorialized the agreed upon procedural schedule.

On June 23, 2020, Columbia filed its Petition for Reconsideration of the Chief Administrative Law Judge's June 3, 2020 Order Extending the Statutory Suspension Period. I&E and the OCA filed Answers to Columbia's Petition for Reconsideration on July 6, 2020 and on July 10, 2020, the OSBA filed its Answer to Columbia's Petition for Reconsideration.

Two telephonic Public Input Hearings were scheduled to take place on July 8, 2020 at 1:00 p.m. and 6:00 p.m. At the 1:00 p.m. Public Input Hearing two Columbia customers testified and ALJ Dunderdale was informed by the OCA that no one had signed up to participate for the 6:00 p.m. Public Input Hearing. Due to the lack of participants expected at the 6:00 p.m. Public Input Hearing, ALJ Dunderdale cancelled the 6:00 Public Input Hearing.

At the August 6, 2020 Public Meeting, the Commission adopted an Order denying in part and granting in part Columbia's Petition for Reconsideration.¹ The Commissioners affirmed a motion sponsored by Vice Chairman David W. Sweet that denied the Petition for Reconsideration by affirming the decision of Chief ALJ Rainey granting the Petition for Extension on June 3, 2020. Columbia's Petition for Reconsideration was granted in that the Columbia's original effective suspension date remained January 23, 2021. Furthermore, the Order directed the Office of Administrative Law Judge to issue a recommended decision on or before November 20, 2020.

On August 7, 2020, ALJ Dunderdale issued the First Interim Order in which the

¹ Columbia Gas of Pennsylvania, Inc.'s Petition for Reconsideration of Staff Action, Docket No. R-2020-3018835 (Order entered August 20, 2020).

Columbia procedural schedule was updated to reflect the recommended decision due date prescribed by the Commission's Order adopted on August 6, 2020. On August 12, 2020, in an effort to maintain the existing procedural schedule, Columbia voluntarily suspended its statutory suspension period from January 23, 2021 to February 25, 2021, with rates to go into effect January 23, 2021. ALJ Dunderdale issued the Second Interim Order on August 13, 2020 reinstating the parties original procedural schedule.

Pursuant to the procedural schedule set forth by ALJ Dunderdale's Second Interim Order, the parties exchanged direct, rebuttal, surrebuttal, and written rejoinder testimony.

I&E served the following statements of testimony and exhibits:

- I&E Statement No. 1, I&E Exhibit No. 1 (Proprietary), I&E Exhibit No. 1 (Non-Proprietary), I&E Statement No. 1-SR, the prepared direct and surrebuttal testimony and exhibits of I&E witness John Zalesky, who addressed the Company's operating and maintenance expenses, and overall revenue requirement;
- I&E Statement No. 2, I&E Exhibit No. 2, and I&E Statement No. 2-SR, the prepared direct and surrebuttal testimony and exhibit of I&E witness Christopher Keller, who addressed the Company's rate of return request;
- I&E Statement No. 3 and I&E Statement No. 3-SR the prepared direct and surrebuttal testimony of I&E witness Ethan H. Cline, who addressed the Company's rate base and rate structure requests;
- I&E Statement No. 4, I&E Exhibit No. 4, and I&E Statement No. 4-SR, the prepared direct and surrebuttal testimony and exhibit of I&E witness Lassine Niambele, who addressed the Company's pipeline safety issues;
- I&E Statement No. 5, I&E Exhibit No. 5, and I&E Statement No. 5-SR, the prepared direct and surrebuttal testimony and exhibit of I&E witness Kokou M. Apetoh, who addressed the Company's pipeline safety issues.

All cross-examination was waived by the parties and the scheduled telephonic evidentiary hearings on September 22, 2020 and September 23, 2020 were cancelled. On September 24, 2020, the parties attended the telephonic evidentiary hearing to enter evidence into the record. I&E files this Main Brief pursuant to the procedural schedule established in this case.

B. Burden of Proof

In any proceeding upon the Commission's motion involving a public utility's proposed rate or in any proceeding upon complaint involving a proposed rate increase, the burden to show that the proposed rate is just and reasonable falls squarely upon the utility.² Moreover, it is well-established that the utility must produce substantial evidence to satisfy its burden.³ Substantial evidence is "that quantum of evidence which a reasonable mind might accept as adequate to support a conclusion."⁴

In base rate cases, the Commission has affirmed the utility's burden of proof and clearly indicated that the burden of proof never shifts to the party challenging a requested rate increase.⁵ While the burden of going forward may shift, the burden of finally and

² 66 Pa. C.S. § 315(a); *Irwin A. Popowsky v. Pa. P.U.C.*, 674 A.2d 1149 (Pa. Cmwlth. 1996).

³ *See Brockaway Glass v. Pa. P.U.C.*, 437 A.2d 1067 (Pa. Cmwlth. 1981); *Lower Frederick Township v. Pa. P.U.C.*, 409 A.2d 505 (Pa. Cmwlth. 1980).

⁴ *Dutchland Tours, Inc. v. Pa. P.U.C.*, 337 A.2d 922, 925 (Pa. Cmwlth. 1975).

⁵ *See e.g. Pa. P.U.C. v. Aqua Pennsylvania, Inc.*, 236 PUR 4th 218 (2004); *Pa. P.U.C. v. Pennsylvania-American Water Company*, 2002 Pa. PUC LEXIS 1 (January 25, 2002).

convincingly establishing the justness and reasonableness of every component of a requested rate increase remains on the utility:

[t]here is no presumption of reasonableness which attached to a utility's claim, at least none which survives the raising of credible issues regarding a utility's claim. A utility's burden is to affirmatively establish the reasonableness of its claim. It is not the burden of another party to disprove the reasonableness of a utility's claims.⁶

Thus, Columbia must affirmatively prove the reasonableness of each element of each of its claims. Pursuant to Section 315(a) of the Public Utility Code, the burden of proof for all claims remains on the Company and the proponent of any adjustment need only go forward with sufficient evidence to support its reasonableness.⁷ I&E contends Columbia has failed to carry its burden of proof with respect to its proposal to increase its revenues by \$100.3 million.

II. SUMMARY OF ARGUMENT

Columbia has failed to adduce substantial credible evidence demonstrating a need for a \$100.3 million revenue increase. Based upon I&E's adjustments, the record evidence proves that Columbia is entitled to a revenue increase of no more than \$75.9 million. This recommendation is based upon the adjustments offered by I&E, as set forth more fully herein and summarized in the tables attached hereto as Appendix "A."

⁶ *Pa. P.U.C. v. Equitable Gas Company*, 57 Pa. P.U.C. 423, 444, note 37 (1983).

⁷ *Pa. P.U.C. v. West Penn Power Company*, 69 P.U.R.4th 470, 59 Pa.P.U.C. 552 (1985).

A. Rate Base

I&E witness Ethan Cline provided testimony recommending that Columbia provide the Commission’s Bureaus of Technical Utility Services (“TUS”) and I&E an update to certain schedules no later than April 1, 2021 and April 1, 2022, reflecting capital expenditures, plant additions, and retirements by month for the future test year (“FTY”) and fully projected future test year (“FPFTY”), respectively. I&E witness Cline explained, while the FPFTY allows projections, there should be verification of the projections. In rebuttal testimony, the Company agreed to provide the updates to the schedules requested by I&E witness Cline.

B. Revenue Allocation/Rate Design

I&E witness Cline’s testimony provided recommendations for Columbia’s flex-rate customers, the Company’s weather normalization adjustment (“WNA”) and the revenue normalization adjustment (“RNA”) proposals.

In regard to Columbia’s flex-rate customers, I&E witness Cline recommends Columbia provide an update to the competitive alternative analysis for any customer that has not had their alternative fuel source verified for a period of 10 years or more at the point at which Columbia files its next base rate case. Mr. Cline explains that it is important to periodically analyze competitive alternatives to ensure that the rates of flex-rate customers are not discounted lower than is necessary to avoid the customer choosing the alternative supply. Providing excessive discounts to customers is not in the public interest and would be harmful to both the Company and its customers because it is the

other customers that ultimately make up the lost revenue that results when flex-rate customers pay less than tariff rates.

I&E witness Cline recommends that the Company's proposal to remove the 3% deadband to its WNA be denied. Columbia's WNA proposal is a tariff provision that allows the Company to adjust Commission-approved rates in between rate cases is a departure from traditional ratemaking and such a departure should only occur due to circumstances that are an extraordinary departure from normal operating conditions. Mr. Cline submits that the 3% deadband represents a range of what can be considered "normal" weather and that the WNA with the 3% deadband achieves the Company's stated goal of eliminating revenue and bill variations due to warmer and colder than normal weather. Additionally, Columbia failed to provide any support to show that weather variations within 3% above or below an established base line could or should not be considered "normal" weather.

Finally, I&E witness Cline recommends that Columbia's RNA proposal be rejected for two reasons: (1) the Company is permitted to build into its revenue requirement an adjustment for revenue lost due to a decline in usage that is projected to occur after rates go into effect through Act 11 and the FPFTY; and (2) the purpose of revenue stabilization is to remove the inherent risk of not recovering the full amount of revenue requirement allowed by the Commission due to changes in usage. Columbia fails to demonstrate the need for further revenue stabilization measures due to its filing of frequent base rate cases, utilization of the FPFTY, the DSIC, and WNA provision.

Additionally, the Company has not indicated that the RNA will result in fewer base rate increases, in which would provide some benefit to its customers.

C. Expenses

I&E witness John Zalesky recommends downward adjustments to Columbia's as-filed expense claims for Rate Case Expense, Labor Expense, Other Employee Benefits, Incentive Compensation, FICA Taxes and PUC, OCA, OSBA Fees. As demonstrated by I&E witness Zalesky, Columbia did not provide an adequate basis to prove these particular expense claims are just and reasonable.

D. Rate of Return

I&E witness Christopher Keller calculates a fair rate of return for Columbia is 7.41%. I&E witness Keller adopted Columbia witness Paul Moul's capital structure, cost of long-term debt and cost of short-term debt. Therefore, the sole issue in dispute is a fair return on common equity. I&E witness Keller calculated a 9.86% return on equity. As endorsed by the Commission, I&E witness Keller's analysis primarily relies on his Discount Cash Flow ("DCF") analysis, with use of the Capital Asset Pricing Model ("CAPM") as a comparison.

I&E witness Keller submits Columbia witness Moul significantly overstates a just and reasonable return for the Company, reflecting a 10.95% return on equity. First, Columbia witness Moul uses a flawed proxy group. Second, Columbia witness Moul improperly gives other methods equal weighting to his DCF analysis. The Commission has clearly stated the DCF method should be the primary method to determine cost of common equity. Additionally, as part of his flawed use of various methods, Columbia

witness Moul inappropriately (1) assigns weights to the results of CAPM, RP, and CE analyses; (2) assigns Columbia risk; (3) applies a growth rate and leverage adjustment to the DCF; (4) includes of a size adjustment; (5) relies on the 30-year Treasury Bond for his risk-free rate; and (6) uses of a double-adjusted beta in his CAPM analysis. Finally, Mr. Moul unjustly claims that Company's return on equity should be adjusted upwards by 20 basis points for "strong management performance."

I&E witness Keller submits evidence demonstrating a size and leverage adjustment for Columbia is inappropriate. Regarding a performance factor adjustment, I&E witness Keller opines, for any company, true management effectiveness is earning a higher return through its efficient use of resources and cost cutting measures. Further, I&E witness Keller states Columbia should not be granted additional basis points for doing what it is required to do in order to provide adequate, efficient, safe, and reasonable service.

E. Pipeline Replacement Issues

I&E witnesses Lassine Niambele and Kokou Apetoh provided testimony addressing various pipeline safety issues including the Company's Distribution Integrity Management Plan ("DIMP"), pipeline replacement, pipeline replacement costs, and leaks and risk reduction.

I&E witness Niambele addressed issues with the Company's DIMP and recommended the Company update its current DIMP to include an explanation on how the Company determines its DIMP risk scores and to also include all available historical data when developing a DIMP risk score.

After review of the Company's current Long-Term Infrastructure Improvement ("LTIIIP") and based upon current levels of pipeline replacement yet to be completed and the Company's progress to date, I&E witness Niambele recommended the Company to increase its pipeline replacement efforts to meet the 2029 LTIIIP goal.

Due to concerns on increasing replacement costs, I&E witness Niambele recommended that Columbia draft a cost reduction plan to be submitted to I&E Pipeline Safety Division within the 60 days of the final Order in this proceeding. However, I&E recognizes the efforts Columbia is making to address this issue and reduce replacement costs. I&E witness Niambele updated his recommendation and now recommends that until the conclusion of the Company's next base rate proceeding, Columbia and I&E's Pipeline Safety Division meet annually for a status update of those efforts. I&E Pipeline Safety would use this meeting to discuss replacement cost reduction strategies and best practices the Company is using to reduce all costs.

Finally, I&E witness Apetoh addresses the Company's leaks and risk reduction. Mr. Apetoh makes three recommendations regarding leaks and risk reduction including the recommendation that the Company perform a root cause analysis, update its maps and records, and address its failed field-assembled risers.

I&E witness Apetoh explains a root cause analysis is generally accepted in the industry and provides a great amount of detail necessary to pinpoint the exact cause or causes of leakage increases. Due to Columbia's increase in leaks on its system it is reasonable for Columbia to perform this root cause analysis to address the specific reason for leak increases. I&E witness Apetoh also recommended that the Company finish

updating its maps and records in order to reduce excavation damages to its pipeline system. The Company has agreed to keep I&E Pipeline Safety apprised of its updating status.

Finally, due to the increase in failed field-assembled risers, witness Apetoh recommended that the Company complete updating its records, which would allow Columbia to identify the locations of all field-assembled risers including those on customer-owned service lines. Additionally, Mr. Apetoh recommended, Columbia complete the inspection of all field-assembled risers in the Company's system as soon as possible and develop a plan to replace all of the field-assembled risers in its system, including those on customer-owned service lines.

F. Cost of Service/Customer Charge

I&E witness Cline provided testimony on the Company's Allocated Cost of Service Studies ("ACOS") as well as the customer cost analysis, customer charge, and a scale-back of rates. Columbia presented three ACOS studies with its filing, peak and average, customer-demand, and an average of the peak and average and customer-demand studies. I&E witness Cline recommends adopting the Company's peak and average study to allocate the final revenue increases among the different customer classes. I&E witness Cline bases his recommendation on the fact that peak and demand is reasonable and based upon the Commission's previous acceptance of the peak and average methodology and its rejection of including the cost of distribution mains as a customer cost.

Columbia prepared and provided two customer cost analysis with its filing, one allocates a portion of the cost of mains to customers and the second of the does not allocate any portion of the cost of mains to customers. Based on Commission precedent, I&E witness Cline recommend the Company's customer cost analysis that includes the cost of mains be rejected.

I&E witness Cline accepted the customer charge proposed by the Company for the RS/RDS/RCC and LDS classes and recommended a reduction to the SGSS1, SGSS2 and SDS /LGSS classes. I&E witness Cline explains that each Pennsylvania natural gas distribution company has its own specific costs and allocation of these costs produces different results and that the rates of each company should be determined based on the facts and data specific to that company and as such, Mr. Cline based his recommendations to the SGSS1, SGSS2 and SDS /LGSS classes on the customer cost analysis using data specific to this case.

Lastly, I&E witness recommends that if less than the full increase is granted, all customer charges and usage rates that have been proposed an increase are scaled back proportionately based on the allocated cost of service study that is ultimately approved by the Commission.

III. OVERALL POSITION ON RATE INCREASE

I&E recommends an overall rate increase of \$75.9 million. This recommended increase incorporates all of I&E's adjustments to rate base, expenses, taxes, and rate of return. More detail on I&E's overall position is provided in the tables attached to I&E's Main Brief.

IV. RATE BASE

A. Plant in Service FPFTY Plant Additions

1. Reporting Requirements

I&E recommends that the Company provide TUS and I&E with an update to Columbia Exhibit No. 108, Schedule 1 no later than April 1, 2021, under this docket number, which should include actual capital expenditures, plant additions, and retirements by month for the twelve months ending November 30, 2020. An additional update should be provided for actuals through December 31, 2021.⁸

I&E witness Cline explains that there is value in determining how closely Columbia's projected investments in future facility comport with the actual investments that are made by the end of the FTY and FPFTY. Determining the correlation between Columbia's projected and actual results will help inform the Commission and the parties in Columbia's future rate cases as to the validity of Columbia's projections. Mr. Cline further acknowledges the importance for Columbia, in particular, to provide these reports due to Columbia's use of a 13-month FPFTY in which an annual report may not include the full thirteen months of actual rate base addition information.⁹

In rebuttal testimony, Company witness Schultz stated that the Company was agreeable to the recommendation of providing an update to Columbia Exhibit 108, Schedule 1 on April 1, 2021 based on actuals for the twelve months ending November

⁸ I&E Statement No. 3, p. 3.

⁹ I&E Statement No. 3, p. 4.

30, 2020 and a further update on April 1, 2022 based on actuals through December 31, 2021.¹⁰

Based upon the foregoing, I&E's recommendation for Columbia to provide updates to Columbia's Exhibit 108 based on actual capital expenditures, plant additions, and retirements for the FTY and FPFTY has been accepted by the Company. Therefore, I&E requests that the ALJ recommend and the Commission approve I&E's reporting requirement for Columbia.

B. Cloud-Based Computing

I&E has not proposed a rate base adjustment for cloud-based computing.

C. Depreciation Reserve

I&E has not proposed a rate base adjustment for depreciation reserve.

D. ADIT

I&E has not proposed a rate base adjustment for ADIT.

V. REVENUE

I&E has not proposed any revenue adjustments.

VI. EXPENSES

A public utility is entitled to recover all of its reasonably incurred expenses necessary to provide service to customers.¹¹ Accordingly, Operating and Maintenance ("O&M") expenses, if properly incurred, may justly inform a rate increase proposal. However, if expenses are unreasonable, e.g., overstated, abnormal, unnecessary, or

¹⁰ Columbia Statement No. 6-R, p. 3.

¹¹ *Butler Township Water Company v. Pa. P.U.C.*, 473 A.2d 219, 221 (Pa. Cmwlth. 1984); *UGI Corp. v. Pa. P.U.C.*, 410 A.2d 923, 932 (Pa. Cmwlth. 1980); *Western Pennsylvania Water Company v. Pa. P.U.C.*, 422 A.2d 906, 908 (Pa. Cmwlth. 1980).

simply have not been incurred for the test year, they should not be relied upon. As explained above, the Company has the burden of proof regarding the justness and reasonableness of each expense.

A. Labor Expense

I&E recommends a reduction of \$3,053,528¹² to the Company's updated claim of \$39,424,022 for Labor Expense. I&E's recommendation is based on two adjustments: (1) an annualization adjustment and (2) an employee vacancy adjustment.¹³

1. Annualization Adjustment

I&E recommends the disallowance of the Company's entire as-filed claim of \$546,602 for the pay increase annualization adjustment as included in the FPFTY labor expense claim. Columbia's FPFTY labor expense claim includes a budgeted adjustment for merit pay increases to become effective in different months throughout the FPFTY, it also includes a ratemaking annualization adjustment for including a full year's pay increase in the 12-month period.¹⁴

I&E witness Zalesky explains that by annualizing FPFTY pay increase, the Company is claiming the full labor expense that would occur if the variably occurring pay increases all occurred on day one of the FPFTY.¹⁵ A revenue requirement calculated on this basis would recover, dollar-for-dollar, an expense level for labor expense that will never be reached in the FPFTY. Witness Zalesky further explains that the Company's proposed annualization adjustment would result in an unfair and unreasonable burden on

¹² I&E Statement No. 1-SR, p. 12.

¹³ I&E Statement No. 1, p. 8.

¹⁴ I&E Statement No. 1, p. 8.

¹⁵ I&E Statement No. 1, p. 9.

ratepayers by establishing an expense recovery in its revenue requirement that is not reflective of actual FPFTY expenses.¹⁶

In rebuttal, Columbia witness Miller argues that the Company annualizes labor expense in order to match annualized revenue, terminal rate base, and annualized expenses and that future wage increases are known for the FPFTY and annual merit pay increases are expected to continue to occur in the FPFTY. Ms. Miller notes that cost recovery through base rates is not designed to recover expenses dollar-for-dollar like a reconciling tracker mechanism. Lastly, Columbia witness Miller states that annualization of labor costs to end-of-year conditions was approved in the 2018 UGI Electric Case.¹⁷

I&E witness Zalesky disagrees with Ms. Miller and states that the revised pay increase annualization adjustment of \$564,602 is an unfair and unreasonable burden on ratepayers because the Company's revenue requirement does not accurately reflect FPFTY expenses. Mr. Zalesky finds Ms. Miller's comparison to a reconciling tracker mechanism inappropriate because the pay increase annualization claim includes more expenses than will actually occur in the FPFTY. Finally, Mr. Zalesky appropriately points out that the Commission's decision to annualize labor costs to end-of-year conditions in the 2018 UGI Electric Base Rate Case does not ensure that Columbia has proven its claim for an annualization adjustment in the instant proceeding.¹⁸

Based on the reasons stated above, I&E continues to recommend that the Company's entire as-filed claim for an annualization adjustment be denied.

¹⁶ I&E Statement No. 1, pp. 9-10.

¹⁷ Columbia Statement No. 4-R, pp. 7-8.

¹⁸ I&E Statement No. 1-SR, pp. 7-8.

2. Employee Complement

Typically, companies have a certain level of employee vacancies on a day to day operating basis due to retirements, resignations, transfers, layoffs, etc., that are unpredictable. Such vacancies will yield an annual savings in the Company's payroll and benefit costs that need to be reflected for ratemaking.¹⁹ I&E recommends an employee vacancy adjustment of 53 employees resulting in a reduction of \$2,506,926 to the Company's claim.²⁰

To determine the appropriate employee vacancy adjustment, Mr. Zalesky reviewed the Company's monthly history of vacant positions for the fiscal years 2017, 2018, 2019, and 2020. For each month of those three years he calculated the vacancy rate by dividing the actual employee vacancies by the employee count which was averaged to determine the annual vacancy rate for each year. The average annual vacancy rate for each of those three years is calculated at 6.44% which was applied to the FPFTY total budgeted positions of 839²¹ yielding an average of 54 positions. I&E witness Zalesky then multiplied the vacancies by the average payroll and benefit costs to produce I&E's recommended adjustment.²²

Company witness Krajovic disagreed with I&E's recommendation regarding the employee vacancy adjustment in rebuttal testimony and also updated Company schedules due to mathematical errors, this included an update to Columbia's FPFTY total budgeted

¹⁹ I&E Statement No. 1, p. 10.

²⁰ I&E Statement No. 1-SR, p. 11.

²¹ Columbia's filing at SDR-GAS-RR-26, Attachment A.

²² I&E Statement No. 1, pp. 10-11.

positions now shown to be 822.²³ Ms. Krajovic asserts that budgeted labor expense is driven largely by the Field Operations Work Plan that requires work to get done despite vacancies using overtime and contracted labor. Further, labor expense is based on projected headcount, which is considered within the context of overtime and outside services being used to accomplish the tasks outlined in the Field Operations Work Plan.²⁴

I&E witness Zalesky correctly points out that based on the Company's data, a certain level of ongoing vacancies due to normal retirements, resignations, transfers, layoffs, etc., exist on a day-to-day operating basis.²⁵ It is, therefore, unreasonable to assume that the Company will maintain 100% full staffing in the FPFTY. Further, there will always be search and placement time involved in filling employee vacancies as per the Company's vacancy-filling or hiring procedures.²⁶

I&E witness Zalesky addresses three flaws in the Company's argument: (1) Columbia failed to reflect a reduction in its budgeted amounts due to ongoing vacancies in the labor cost; (2) the Company has not clearly demonstrated how the use of contractors or overtime has not already been reflected in the Company's claim amounts because the Company's historic results included vacancies that would have presumably included the corresponding impact to contract labor and overtime as necessary to meet field work requirements; and (3) Columbia's argument that vacant positions

²³ Columbia Exhibit No. NJDK-5-R, p. 3.

²⁴ Columbia Statement No. 9-R, pp. 18-19.

²⁵ I&E Statement No 1-SR, p. 9; I&E Exhibit No. 1, Schedule 3, p. 6 PROPRIETARY.

²⁶ I&E Statement No 1-SR, pp. 9-10; I&E Exhibit No. 1, Schedule 3, p. 5 PROPRIETARY.

automatically increase outside contract work by an equal amount of payroll costs that would otherwise be incurred is unsupported.²⁷

As mentioned above, Columbia updated its FPFTY total budgeted positions from 839 to 822, this change impacted I&E’s calculation of vacant positions. I&E witness Zalesky used the average annual vacancy rate determined above, 6.44%, and multiplied it by the updated FPFTY total budgeted positions, 822, which returns 53 vacancies.²⁸ Therefore, I&E continues to recommend an adjustment to labor expense based on the vacancies of 53 employees.

3. Summary of I&E’s Labor Expense Adjustments

I&E recommends an allowance for labor expense of \$36,420,494, or a reduction of \$3,053,528 to the Company’s updated claim. I&E’s total adjustment is composed of (1) disallowance of the annualization adjustment of \$546,602 and (2) a vacancy adjustment of \$2,506,926. The following table shows I&E’s updated calculation of adjusted labor expense:²⁹

FPFTY Labor Expense Claim – Updated	\$39,474,022
Less Annualization Adjustment – Updated	<u>-\$546,602</u>
Adjusted FPFTY Labor Expense – Updated	<u><u>\$38,927,420</u></u>

²⁷ I&E Statement No. 1-SR, pp. 9-10.

²⁸ I&E Statement No. 1-SR, p. 12.

²⁹ I&E Statement No. 1-SR, p. 12.

I&E’s updated recommendation on its vacancy adjustment incorporated the Company’s updated FPFTY employee count of 822, which is shown in the table below to show I&E’s updated adjusted payroll expense.³⁰

	CALCULATION	RESULT
VACANCY RATE:		
Average Vacancy Rate for 2017, 2018, and 2019		6.44%
Updated FPFTY Employee Count		822
Projected Employee Vacancies (rounded)	822×0.0644	53
PAYROLL EXPENSE:		
FPFTY Adjusted Payroll Expense	$\$39,474,022 - \$546,602$	\$38,927,420
Average per Employee Payroll Cost	$\$38,927,420 \div 822$	\$47,357
Total Payroll Claim Reduction for Vacancies	$\$38,927,420 \times 0.0644$ ($\$47,357 \times 53$, approximately)	\$2,506,926

B. Other Employee Benefits

I&E recommends a reduction of \$500,968 to Columbia’s claim of \$7,779,000 for Other Employee Benefits. Other Employee Benefits expense includes claims for benefits such as medical, dental, vision, life insurance, long-term disability, 401K plan, and profit sharing benefits.³¹ I&E’s recommendation is based on I&E’s vacancy adjustment to the Company’s labor expense claim discussed above.

Columbia witness Nancy J. D. Krajovic disagreed with I&E’s adjustment to Other Employee Benefits expense. Witness Krajovic analyzed Other Employee Benefits actual

³⁰ I&E Statement No. 1-SR, p. 13.

³¹ I&E Statement No. 1, pp. 12-13 (Citing Columbia Response to I&E-RE-16, Attachment A).

versus budgeted amounts for 2017 through 2019 and argued that there is not a corresponding underspend in budgeted versus actual for this category. She noted that two of the three years actually exceeded budget and asserted that actual amounts spent for this category can vary from budget for reasons other than headcount.³²

I&E disagrees with Columbia's position as witness Zalesky's vacancy adjustment applies equally to employee benefits expense and a corresponding adjustment is necessary to reflect an accurate expense amount for ratemaking purposes. Further, I&E recognizes that two of the last three years exceeded the budget as 2017 was 124 over budget and 2019 was 80 over budget; however, 2018 was 429 under budget which far outweighs the other two years combined.³³ Therefore, I&E continues to recommend a reduction of \$500,968 to the Company's claim for Other Employee Benefits expense.

C. Incentive Compensation and Stock Rewards

Incentive compensation comprises payments to eligible employees in addition to their base salaries and wages. Incentive compensation payout is generally based on the attainment of key performance indicators established by the company or an affiliate. I&E recommends a reduction of \$784,686 to Columbia's claim of \$2,267,000 for Incentive Compensation Expense based upon the most recent incentive compensation payout.³⁴ In direct testimony, I&E witness Zalesky recommended a reduction to this expense of \$373,749 based on a three-year historic average of incentive compensation payouts.³⁵

³² Columbia Statement No. 9-R, pp. 19-20.

³³ I&E Statement No. 1, pp. 13-14.

³⁴ I&E Statement No. 1-SR, p. 18.

³⁵ I&E Statement No. 1, p. 15.

In rebuttal testimony, Columbia witnesses Cartella and Krajovic disagreed with I&E witness Zalesky's method of adjusting the Company's incentive compensation expense. Witness Cartella asserts that I&E's adjustment to incentive compensation based on historic results departs from the principals of a FPFTY claim. Ms. Cartella claims that incentive compensation is on numerous factors such as customer service, quality of service, safety, and financial metrics and individual employee contributions and performance.³⁶

I&E witness Zalesky's adjustment to incentive compensation based on historical results does not depart from the principles of a FPFTY claim. As Mr. Zalesky explains, without adequate justification for a FPFTY claim it is reasonable to rely on historical data, particularly when there is no guaranteed full payout in any given year and as a result the amount can fluctuate from year to year. Here, it is more appropriate to rely on historical data for a just and reasonable estimate.³⁷

Company witness Krajovic echoes Ms. Cartella's concerns that using historical averages disregards the fact that the Company is using a FPFTY and that actual incentive compensation awarded is dependent upon many factors. Ms. Krajovic also notes that incentive compensation is paid as a percentage of base pay, so using a three-year historical average is out of sync with payroll growth. Further, Ms. Krajovic identifies an inconsistency in the numbers used in I&E's recommendation in direct testimony in which the calculation, mixed historical incentive compensation for the twelve months ended

³⁶ Columbia Statement No. 15-R, pp. 4-9.

³⁷ I&E Statement No. 1, p. 15.

(“TME”) November 30, 2017 and TME November 30, 2018 with the normalized expenses for TME November 30, 2019 and recommended that I&E be consistent. Alternatively, Ms. Krajovic calculated the historical payout percentage of 5.8% and applied it to the FPFTY labor expense claim which approximated the Company’s FPFTY claim for incentive compensation.³⁸

I&E witness Zalesky also disagrees with Ms. Krajovic’s assertion that the recommendation based on historical average is out of sync with payroll growth. Mr. Zalesky points out from 2017 to 2019 incentive compensation has decreased as labor expense has increased and that it appears that incentive compensation is not correlated with labor expense as suggested. Below is an expanded version of the table from Ms. Krajovic’s rebuttal testimony³⁹ which includes incentive compensation and labor expense.⁴⁰

Twelve Months Ended	Per Books Labor Expense	Incentive Compensation (Columbia Ex. 4, Sch. 1, p. 2)	Percentage Payout (Incentive Compensation ÷ Labor Expense)
11/30/17	\$30,125,334	\$2,682,071	8.90%
11/30/18	\$32,215,808	\$1,521,149	4.72%
11/30/19	\$36,130,190	\$1,472,179	4.07%
Total	\$98,471,332	\$5,675,399	5.76%
Average	\$32,823,777	\$1,891,800	5.76%

³⁸ Columbia Statement No. 9-R, pp. 20-22.

³⁹ Columbia Statement No. 9-R, p. 21.

⁴⁰ I&E Statement No. 1-SR, pp. 17-18.

Incentive compensation has decreased significantly over the most recent historical years, both in dollars and percentage of labor expense. In fact, incentive compensation as a percentage of labor expense has decreased by more than half, going from 8.90% in the TME November 30, 2017 to 4.07% in the TME November 30, 2019. Given these considerations, it would be inappropriate to use a historical payout percentage to estimate FPFTY incentive compensation.⁴¹ Therefore, I&E witness Zalesky updated I&E's recommendation that was previously based on a three-year historic average of incentive compensation dollars to now reflect the most recent incentive compensation payout of 4.07%, since the percent has declined year after year from 8.90% to 4.72% between 2017 and 2018, then to 4.07% in 2019.⁴² I&E believes that the drastic decline from years 2017 through 2019 show that it is reasonable to rely on the most recent year in determining an appropriate incentive compensation expense recommendation.

Mr. Zalesky calculated the updated recommendation by multiplying I&E's recommended labor expense allowance of \$36,420,494 by 4.07% which resulted in I&E's recommended incentive compensation allowance of \$1,482,314 or a reduction of \$784,686 to the Company's claim for incentive compensation expense. It is worth noting that I&E's recommended allowance is higher than the Company's actual 2019 payout.⁴³ I&E requests that the ALJ recommend and the Commission adopt I&E's updated recommendation to the Company's claim for incentive compensation expense.

⁴¹ I&E Statement No. 1-SR, pp. 17-18.

⁴² I&E Statement No. 1-SR, p. 18.

⁴³ I&E Statement No. 1-SR, p. 19.

D. PUC, OCA, OSBA Fees

I&E recommends a reduction of \$348,549 to the Company's claim for PUC, OCA, OSBA Fees. In direct testimony, I&E witness Zalesky recommended a reduction to this expense of \$456,976 based upon the Company's 2019 assessment notice and that this expense may decrease due to the ongoing pandemic.⁴⁴ Mr. Zalesky explains that it is more prudent to rely upon the most up-to-date data for PUC assessments.⁴⁵ As of the filing of his direct testimony, the 2019 assessment notice was the most up-to-date data available to Mr. Zalesky.

Company witness Krajovic argued that I&E's adjustment should be rejected because the basis as it relates to the pandemic is unsubstantiated conjecture and it is just as likely that costs may increase due to the pandemic.⁴⁶

I&E witness Zalesky accepts the Company's point that costs attributed to the pandemic are uncertain and in I&E's updated position the potential changes due to the pandemic are not taken into consideration. I&E's updated position relies upon the Commission's 2020-2021 PUC assessment factors recently released from the PUC's fiscal office. As this is the most recent release available, this is in line with Mr. Zalesky's recommendation in direct that this expense be based on the most up-to-date data available. Further, as explained by Mr. Zalesky, assessments for a given year are based on multiplying assessment factors by prior year revenues as reported in annual reports submitted to the Commission each year, this means the proper allowance should be

⁴⁴ I&E Statement No. 1, p. 20.

⁴⁵ I&E Statement No. 1, p. 20.

⁴⁶ Columbia Statement 9-R, pp. 22-23.

produced by multiplying FTY revenues by the current assessment factor.⁴⁷

Therefore, using the 2020-2021 PUC assessment factors and the Company's FTY revenues, I&E recommends a reduction of \$348,549 to the Company's PUC assessments expense claim.

E. Rate Case Expense

The nature and types of individual expenditures that comprise a utility's allowable claim for Rate Case Expense are those directly incurred to compile, present, and defend a utility's request for a base rate increase before the Commission. The actual expenditures and estimated costs typically found in an allowable rate case expense claim include legal fees for outside counsel, fees to outside consultants, and the cost of printing, document assembly, and postage.⁴⁸ In this proceeding, Columbia's total rate case expense claim is \$1,060,000 normalized over 12 months, resulting in an annual rate case expense claim of \$1,060,000.⁴⁹

The Commission characterizes rate case expense as a normal operating expense that should be accorded the same rate-making treatment as any other normalized expense.⁵⁰ To determine the length of normalization,⁵¹ the Commission has looked to the

⁴⁷ I&E Statement No. 1-SR, pp. 22-23.

⁴⁸ I&E Statement No. 1, p. 4.

⁴⁹ I&E Statement No. 1, p. 5 (citing Columbia Exhibit No. 104, Schedule 1, p. 4 and Schedule 2, p. 15).

⁵⁰ See *Pa. P.U.C. v. Apollo Gas Co.*, 54 Pa. PUC 358, 373 (Pa. P.U.C. 1980).

⁵¹ Normalization is the accounting and ratemaking practice of reflecting non-recurring expenses as an annual expense.

average number of months between a company’s rate case filings.⁵²

Columbia’s claimed 12-month normalization period is not supported by the Company’s historic filing frequency.⁵³ Based upon Columbia’s actual filing history, I&E witness Zalesky calculated a 20-month average as follows:

DOCKET NO.	DATE FILED	TIME ELAPSED
R-2020-3018835	April 24, 2020	➤ 25 mos. ➤ 24 mos. ➤ 12 mos.
R-2018-2647577	March 16, 2018	
R-2016-2529660	March 18, 2016	
R-2015-2468056	March 19, 2015	

Dividing the time between Columbia’s rate filings by the three filing intervals results in a 20 month $[(25 + 24 + 12) \div 3]$ filing frequency. The Company has not disputed that the average time between the filing of its last three rate cases was 20 months.

⁵² I&E Statement No. 1, p. 4; *See, e.g., Pa. P.U.C. v. City of DuBois - Bureau of Water*, Docket No. R-2016-2554150, pp. 65-66 (Order Entered March 28, 2017) (reconsideration of rate case expense claim denied by Order entered May 18, 2017); *Pa. P.U.C. v. Emporium Water Company*, Docket No. R-2014-2402324, p. 50 (Order Entered January 28, 2015); *Irwin A. Popowsky v. Pa. P.U.C.*, 674 A.2d 1149, 1154 (Pa. Cmwlth. 1996); *Pa. P.U.C. v. Borough of Media Water Works*, 1990 WL 10702673 (Pa. P.U.C. 1990). It should be noted, in 2012, the Commission granted PPL Electric Utilities Corporation (“PPL”) permission to normalize its rate case expense over a 24-month period based on the expected timing of future base rate case filings. *Pa. P.U.C. v. PPL Electric Utilities Corporation*, Docket No. R-2012-2290597, pp. 47-48 (Order Entered December 28, 2012). That particular base rate case was filed on March 30, 2012; however, PPL did not file its next base rate case until March 31, 2015, which was 36 months after the 2012 rate case filing. The 12-month discrepancy between PPL’s projection in 2012 when it would next file and its actual filing date of the subsequent rate case shows that future projections are unreliable when determining an appropriate normalization period for the rate case expense. I&E’s recommended normalization period in 2012 PPL proceeding was a 32-month interval based on the Company’s historic filing frequency. I&E Statement No. 2, pp. 13-14 at Docket No. R-2012-2290597. The I&E recommendation in that instance produced a much more accurate result than the Company’s stated future intention to file a rate case.

⁵³ I&E Statement No. 1, p. 6.

I&E's recommended 20-month normalization period results in an annualized rate case expense allowance of \$636,000 [(\$1,060,000 ÷ 20 months) x 12 months], which is a reduction of \$424,000 (\$1,060,000 - \$636,000) to the Company's claim.⁵⁴ Columbia witness Miller, while not disagreeing with the accuracy of I&E's calculation, disagreed with I&E's reliance on historical filing frequency. Ms. Miller asserted that Columbia has filed annual rate cases in recent years with few exceptions and the Company anticipates annual rate filings for the foreseeable future therefore, a 12 month normalization is appropriate for rate case expense.⁵⁵

While I&E recognizes that Columbia has filed annual rate cases in the past, recent history has shown that the exceptions have been more common.⁵⁶ I&E witness Zalesky appropriately points out that by using the Company's filing frequency of the three most recent rate cases along with the current rate case it provides a more accurate basis for the normalization period.⁵⁷

In summary, Columbia's claim that it will file annual rate cases is speculative, and Columbia's claimed 12-month normalization period would result in an unreasonable increase. Therefore, the Commission should adopt I&E's 20-month normalization period based on the Company's historic filing frequency resulting in a recommended disallowance of \$424,000 for Rate Case Expense.

F. Outside Services

I&E has not proposed an adjustment to the Company's outside services expense.

⁵⁴ I&E Statement No. 1, pp. 5-6.

⁵⁵ Columbia Statement No. 4-R, pp. 8-9.

⁵⁶ I&E Statement No. 1-SR, p. 5.

⁵⁷ I&E Statement No. 1-SR, p. 5.

G. Other Adjustments

1. Adjustments for Safety Initiatives

I&E has not proposed an adjustment for safety initiatives.

2. Compensation Adjustments

I&E has not proposed compensation adjustments.

H. Depreciation Expense

I&E has not proposed an adjustment to depreciation expense.

VII. TAXES

A. Taxes Other Than Income Taxes

I&E recommends a reduction of \$275,672 to Columbia's claim of \$3,001,823 for FICA tax expense. In direct testimony, I&E witness Zalesky recommended a reduction to this expense of \$243,119.⁵⁸ I&E's recommendation corresponds to recommended adjustments to labor expense and incentive compensation. The FICA tax expense reduction was calculated by multiplying the total reduction of labor expense and incentive compensation by the Company's historic test year ("HTY") FICA experienced rate of 7.1823%.⁵⁹

Columbia witnesses did not directly address I&E's recommended adjustment to FICA tax expense but did address I&E's labor expense and incentive compensation recommendations. Because I&E's recommendation to FICA tax expense is based upon I&E's adjustments to labor expense and incentive compensation, I&E revised its allowance in surrebuttal testimony to account for updated labor expense and incentive

⁵⁸ I&E Statement No. 1, p. 18.

⁵⁹ I&E Statement No. 1, pp. 18-19.

compensation recommendations.⁶⁰ The updated total recommended reduction to labor expense and incentive compensation multiplied by the Columbia's HTY FICA experienced rate was \$275,672.⁶¹ Therefore, I&E recommends a reduction of \$275,672 to Columbia's claim for FICA tax expense.

B. Income Taxes

I&E did not propose any adjustments to income taxes.

VIII. RATE OF RETURN

A. Introduction

A rate of return allows payment to a utility's debt holders with interest and fair compensation for its equity shareholders. Rate of return is expressed as the amount of revenue an investment generates in the form of net income and is usually expressed as a percentage of the amount of capital invested over a given period of time. Rate of return is one of the components of the revenue requirement formula.⁶² In *Bluefield Water Works & Improvements Co. v. Public Service Comm. of West Virginia*⁶³ and *Federal Power Commission v. Hope Natural Gas Co.*⁶⁴ the U.S. Supreme Court expressed the legal standards for determining rates of return.

⁶⁰ I&E Statement No. 1-SR, p. 20.

⁶¹ I&E Statement No. 1-SR, pp. 20-21.

⁶² I&E Statement No. 2, p. 2. The revenue requirement used $RR = E + D + T + (RB \times ROR)$, where RR = Revenue Requirement; E = Operating Expense; D = Depreciation Expense; T = Taxes; RB = Rate Base; and ROR = Overall Rate of Return. *Id.*, pp. 2-3.

⁶³ 292 U.S. 679 (1923 ("*Bluefield*").

⁶⁴ 320 U.S. 591 (1944) ("*Hope Natural Gas*").

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

A public utility is entitled to such rates as will permit it to earn a return on 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. A rate of return may be too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.⁶⁵

The U.S. Supreme Court affirmed these principles in *Hope Natural Gas*, stating:

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 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.⁶⁶

Therefore, the principles followed by regulators through the U.S. to measure a fair rate of return include the following:

- A utility is entitled to a return similar to that being earned by other enterprises with corresponding risks and uncertainties, but not as high as those earned by highly profitable or speculative ventures;

⁶⁵ *Bluefield*, 262 U.S. 679, 692-93.

⁶⁶ *Hope Natural Gas*, 320 U.S. 591, 603.

- A utility is entitled to a return level reasonably sufficient to assure financial soundness;
- A utility is entitled to a return sufficient to maintain and support its credit and raise necessary capital;
- A fair return can change (increase or decrease) along with economic conditions and capital markets.⁶⁷

In accordance with these principles, I&E witness Christopher Keller recommends the following rate of return for Columbia Gas:

<u>Type of Capital</u>	<u>Ratios</u>	<u>Cost Rate</u>	<u>Weighted Cost Rate</u>
Long-Term Debt	42.22 %	4.73 %	2.00 %
Short-Term Debt	3.59 %	2.06 %	0.07 %
Common Equity	<u>54.19 %</u>	9.86 %	<u>5.34 %</u>
Total	<u>100.00 %</u>		<u>7.41 %</u> ⁶⁸

I&E witness Keller accepts Columbia’s hypothetical capital structure and Columbia’s claimed cost rates of long-term and short-term debt. However, I&E witness Keller rejects Columbia’s method for calculating return on common equity. Instead, I&E witness Keller calculates his recommended return on equity pursuant to the Discounted Cash Flow methodology frequently used by the Commission while using the Capital Asset Pricing Model as an alternate means to verify the reasonableness of his return.

B. Capital Structure Ratios

I&E accepts Columbia’s claimed hypothetical capital structure. I&E witness Keller recommends using Columbia’s claimed hypothetical capital structure, as the

⁶⁷ I&E Statement No. 2, pp. 3-4. *See also Pennsylvania Gas & Water Company v. Pa. P.U.C.*, 341 A.2d 239, 249-252 (Pa. Cmwlth. 1975).

⁶⁸ I&E Statement No. 2-SR, p. 38.

hypothetical debt and equity fall within the range of his proxy group capital structures. This range contains long-term debt ratios ranging from 33.18% to 53.48% and equity ratios ranging from 32.78% to 59.01%, with a five-year average of 40.29% for long-term debt and 47.60% for common equity. I&E witness Keller points out that although the Company's short-term debt is below the 2019 range of 4.77% to 19.65%, it is within range for the five-year period 2015-2019 for short-term debt of 0.41% to 26.85%.⁶⁹

C. Debt Cost Rate

1. Cost of Long-Term Debt

I&E accepts Columbia's 4.73% claimed cost rate of long-term debt. In direct testimony, I&E witness Keller accepted the Company's claimed cost rate of long-term debt of 4.70%. In rebuttal testimony, Columbia witness Moul adjusted this number to 4.73% to reflect actual costs of promissory notes that were issued in March 2020.⁷⁰

Witness Keller opines the Company's claimed cost rate of long-term debt is reasonable as it is representative of the industry and falls within his proxy group's implied long-term debt cost range of 3.14% to 5.82% with an average implied long-term debt cost of 4.91%.⁷¹ Therefore, I&E recommends using the Company's claimed cost rate of long-term debt.

2. Cost of Short-Term Debt

I&E accepts Columbia's claimed cost rate of short-term debt of 2.06%. I&E witness Keller points out although the Blue Chip Financial Forecast for the three-month

⁶⁹ I&E Statement No. 2, pp. 10-12; I&E Exhibit No. 2, Schedule 2.

⁷⁰ Columbia Statement No. 8-R, p. 6.

⁷¹ I&E Exhibit No. 1, Schedule 3.

average forecasted LIBOR rate from the third quarter 2020 to the third quarter of 2021 reflects a cost rate of 0.52%, Columbia witness Moul’s three-month average forecasted LIBOR rate relies upon the most recent information available.⁷² Therefore, I&E recommends using the Company’s claimed cost rate of short-term debt.

D. Return on Common Equity

1. Columbia’s Proposal

Columbia witness Moul relies on the DCF, CAPM, RP, and CE methodologies in presenting his recommended return on equity. Based upon the use of his proxy groups, Columbia witness Moul calculates the following equity returns:⁷³

<u>Measure</u>	<u>Gas Proxy Group</u>
DCF	11.91%
RP	10.50%
CAPM	10.19%
CE	12.75%
Indicated Cost of Equity	10.95%

In addition to calculating an average return on equity of 10.95%, Columbia witness Moul’s recommended common equity cost rate reflects a leverage adjustment and performance factor adjustments. Specifically, Columbia’s witness Moul

⁷² I&E Statement No. 2, p. 14.

⁷³ Columbia Statement No. 8, p. 5.

recommends both a 172 basis points upwards adjustment to reflect his leverage adjustment and a 20 basis points upwards adjustment as a performance factor.⁷⁴

I&E witness Keller opposes Mr. Moul's calculated return on equity for several reasons. First, Mr. Keller disagrees with the weights given to the results of Mr. Moul's CAPM, RP, and CE analyses in his recommendation. Second, he disagrees with certain aspects of Mr. Moul's discussion of Columbia's risk. Third, I&E witness Keller disagrees with Mr. Moul's application of the DCF including the forecasted growth rate and leverage adjustment he uses. Fourth, Mr. Keller disagrees with Columbia witness Moul's inclusion of a size adjustment, his reliance on the 30-year Treasury Bond for his risk-free rate, and the use of a double-adjusted beta in his CAPM analysis. Finally, Mr. Keller claims that Company witness Moul's request for an additional 20 basis points for "strong management performance" is unjustified.⁷⁵

Additionally, in rebuttal testimony Mr. Moul alleges that it would be inappropriate in a base rate case to grant a cost of equity that is lower than the current DSIC ROE.⁷⁶ This is simply untrue. Mr. Moul's contention fails to account for the fact that DSIC return for utilities is calculated differently than the equity return in a base rate case and does not represent the full scope of risk for a given utility company.⁷⁷

a) Columbia's Flawed Proxy Group

Columbia witness Moul's proxy group identified in direct testimony included the following nine companies: Atmos Energy Corp.; Chesapeake Utilities Corp.; New Jersey

⁷⁴ Columbia Statement No. 8, p. 30; Columbia Statement No. 8, p. 5.

⁷⁵ I&E Statement No. 2, pp. 28-29.

⁷⁶ Columbia Statement No. 8-R, pp. 11-12.

⁷⁷ I&E Statement No. 2-SR, p. 4.

Resources Corp.; NiSource Inc.; Northwest Natural Holding Co.; ONE Gas, Inc.; South Jersey Industries, Inc.; Southwest Gas Holdings, Inc.; and Spire, Inc.⁷⁸ Columbia witness Paul Moul did not provide a list of criteria used to determine his “Gas Group” other than that the Gas Group is made up of the companies the Commission’s Bureau of Technical Utility Service (“TUS”) uses to calculate the cost of equity in its Quarterly Earnings Report.⁷⁹

In direct testimony, I&E witness Keller disputes I&E witness Moul’s proxy group. I&E witness Keller noted, while both proxy groups contain seven of the same companies, I&E witness Moul’s Gas Utility Proxy Group includes two companies that I&E does not use.⁸⁰ Specifically, I&E witness Keller excluded New Jersey Resources Corp. and Southwest Gas Holdings, Inc., because neither met I&E witness Keller’s criterion that fifty percent or more of the company’s revenues must be generated from the regulated gas utility industry.⁸¹

In rebuttal testimony, both the Company and the OCA disagree with I&E’s proxy group. First, Columbia witness Moul argued against I&E’s proxy group for two reasons; (1) that using the percentage of revenue as a criterion for a proxy group is incorrect, and (2) that the percentage of gas assets to total assets is a more appropriate criterion because the margins of utility-based activities are not comparable to that of non-utility business segments.⁸² I&E witness Keller disagreed with Mr. Moul’s assertion that it is incorrect to

⁷⁸ Columbia Exhibit 400, Schedule 3, p. 2.

⁷⁹ Columbia Statement No. 8, pp. 3-4.

⁸⁰ I&E Statement No. 2, p. 10.

⁸¹ I&E Statement No. 2, p. 10.

⁸² Columbia Statement No. 8-R, pp. 15-16.

use the percentage of revenue as a criterion for a proxy group because revenues represent the percentage of cash flow a company receives from each business line related to providing a good or service. If fewer than fifty percent of revenues come from the regulated gas business sector, a company is not comparable to the subject utility as it does not provide a similar level of regulated business.⁸³

Next, I&E witness Keller explains that the percentage of gas assets to total assets is not an appropriate criterion because it is not always a reliable way of determining if a business is primarily a regulated utility, and there are differences between businesses in the amount of capital needed.⁸⁴

In rebuttal, OCA witness O'Donnell opines that due to the limited number of available gas utilities as a result of mergers and acquisitions, he chose not to eliminate the entire proxy group provided by *Value Line* and that removal of companies from a proxy group is subjective and can result in data integrity issues.⁸⁵ In response, Mr. Keller iterated that his proxy group was designed to select companies that are most like the gas distribution company subject in this proceeding. Further, I&E witness Keller points out that OCA witness O'Donnell utilized the same nine companies in his proxy group as Columbia witness Moul and both performed a stand-alone analysis directly on NiSource, Inc., which witness Keller found to be inappropriate and unnecessary.⁸⁶

⁸³ I&E Statement No. 2-SR, p. 7 (Citing I&E Statement No. 2, p. 10).

⁸⁴ I&E Statement No. 2-SR, p. 6.

⁸⁵ OCA Statement No. 3R, pp. 6-7.

⁸⁶ I&E Statement No. 2-SR, pp. 8-9.

I&E witness Keller's objection to use of New Jersey Resources Corp. and Southwest Gas Holdings, Inc. remains, and the Commission should use I&E's proxy group as it is most comparable to Columbia in developing an appropriate cost of equity.

b) Columbia's Flawed Equal Weighting and Use of CAPM, RP, and CE

After forming his proxy group, Columbia witness Moul calculated common equity costs with data inputs specific to these companies using the DCF, RP, and CAPM methods.⁸⁷ By contrast, I&E witness Keller recommended using the DCF method as the primary method to determine the cost of common equity and using the results of the CAPM as a comparison to the DCF results.⁸⁸

As explained above, I&E witness Keller's analysis is consistent with the methodology commonly endorsed by the Commission in base rate proceedings, and should be approved here. Just recently, the Commission affirmed reliance primarily on the DCF and rejected giving equal weight to the other methodologies. In *City of Dubois – Bureau of Water*, the Commission stated:

[T]he City's cost of equity in this proceeding should be based upon the use of the DCF methodology, with the other methodology results used as a check on the reasonableness of the DCF results. We note that we have primarily relied upon the DCF methodology in arriving at previous determinations of the proper cost of equity and utilized the results of methods other than the DCF, such as the CAPM and RP methods, as a check upon the reasonableness of the DCF derived equity return calculation, tempered by informed judgement. We are not persuaded by the arguments of the City that we should assign equal weight to the multiple methodologies.⁸⁹

⁸⁷ I&E Statement No. 2, p. 21.

⁸⁸ I&E Statement No. 2, p. 21.

⁸⁹ *City of DuBois – Bureau of Water*, pp. 96-97.

In *UGI Utilities, Inc. – Electric Division*, the Commission stated:

The ALJs adopted the positions of I&E and the OCA that the DCF method should be the primary method used to determine the cost of common equity, and that the results of the CAPM should be used as a comparison to the DCF results. The ALJs found no reason to deviate from these preferred methods in this proceeding. Therefore, the ALJs recommended against the use of the RP and CE methods proffered by UGI. Further, the ALJs noted that the companies analyzed under the CE model are too dissimilar to a regulated public utility company. R.D. at 60, 76, 81-82....[W]e shall adopt the positions of I&E and the OCA and shall base our determination of the appropriate cost of equity on the results of the DCF method and shall use the CAPM results as a comparison thereto. As both Parties noted, the use of the DCF model has historically been our preferred methodology. This was recently affirmed in *Pa. P.U.C., et al v. City of DuBois - Bureau of Water*, Docket No. R-2016-2554150, *et. al.* (Order Entered March 28, 2017). Like the ALJs, we find no reason to deviate from the use of this method in the instant case. Accordingly, we shall deny UGI's Exceptions on this issue.⁹⁰

As endorsed by the Commission, I&E witness Keller did use the CAPM method as a comparison to the DCF results. However, there are disadvantages associated with the CAPM and it should not be used as a primary method.⁹¹ The CAPM is a less reliable model because it measures the cost of equity indirectly and risk premiums vary depending on the debt and equity being compared. The CAPM uses U.S. Treasury Bonds and, typically, the return of the S&P 500 as proxies for the risk-free rate and overall market return, respectively. However, its result can be manipulated based on the inputs used; therefore, it introduces a greater amount of subjectivity with respect to determining

⁹⁰ *UGI Utilities, Inc. – Electric Division*, pp. 103-106.

⁹¹ I&E Statement No. 2, p. 18.

the cost of equity of a given company.⁹² CAPM has also been subject to criticism from academic literature.⁹³

I&E witness Keller excluded the RP method from his analysis because it is a simplified version of the CAPM and, in addition to being subject to the same faults listed above, the RP method does not recognize company-specific risk through beta.⁹⁴ Finally, I&E witness Keller excluded the CE method from his analysis because the choice of which companies are comparable is subjective, and it is debatable whether historic accounting values are representative of the future. Moreover, the Commission has long recognized the problem with this method, and as a result, its historical usage in this regulatory forum has been minimal.⁹⁵

Accordingly, the Commission should reject Columbia's equal weighting of various models, and endorse use of the DCF method, with CAPM used as a comparison.

c) Columbia's Inappropriate Risk Analysis

Mr. Moul's rate of return recommendations are also grossly overstated by his assignment of several faulty assumptions of risk to Columbia.

Mr. Moul describes the Company's claimed risk factors in two different subsections. In the first section, labeled "Natural Gas Risk Factors," he describes the *qualitative* risk factors. In this section, Mr. Moul discusses the potential for bypass, the Company's construction program, the potential discontinuation of the Company's weather normalization adjustment ("WNA") tariff design and/or the refusal of its revenue

⁹² I&E Statement No. 2, p. 18.

⁹³ I&E Statement No. 2, p. 19.

⁹⁴ I&E Statement No. 2, p. 20.

⁹⁵ I&E Statement No. 2, p. 20.

normalization adjustment (“RNA”) proposal.⁹⁶ In the second section of his risk analysis, labeled “Fundamental Risk Analysis,” he describes the *quantitative* risk factors. In this section, Mr. Moul discusses the Company’s credit quality, as well as many different financial metrics including size, market ratios, common equity ratio, return on book equity, operating ratios, pre-tax interest coverage, quality of earnings, internally generated funds, and betas.⁹⁷

(1) Risk of Bypass

Mr. Moul opines that the Company faces a unique situation in Western Pennsylvania where gas utilities have overlapping territories; this creates “gas on gas” competition. He claims that the six interstate pipelines traversing the Company’s service territory create the potential for bypass among certain large volume customers. Additionally, Mr. Moul claims that local gas production provides another bypass threat, as well as the consolidation of competing Local Distribution Companies which form a strong competitor.⁹⁸

I&E witness Keller’s agrees that the Western Pennsylvania market is unique in that the overlapping territories create “gas on gas” competition; however, Mr. Keller states that whatever competition exists is limited to a very small number of competitors and only in overlapping territories. Mr. Moul did not provide the number of potential customers affected, nor did he reveal the size of Columbia’s territory that is overlapped by NGDC competitors. Additionally, to the degree that customers must absorb switching

⁹⁶ Columbia Statement No. 8, pp. 5-10.

⁹⁷ Columbia Statement No. 8, pp. 10-15.

⁹⁸ Columbia Statement No. 8, p. 6.

costs to move from one NGDC to another, competition will be discouraged. Because insufficient information has been provided, the risk of bypass in overlapping territories cannot be substantiated. Mr. Keller concludes by stating beyond the claimed risk of bypass resulting from overlapping territories of competitors, Columbia faces no more risk than any of the companies in the proxy group. The cost of equity measured by the proxy group adequately compensates investors for the risk of bypass.⁹⁹

In rebuttal testimony, Mr. Moul states that the situation of overlapping service territories is unique to gas utilities operating in Western Pennsylvania and that other than the Company's parent, NiSource, no company in his proxy group faces the same risk of bypass. He claims that the Company's risk is generally higher than those in his proxy group.¹⁰⁰

However, I&E witness Keller's position remains unchanged from the arguments made in direct testimony. For the reasons stated above, I&E believes that the cost of equity measured by the proxy group adequately compensates investors for the risk of bypass and therefore should be adopted.

(2) Replacing Aging Infrastructure

Columbia witness Moul claims that the Company incurs additional risk because required capital expenditures to replace aging infrastructure do not increase the Company's customer base.¹⁰¹ He goes on to state that the Company anticipates total

⁹⁹ I&E Statement No. 2-SR, p. 33.

¹⁰⁰ Columbia Statement No. 8-R, pp. 36-37.

¹⁰¹ Columbia Statement No. 8, p. 9.

capital expenditures over the next five years will equal 93% of the net utility plant service at December 31, 2018.¹⁰²

I&E witness Keller rebuts Mr. Moul's claims in direct testimony where he states that every gas utility faces the same issues of upgrading or replacing its infrastructure. As costs for replacing infrastructure increase, Columbia, like any other regulated gas utility, has the option to file a base rate case at any time to address revenue inadequacy due to increasing costs, infrastructure replacement, or any other associated issues. Base rate cases allow a utility to recover its costs and provide it with the *opportunity* to earn a reasonable return on capital investments.¹⁰³ Additionally, as Mr. Moul states in his testimony, the Commission offers risk reducing mechanisms such as the DSIC and the FPFTY to help reduce any regulatory lag in recovery of infrastructure investment or other unforeseen expenditures.¹⁰⁴ However, as Mr. Keller correctly points out, it should be noted that these mechanisms were not designed to eliminate the need for periodic base rate case filings.¹⁰⁵

For the reasons discussed above, I&E rejects Columbia's position that replacing infrastructure increases Columbia's risk.

¹⁰² Columbia Statement No. 8, p. 9.

¹⁰³ I&E Statement No. 2, p. 33.

¹⁰⁴ Columbia Statement No. 8, p. 7.

¹⁰⁵ I&E Statement No. 2, p. 33.

(3) Potential Discontinuation of the Weather Normalization Adjustment Mechanism and Refusal of the Revenue Normalization Adjustment

Mr. Moul argues that, “If the Company is unable to continue with its WNA rate design and is not authorized to adopt the RNA mechanism, its risk will increase above that of the Gas Group that serves as a basis to measure the Company’s cost of equity...”¹⁰⁶

However, Mr. Keller correctly states that the Commission allows utilities the opportunity to propose alternative ratemaking mechanisms, and Columbia has requested continuation of its WNA, albeit with modification, and proposed an RNA in this proceeding. The Company currently does not have an RNA mechanism in place; therefore, its refusal will not increase risk to the Company. However, if the Commission approves the Company’s RNA proposal, its overall risk will decrease as a result. Further, Mr. Moul has not produced evidence demonstrating that the Gas Group companies employ either the WNA mechanism that is already authorized for Columbia, nor the RNA mechanism that Columbia has proposed.¹⁰⁷

In rebuttal testimony, Mr. Moul reiterates the position that the loss of the weather normalization adjustment will materially increase the Company’s risk and would require a return greater than his proxy group.¹⁰⁸ As Mr. Moul does not lend any support for this argument, I&E’s position to not factor in WNA and RNA into the Company’s risk analysis is appropriate and should be adopted.

¹⁰⁶ Columbia Statement No. 8, p. 7.

¹⁰⁷ I&E Statement No. 2, pp. 34-35.

¹⁰⁸ Columbia Statement No. 8-R, p. 37.

(4) Risk Analysis Summary

Mr. Moul states that it is necessary to establish a company's relative risk position within its industry through an analysis of quantitative and qualitative factors. Mr. Moul uses various financial metrics to compare Columbia to the S&P Public Utilities Index, and his Gas Group.¹⁰⁹

Throughout the remainder of his "fundamental risk analysis," Mr. Moul makes four statements to indicate that the Company has no more of a risk than any other company in his Gas Group. First, while discussing the common equity ratio, Mr. Moul states, "The five-year average common equity ratios, based on permanent capital, were 55.5% for CPA, 53.2% for the Gas Group, and 43.0% for the S&P Public Utilities. The Company's common equity was fairly similar to the Gas Group, thereby indicating similar risk."¹¹⁰ Second, regarding operating ratios, Mr. Moul states, "The five-year average operating ratios were 75.5% for the Company, 84.7% for the Gas Group, and 79.0% for the S&P Public Utilities. The Company's operating ratios were somewhat lower than the Gas Group, thereby indicating lower risk."¹¹¹ Third, concerning coverage, he states, "Excluding Allowance for Funds Used During Construction ("AFUDC"), the five-year average pre-tax interest coverage was 4.64 times for the Company, 4.41 times for the Gas Group, and 3.32 times for the S&P Public Utilities. The interest coverages were fairly similar for the Company and the Gas Group, thereby indicating similar

¹⁰⁹ Columbia Statement No. 8, p. 10.

¹¹⁰ Columbia Statement No. 8, p. 13.

¹¹¹ Columbia Statement No. 8, p. 13.

risk.”¹¹² Finally, concerning internally generated funds, he states, “Historically, the five-year average percentage of IGF to capital expenditures was 66.5% for the Company, 66.6% for the Gas Group and 78.6% for the S&P Utilities. Had the Company paid dividends in recent years, its IGF would have been weaker. The Company’s average IGF to construction percentage has been similar to that of the Gas Group, thereby signifying similar risk.”¹¹³

While some measures Mr. Moul discusses may imply a higher risk profile for the Company, he provides other more convincing measures that illustrate the Company has lower risk. Overall, through his own analysis and testimony, Mr. Moul substantiates that the Company has very similar risk, or arguably, even lower risk as compared to that of his Gas Group.¹¹⁴ Therefore, Mr. Moul’s rate of return recommendations are also grossly overstated by his assignment of several faulty assumptions of risk to Columbia such as the risk bypass, infrastructure replacement, and the discontinuance of WNA and refusal of RNA and should be rejected.

d) Columbia’s Inflated Growth Rates used in DCF Analysis

Columbia witness Moul employed a growth rate of 7.50% based upon the growth rates for his Gas Group which he listed as 5.24% by IBES/First Call, 6.59% by Zacks, 7.00% by Morningstar and 10.17% by *Value Line*.¹¹⁵ Mr. Moul used 7.50% growth rate

¹¹² Columbia Statement No. 8, p. 13.

¹¹³ Columbia Statement No. 8, p. 14.

¹¹⁴ I&E Statement No. 2, p. 36.

¹¹⁵ Columbia Statement No. 8, p. 25.

claiming that continued infrastructure spending argues for a DCF growth rate near the high end of the range.¹¹⁶

I&E witness Keller determined a reasonable growth rate for Columbia would be 6.53% and disagrees with Mr. Moul's inclusion of *Value Line's* 26.50% growth estimate for Northwest Natural Gas Co. I&E witness Keller opines that while the five-year projected growth rates can be used in analyses, one must be aware that analysts' estimates may be biased. Mr. Keller lends support to his argument by citing to an article written by Professors Ciciretti, Dwyer, and Hasan in 2009 observed strong support of earnings forecasts being higher than actual earnings.¹¹⁷ In spring of 2010, McKinsey On Finance presented an article reporting that after a decade of stricter regulation analysts' forecasts are still overly optimistic.¹¹⁸

Mr. Keller states that analysts' estimates are an attempt to forecast future cash flows and thus expected earnings growth. However, it should be kept in mind that prudent judgment must be exercised as to the sustainability of forecasted growth rates with respect to the base earnings. If the base year earnings are abnormally high, the growth rates from which they are calculated will be biased downward. Similarly, if the base year earnings are abnormally low, the growth rates from which they are calculated

¹¹⁶ Columbia Statement No. 8, p. 26.

¹¹⁷ Ciciretti, Rocco; Dwyer, Gerald R; and Iftekhan Hasan. "Investment Analysts' Forecasts of Earnings" Federal Reserve Bank of St. Louis Review, September/October 2009, 91 (5, part 2) pp. 545-67.

¹¹⁸ Goedhart, Marc J; Raj, Rishi; and Abhishek Saxena. "Equity analyst: Still too bullish" McKinsey On Finance Number 35 Spring 2010, pp. 14-17.

will be biased upward. As a result, it is typically necessary to employ a methodology to smooth out the abnormally high or low base year earnings.¹¹⁹

Mr. Moul argues against I&E's growth rate in rebuttal testimony. Mr. Moul explains that Mr. Keller adjusted his actual calculated growth rate of 7.64% for his proxy group and instead used a rate of 6.52%.¹²⁰ Columbia witness Moul opines that Mr. Keller erroneously eliminated the *Value Line* earnings forecast projection for Northwest Natural Gas from his analysis.¹²¹

As explained earlier, *Value Line*'s projected earnings growth estimate for Northwest Natural Gas is clearly an outlier. The estimate of 26.50% is more than 3.5 times higher and greater than three standard deviations over the originally calculated 7.64% overall average. Furthermore, the estimate is almost four times higher than the average of the remaining estimates. Including this anomaly in I&E or the Company's analysis would have an unreasonable and unwarranted impact on the DCF analysis and would be harmful to ratepayers as it creates an unjustified increase in return on equity and consequently puts upward pressure on rates, which is not in the public interest.¹²²

In the past, I&E has removed growth estimates in its analysis that would have lowered a company's return on equity calculation.¹²³ In those proceedings, I&E believed that the growth projections for some of the proxy group companies in those proceedings were extremely inconsistent and would have had an unnecessary and unwarranted

¹¹⁹ I&E Statement No. 2, p. 34.

¹²⁰ Columbia Statement No. 8-R, p. 18.

¹²¹ Columbia Statement No. 8-R, p. 19.

¹²² I&E Statement No. 2-SR, pp. 17-18.

¹²³ See I&E Rate of Return Testimony in PECO Energy Company – Electric Division proceeding at Docket No. R-2018-3000164 and the Duquesne Light Company proceeding at Docket Nos. R-2018-3000124 and R-2018-3000829.

negative impact on the DCF analysis, adversely affecting I&E's recommendation for the cost of common equity.

The OCA responded to I&E's recommendation on growth rate in rebuttal testimony as well. OCA witness O'Donnell disagrees with Mr. Keller's use of only using forecasted growth rates in his DCF analysis. Mr. O'Donnell opines that historical growth rates as well as forecasted growth rates should be used as this would provide a more complete picture and given the inherent uncertainties as a result of the COVID-19 pandemic.¹²⁴

I&E witness Keller disagrees with the OCA by stating that he has used forecasted growth rates for his DCF recommendation in order to estimate a cost of equity that is forward looking. The growth rate forecasts are made by analysts who are aware of both the historic events of each company and what is expected both at a company and industry level. The past performance of a company is taken into account in a growth rate forecast, and although past performance can be a valuable piece of information, Mr. O'Donnell's method of relying on it for a DCF analysis causes his recommendation to place too much weight on past performance.¹²⁵

I&E continues to recommend against the inclusion of *Value Line's* projected earnings growth for Northwest Natural Gas as it is clearly an outlier and would have an unreasonable and unwarranted impact on I&E's DCF analysis. This would be harmful to ratepayers as it creates an unjustified increase in return on equity and consequently puts

¹²⁴ OCA Statement No. 3R, pp. 8-9.

¹²⁵ I&E Statement No. 2-SR, pp. 17-18.

upward pressure on rates, which is not in the public interest. Additionally, only forecasted growth rates should be used as growth rates to estimate a cost of equity as it is forward looking. The growth rate forecasts are made by analysts who are aware of both the historic events of each company and what is expected both at a company and industry level where past performance of a company is taken into account in a growth rate forecast. Therefore, I&E recommends its growth rate of 6.52% is accepted.

e) Columbia's Inappropriate Leverage Adjustment Applied to DCF Analysis

Financial leverage is the use of debt capital to supplement equity capital. A firm with significantly more debt than equity is considered to be highly leveraged. Generally, a market-to-book ratio is used to evaluate a public firm's equity value. This is done by comparing a company's equity market value to a company's equity book value.¹²⁶

In his return on equity analysis, Mr. Moul proposes to make a 172-basis point "leverage" adjustment to the results of his DCF analysis to account for applying a market-determined cost of equity to a book value capital structure.¹²⁷ Mr. Moul does not propose to change the capital structure of the utility (a leverage adjustment), nor does he propose to apply the market-to-book ratio to the DCF model (a market-to-book adjustment). Instead, Mr. Moul proposes to make a novel adjustment to account for applying the market value cost rate of equity to the book value of the utility's equity. Mr. Moul states that in order to make the DCF results relevant to a book value capital structure, the market-derived cost of equity needs to be adjusted to take into consideration

¹²⁶ I&E Statement No. 2, p. 39.

¹²⁷ Columbia Statement No. 8, p. 30.

the difference in financial risk.¹²⁸ Mr. Moul opines this is because market valuations of equity are based on market value capital structures, which in general have more equity, less debt, and therefore, less risk than book value capital structures.¹²⁹

In an attempt to justify the leverage adjustment Mr. Moul simply states:

I know of no means to mathematically solve for the 1.72% leverage adjustment by expressing it in the terms of any particular relationship of market price to book value. The 1.72% adjustment is merely a convenient way to compare the 11.91% return computed directly with the Modigliani & Miller formulas to the 10.19% return generated by the DCF model based on a market value capital structure.¹³⁰

Mr. Keller's thorough analysis of Mr. Moul's leverage adjustment debunks any purported validity. First, rating agencies assess financial risk based upon a company's booked debt obligations and the ability of its cash flow to cover the interest payments on those obligations. The agencies use a company's financial statements for their analysis, not market capital structure. The income statement reflects the financial risk of a company because it represents the performance of the company over a certain period of time. A change in the market value of the stock is not reflected in the income statement nor is a change in market value capital structure reflected in the book value capital structure unless treasury stock is purchased. It is a company's financial statements that affect the market value of the stock, and therefore, the financial statements and the book

¹²⁸ Columbia Statement No. 8, p. 27.

¹²⁹ Columbia Statement No. 8, pp. 26-27.

¹³⁰ Columbia Statement No. 8, pp. 29-30.

value capital structure that is relied upon in an analysis such as that done by rating agencies.¹³¹

Mr. Keller notes that while the Commission has granted this adjustment on occasion, it has also clearly rejected in three recent cases. First, in *Pennsylvania Public Utility Commission v. Aqua Pennsylvania, Inc.*, at Docket No. R-00072711 (Order Entered July 31, 2008), p. 38, the Commission rejected the ALJ’s recommendation for a leverage adjustment stating, “[t]he fact that we have granted leverage adjustments in the past does not mean that such adjustments are indicated in all cases.”

Second, in *Pennsylvania Public Utility Commission, et al. v. City of Lancaster – Bureau of Water*, at Docket No. R-2010-2179103 (Order Entered July 14, 2011), p. 79, the Commission agreed with the I&E position and stated, “any adjustment to the results of the market based DCF are unnecessary and will harm ratepayers. Consistent with our determination in *Aqua 2008* there is no need to add a leverage adjustment.”

Third, in the most recent case of *Pennsylvania Public Utility Commission, et al. v. UGI Utilities, Inc. – Electric Division*, at Docket No. R-2017-2640058 (Order Entered October 25, 2018), pp. 93-94, the Commission agreed with the I&E position and stated, “we conclude that an artificial adjustment in this proceeding is unnecessary and contrary to the public interest. Accordingly, we decline to include a leverage adjustment in our calculation of the DCF cost of equity.”¹³²

¹³¹ I&E Statement No. 2, p. 42.

¹³² I&E Statement No. 2, pp. 42-43.

Mr. Moul has supported the I&E argument that his proposed leverage adjustment is not needed by stating that the credit rating agencies are only concerned with the timely payment of interest and principal by utilities.¹³³ Mr. Moul's stated need for the leverage adjustment is based on his assertion that the difference between the book value capital structure and his market value capital structure causes a financial risk difference.¹³⁴

Mr. Keller opines that financial risk does relate to the capital structure of a company, but it is created by the financing decisions (the use of debt or equity) and the amount of leverage or debt a company chooses to finance its assets. Financial risk and the book value capital structure of a company are represented in the income statement, part of what is evaluated by rating agencies. Mr. Moul agrees with Mr. Keller that credit rating agencies use a company's financial statements in their analysis to assess financial risk and determine creditworthiness.¹³⁵

Next, Company witness Moul refers to the three recent cases (Aqua Pennsylvania, Inc., City of Lancaster – Bureau of Water, and UGI Utilities, Inc. – Electric Division) where the Commission has rejected a “leverage adjustment.” Mr. Moul argues that the adjustment proposed in the City of Lancaster case was much different than what he is proposing in this proceeding. Additionally, Mr. Moul explains that even though the Commission declined to make a “leverage adjustment” in the Aqua Pennsylvania case, it does not invalidate its use. Further, Mr. Moul states, “Notably, the Commission did not repudiate the leverage adjustment in the Aqua case, but instead arrived at an 11.00%

¹³³ Columbia Statement No. 8-R, p. 23.

¹³⁴ Columbia Statement No. 8, p. 26.

¹³⁵ Columbia Statement No. 8-R, p. 23.

return on equity for Aqua by including a separate return increment for management performance.” Finally, Mr. Moul states that the Commission granted basis points for management performance in the UGI Electric case to arrive at the return on equity of 9.85%.¹³⁶

In this proceeding, Mr. Moul is recommending a 172-basis point “leverage adjustment.” To be clear, the Commission did in fact refuse to accept the leverage adjustment in the Aqua case by stating “...we reject the ALJ’s recommendation to allow a 65 basis point leverage adjustment.”¹³⁷ The management performance points awarded to Aqua were case-specific and in no way related to the proposed leverage adjustment. Regarding the Lancaster case, the Commission did not reject the leverage adjustment based on the manner in which it was calculated, but rather, the Commission stated, “...the ALJ’s recommendation is in error as any adjustment to the results of the market based DCF as we have previously adopted are unnecessary and will harm ratepayers.”¹³⁸ Regarding the UGI Electric case, the Commission concluded that, “...an artificial adjustment in this proceeding is unnecessary and contrary to the public interest. Accordingly, we decline to include a leverage adjustment in our calculation of the DCF cost of equity.”¹³⁹

¹³⁶ Columbia Statement No. 8-R, p. 24.

¹³⁷ *Pa. P.U.C. v. Aqua Pennsylvania, Inc.*, Docket No. R-00072711, pp. 38-39 (Order Entered July 31, 2008).

¹³⁸ *Pa. P.U.C. v. City of Lancaster – Bureau of Water*, Docket No. R-2010-2179103, p. 79 (Order Entered July 14, 2011).

¹³⁹ *Pa. P.U.C. v. UGI Utilities, Inc. – Electric Division*, Docket No. R-2017-2640058, pp. 93-94 (Order Entered October 25, 2018).

Mr. Moul's assertion that an investor is concerned with the return earned on dollars invested and not "some accounting value of little relevance to them,"¹⁴⁰ is unsupported. Clearly an investor takes financial risk into consideration when determining a required return. In addition, the market capitalization information included in *Value Line*'s reports and discussed by Mr. Moul is not the same as market value capital structure.¹⁴¹ Market capitalization refers to the number of shares outstanding multiplied by the current price. A market value capital structure refers to the ratio of market debt to market equity, which is not included in *Value Line*'s reports. Therefore, Mr. Moul's contention that *Value Line* includes market capitalization data does not offer any support for his leverage adjustment.

Columbia has not shown that a leverage adjustment is needed nor has the Company supported its claim for one, therefore, I&E continues to recommend that Columbia's leverage adjustment be rejected.

f) Columbia's Inflated Betas used in CAPM Analysis

Columbia witness Moul has used the same logic for inflating his CAPM betas from 0.66 to 0.83 that he used to enhance his DCF returns, through a financial risk or "leverage" adjustment.¹⁴² I&E witness Keller asserts that such enhancements are unwarranted for beta in a CAPM analysis for the same reasons that enhancements are unwarranted for DCF results.¹⁴³

¹⁴⁰ Columbia Statement No. 8-R, p. 25.

¹⁴¹ Columbia Statement No. 8-R, p. 25.

¹⁴² I&E Statement No. 2, p. 44 (citing Columbia Statement No. 8, pp. 35-36).

¹⁴³ I&E Statement No. 2, p. 44.

Also, if the unadjusted *Value Line* betas do not reflect an accurate investment risk as Mr. Moul contends, the question naturally arises as to why *Value Line* does not publish betas that are adjusted for leverage. Until this type of adjustment is demonstrated in the academic literature to be valid, such leverage adjusted betas in a CAPM model should be rejected. Furthermore, the Commission found no basis to add leverage adjusted betas in the recently litigated UGI Electric base rate case.¹⁴⁴

Mr. Moul's adjustment only serves to inflate the result of his CAPM analysis. Enhancements such as leverage adjusted betas are unwarranted in CAPM analyses for the same reasons that enhancements are unwarranted for DCF results. Until this type of adjustment is demonstrated in academic literature to be valid, such leverage-adjusted betas in a CAPM should be rejected.¹⁴⁵

g) Inappropriate Size Adjustment Applied to CAPM Analysis

In addition to the inflated return on equity resulting from Columbia's witness Moul's faulty methods described above, Columbia's witness Moul proposes a 102-basis point addition to his indicated common equity cost rate because he opines that as the size of a firm decreases, its risk and required return increases.¹⁴⁶ To support his claim, Mr. Moul relies upon technical literature including Morningstar's Stocks, Bonds, Bills, and Inflation Yearbook, a Fama and French study entitled "The Cross-Section of Expected

¹⁴⁴ *Pa. P.U.C. v. UGI Utilities, Inc. – Electric Division*, Docket No. R-2017-2640058, p. 100 (Order Entered October 25, 2018).

¹⁴⁵ I&E Statement No. 2-SR, p. 26.

¹⁴⁶ Columbia Statement No. 8, p. 39.

Stock Returns,” and an article published in *Public Utilities Fortnightly* entitled “Equity and the Small-Stock Effect”.¹⁴⁷

I&E witness Keller rebutted Columbia witness Moul’s claims by citing the variance year-to-year of returns for large- and small-capitalization stocks listed on the NYSE, AMEX, and NASDAQ.¹⁴⁸ I&E witness Keller also opines Columbia witness Moul’s size adjustment is unnecessary because none of the technical literature he cites supporting investment adjustments related to the size of a company is specific to the utility industry; therefore, such an adjustment is not appropriate.¹⁴⁹

Specific to the utility industry, I&E witness Keller cites an article stating a size adjustment for risk is not applicable to utility companies.¹⁵⁰ In the article “Utility Stocks and the Size Effect: An Empirical Analysis,” Dr. Annie Wong concludes:

The objective of this study is to examine if the size effect exists in the utility industry. After controlling for equity values, there is some weak evidence that firm size is a missing factor from the CAPM for the industrial but not for utility stocks. This implies that although the size phenomenon has been strongly documented for the industrials, the findings suggest that there is no need to adjust for the firm size in utility rate regulation.¹⁵¹

¹⁴⁷ Columbia Statement No. 8, p. 39.

¹⁴⁸ I&E Statement No. 2-SR, pp. 28-29 (citing Ibbotson *Stocks, Bonds, Bills & Inflation: 2015 Yearbook*, pp. 100, 109, 112 (“While the largest stocks actually declined in 2001, the smallest stocks rose more than 30%. A more extreme case occurred in the depression-recovery year of 1933, when the difference between the first and 10th decile returns was far more substantial. The divergence in the performance of small- and large- cap stocks is evident. In 30 of the 89 years since 1926, the difference between the total returns of the largest stocks (decile 1) and the smallest stocks (decile 10) has been greater than 25 percentage points.... In four of the last 10 years, large-capitalization stocks (deciles 1-2 of NYSE/AMEX/NASDAQ) have outperformed small-capitalization stocks (deciles 9-10). This has led some market observers to speculate that there is no size premium. But statistical evidence suggests that periods of underperformance should be expected.... Because investors cannot predict when small-cap returns will be higher than large-cap returns, it has been argued that they do not expect higher rates of return for small stocks.”)).

¹⁴⁹ I&E Statement No. 2, p. 46.

¹⁵⁰ I&E Statement No. 2, p. 47.

¹⁵¹ Wong, Annie, “Utility Stocks and the Size Effect: An Empirical Analysis” *Journal of the Midwest Finance Association* (1993), pp. 95-101.

Columbia witness Moul attempts to refute Dr. Wong's study by referencing the Fama/French study, "The Cross-Section of Expected Stock Returns," to illustrate that his size adjustment is a separate factor from beta which helps explain systematic risk and returns. Mr. Moul argues the distinction between regulated utilities and unregulated industrial companies from the technical literature that he cites is not enough to reject his size adjustment and that the size adjustment he derived from the Ibbotson study included public utilities. Mr. Moul also states that enormous changes have occurred in the industry since Dr. Wong's article was published.¹⁵²

Although Mr. Moul claims that enormous changes have occurred in the industry since the 1960s, he presents no evidence that these "changes" have caused the need for a size adjustment. To the contrary, Dr. Wong's study demonstrated that one does *not* need to be made in the regulated utility industry. Absent any credible article to refute Dr. Wong's findings, Mr. Moul's size adjustment to his CAPM results should be rejected.¹⁵³ I&E therefore recommends the Commission deny Columbia's claimed size adjustment.

2. I&E's Proposal

a) Introduction

As recommended by I&E witness Keller, an 9.86% return on common equity, based upon a similarly-situated proxy group of companies for purposes of determining capital structure, best balances the interests of the ratepayers and the Company.

¹⁵² Columbia Statement No. 8-R, pp. 28-29.

¹⁵³ I&E Statement No. 2-SR, p. 29.

b) Proxy Group

A proxy (or barometer) group is a group of companies that act as a benchmark for determining the utility's rate of return. A proxy group is also typically used because using data exclusively from one company may be less reliable than using a group of companies because the data for one company may be subject to short-term anomalies that distort its return on equity. Use of a proxy group smooths these potential anomalies. Use of a proxy group also satisfies the long-established principle of utility regulation that seeks to provide the utility the opportunity to earn a return equal to that of similar risk enterprises.¹⁵⁴

I&E witness Keller selected his proxy group based on the following criteria:¹⁵⁵

1. Fifty percent or more of the company's revenues must be generated from the regulated electric utility industry;
2. The company's stock must be publicly traded;
3. Investment information for the company must be available from more than one source, which includes *Value Line*;
4. The company must not be currently involved in an announced merger or acquisition at the time of this analysis;
5. The company must have four consecutive years of historic earnings data; and
6. The company must be operating in a state that has a deregulated gas utility market.

¹⁵⁴ I&E Statement No. 2, pp. 6-7.

¹⁵⁵ I&E Statement No. 2, pp. 7-8.

I&E witness Keller’s proxy group comprises of Atmos Energy Corp.; Chesapeake Utilities Corp.; NiSource Inc.; Northwest Natural Holding Co.; ONE Gas, Inc.; South Jersey Industries; and Spire Inc.¹⁵⁶

c) I&E’s Discounted Cash Flow Analysis

Although there are four methods commonly presented to estimate the cost of common equity,¹⁵⁷ I&E witness Keller uses the DCF method applied to his proxy group of similar utilities to calculate a fair return on equity. I&E witness Keller’s analysis is in accordance with the Commission historical use the DCF as the primary methodology to determine a utility’s cost of equity.¹⁵⁸

In sum, the DCF is “the “dividend discount model” of financial theory, which maintains that the value (price) of any security or commodity is the discounted present value of all future cash flows. The DCF model assumes that investors evaluate stocks in the classical economic framework, which maintains that the value of a financial asset is determined by its earning power, or its ability to generate future cash flows.¹⁵⁹

The DCF recognizes the time value of money, is forward-looking, and has widespread regulatory acceptance. I&E witness Keller confirms the reasonableness of his

¹⁵⁶ I&E Statement No. 2, p. 9.

¹⁵⁷ The four include the DCF Model, the CAPM, the Risk Premium (“RP”) Method, and the Comparable Earnings (“CE”) Method. I&E Statement No. 2, p. 15. I&E witness Keller provided a brief overview of each method. I&E Statement No 2, pp. 15-16.

¹⁵⁸ See *Pa. P.U.C. v. UGI Utilities, Inc. – Electric Division*, Docket No. R-2017-2640058 (Order Entered October 25, 2018) (“*UGI Utilities, Inc. – Electric Division*”), pp. 104-106, 121; *Pa. P.U.C. v. City of DuBois – Bureau of Water*, Docket No. R-2016-2554150 (Order Entered March 28, 2017) (“*City of DuBois – Bureau of Water*”), pp. 96-98; *Pa. P.U.C. v. PECO Energy Company*, 87 Pa. PUC 184, 212 (Pa. P.U.C. 1997); *Pa. P.U.C. v. Philadelphia Suburban Water Co.*, 71 Pa. PUC 593, 623-32 (Pa. P.U.C. 1989); *Pa. P.U.C. v. Western Pennsylvania Water Co.*, 67 Pa. PUC 529, 559-70 (Pa. P.U.C. 1988); *Pa. P.U.C. v. Consumers Pennsylvania Water Company – Roaring Creek Division*, 87 Pa. PUC 826 (Pa. P.U.C. 1997); *Pa. P.U.C. v. City of Bethlehem*, 84 Pa. PUC 275, 304-05 (Pa. P.U.C. 1995); *Pa. P.U.C. v. Media Borough*, 77 Pa. PUC 446, 481 (Pa. P.U.C. 1992).

¹⁵⁹ I&E Statement No. 2, p. 15.

DCF calculation with a comparison to the CAPM results because the Commission has expressed an interest in having results from another methodology as a point of comparison. While the CAPM is also forward-looking and is based on the concept of risk and return, it and the other methodologies have flaws that should discount their use as primary determinants.¹⁶⁰

Based upon his analysis, I&E witness Keller recommends a cost of common equity of 9.86%. This recommendation includes a dividend yield of 3.34% and a recommended growth rate of 6.52%.¹⁶¹ I&E witness Keller's analysis uses a spot dividend yield, a 52-week dividend yield, and earnings growth forecasts. I&E witness Keller employs the standard DCF model formula, $K = D_1/P_0 + g$, where K = the cost of equity, D_1 = the dividend expected during the year; P_0 = the current price of the stock; and g = the expected growth rate. When a forecast of D_1 is not available, D_0 (the current dividend) must be adjusted by $\frac{1}{2}$ the expected growth rate in order to account for changes in the dividend paid in period one.¹⁶²

(1) Dividend yields

A representative yield must be calculated over a time frame sufficient to avoid short-term anomalies and stale data. I&E witness Keller's dividend yield calculation places equal emphasis on the most recent spot (3.47%) and 52-week average (3.20%) dividend yields resulting in an average dividend yield of 3.34%.¹⁶³

¹⁶⁰ I&E Statement No. 1, pp. 17-20.

¹⁶¹ I&E Statement No. 2, p. 25.

¹⁶² I&E Statement No. 2, p. 22.

¹⁶³ I&E Statement No. 2, p. 22-23.

(2) Growth rates

I&E witness Keller used earnings growth forecasts to calculate his expected growth rate. His earnings forecasts are developed from projected growth rates using 5-year estimates from established forecasting entities for his proxy group of companies, yielding an average 5-year growth forecast of 6.52%.¹⁶⁴

(3) Comparison to CAPM

I&E witness Keller analysis of a return on equity using the CAPM methodology uses the standard CAPM formula $K = R_f + \beta(R_m - R_f)$, where K = the cost of equity, R_f = the risk-free rate of return; β = beta, which measures the systematic risk of an asset, and R_m = the expected rate of return on the overall stock.¹⁶⁵

For his CAPM analysis, I&E witness Keller chose the risk-free rate of return (R_f) from the projected yield on 10-year Treasury Bonds as the most stable risk-free measure. With this choice, I&E witness Keller balanced out issues related to use of long term bonds and short term T-Bills.¹⁶⁶ For his beta, I&E witness Keller used the average of the betas from the *Value Line* Investment Survey.¹⁶⁷ To arrive at a representative expected return on the overall stock market, I&E witness Keller reviewed *Value Line*'s 1700 stocks and the S&P 500 Index. The result of the overall stock market returns based on I&E

¹⁶⁴ I&E Statement No. 2, pp. 23-25.

¹⁶⁵ I&E Statement No. 2, p. 25.

¹⁶⁶ I&E Statement No. 2, p. 27.

¹⁶⁷ I&E Statement No. 2, p. 26.

witness Keller's CAPM analysis is 10.35%.¹⁶⁸ This, in turn, yields a cost of equity result of 8.72%.¹⁶⁹

Mr. Moul rebuts Mr. Keller's use of the yield on 10-year Treasury notes and claims that a 30-year Treasury bond is more appropriate because a longer-term bond is less susceptible to Federal policy actions.¹⁷⁰ However, as stated previously, Mr. Keller appropriately chose the 10-year Treasury bond, as long-term bonds are susceptible to substantial maturity risk associated with the market risk and also bear the risk of unexpected inflation.¹⁷¹ Furthermore, the Commission has recently agreed with I&E and recognized the 10-year Treasury Note as the superior measure of the risk-free rate of return.¹⁷² Mr. Keller's use of the yield on the 10-year Treasury bond is appropriate and based upon Commission precedent, therefore should be accepted.

Columbia witness Moul further claims that the incorrect weight was given to the 10-year Treasury note two quarters of 2020 and three quarters of 2021 and suggests giving equal weight to each year from 2021 to 2026.¹⁷³ Mr. Moul fails to consider The flaw with this equal weighting approach is that the further out into the future one forecasts, the less reliable and more speculative the estimates become; therefore, to give the less reliable estimates equal weight would not be prudent. Mr. Keller's calculation provides a more accurate estimation of the risk-free rate during the Fully Projected Future

¹⁶⁸ I&E Statement No. 2, p. 28.

¹⁶⁹ I&E Statement No. 2, p. 28.

¹⁷⁰ Columbia Statement No. 8-R, p. 26.

¹⁷¹ I&E Statement No. 2-SR, p. 23.

¹⁷² *Pa. P.U.C. v. UGI Utilities, Inc. – Electric Division*, Docket No. R-2017-2640058 p. 99 (Order Entered October 25, 2018).

¹⁷³ Columbia Statement No. 8-R, pp. 26-27.

Test Year, as the further out one forecasts, the less reliable the information becomes.¹⁷⁴

Finally, OCA witness O'Donnell opined that I&E's use of a 10.35% forecasted market return is not realistic given the current economic situation even when examining market trends prior to the impacts felt by the COVID-19 pandemic.¹⁷⁵ Furthermore, I&E and the OCA both agree that, "The development of the current market risk premium is, undoubtedly, the most controversial aspect of the CAPM calculations".¹⁷⁶ It is generally accepted that each witness uses a variety of trusted sources in determining the overall market rate of return as well as a degree of professional judgment. As a result, the subjectivity of the CAPM variables allows for such a wide range and interpretations, unlike the DCF that uses specific and defined inputs.¹⁷⁷

I&E witness Keller gave no specific weight to his CAPM results because of his concerns that unlike the DCF, which measures the cost of equity directly by measuring the discounted present value of future cash flows, the CAPM measures the cost of equity indirectly and can be manipulated by the time period used.¹⁷⁸ However, I&E submits that for purposes of providing another point of comparison, the 8.72% CAPM analysis confirms the reasonableness of I&E witness Keller's 9.86% return under his DCF calculation.¹⁷⁹

¹⁷⁴ I&E Statement No. 2-SR, p. 24.

¹⁷⁵ OCA Statement No. 3R, p. 10.

¹⁷⁶ OCA Statement No. 3, p. 65.

¹⁷⁷ I&E Statement No. 2-SR, p. 25.

¹⁷⁸ I&E Statement No. 2, p. 29. I&E witness Keller's presentation of a CAPM analysis serves as a check on his DCF analysis. For the reasons set forth in I&E witness Keller's direct testimony, the DCF model should be used as the primary method in determining a fair return on equity.

¹⁷⁹ I&E Statement No. 2-SR, p. 38.

3. Increment for Management Effectiveness

Columbia witness Moul explains that his 10.95% cost of equity recommendation includes 20 basis points in consideration of the Company's exemplary management performance.¹⁸⁰ The Company's rationale to support its management performance claim includes Columbia's management performance is demonstrated through among other things, its enhanced safety measures, accelerated infrastructure replacement plan, superior results in PUC Management Performance Audit and PUC UCARE reports, its PAR rate, Quality of Service Performance report, and its result in the 2019 J.D. Power Residential Customer Satisfaction Survey.¹⁸¹ This upward adjustment is inappropriate and unsupported.

The example below illustrates the impact of 20 additional basis points to the Company's cost of equity:

Columbia Gas of Pennsylvania, Inc. ¹⁸²	
Claimed Equity Percentage of Capital Structure	54.19%
Additional Basis Points to Calculated Cost of Equity	20
Claimed Rate Base*	\$2,401,427,019
Total Impact	<u><u>\$2,602,667</u></u>

¹⁸⁰ Columbia Statement No. 8, p. 5.

¹⁸¹ Columbia Statement No. 1, pp. 18-39.

¹⁸² I&E Statement No. 2, p. 48; Columbia Exhibit 102, Schedule 3, p. 3.

In this example, an addition of 20 basis points to the cost of equity would force ratepayers to fund an unwarranted additional amount of \$2,602,667 ($0.5419 \times 0.0020 \times \$2,401,427,019$) in rates.¹⁸³

I&E disagrees with the Company's management performance adjustment. Mr. Keller states that although the Company touts its Management Audit scores against other NGDC's it is not to say that the Company does not have room for improvement. According to the Commission's recently issued Management and Operations Audit for Columbia Gas of Pennsylvania, Inc. (Issued in June 2020) at Docket No. D-2019-3011582, the following deficits are illustrated regarding Columbia's customer service:

- Page 53 – Columbia's metering and billing policies and procedures are outdated;
- Page 53 – Columbia's average arrearages were higher throughout the audit period compared to a panel average of Pennsylvania natural gas distribution companies;
- Page 56 – Columbia's revenue recovery has not developed net collection performance goals with which to manage its third-party collection efforts;
- Page 58 – NiSource Corporate Services Company does not have a documented theft of service program; and
- Page 58 – Columbia's customer service representative turnover is higher than at other like utilities.

Unlike other areas, customer service is an area of management and operations over which the Company has complete and direct control. By awarding the Company management effectiveness points, it will cost the customer money for service that can and

¹⁸³ I&E Statement No. 2, p. 48.

should be improved. Any savings from effective operating and maintenance cost measures should flow through to ratepayers and/or investors. These claimed savings would likely be offset by the addition of basis points for management effectiveness as ratepayers would have to fund the additional costs. This defeats the purpose of cutting expenses to benefit ratepayers. Ensuring that these cost saving measures flow to ratepayers is especially important now as many have recently experienced reduced household income as a result of job loss or reduction in hours due to the global pandemic.¹⁸⁴

In rebuttal testimony, both Mr. Moul and Mr. Tubbs responded to I&E's recommendation to disallow the Company's management performance claim. Mr. Moul simply states, "I continue to support the 10.95% return on equity that includes the increment for management performance."¹⁸⁵ Mr. Moul fails to offer an explanation beyond what he argued in his direct testimony and fails to provide any additional support for the Company's claim. Company witness Tubbs argues that Mr. Keller only focused on a few items in the recently issued Management and Operations Audit for Columbia Gas of Pennsylvania, Inc., and that Mr. Keller did not address the positive outcomes in the report, and did not recognize the Commission made no recommendations regarding the Company's gas operations and how the Company manages to provide safe and reliable service.¹⁸⁶

¹⁸⁴ I&E Statement No. 2, pp. 48-50.

¹⁸⁵ Columbia Statement No. 8-R, p. 10.

¹⁸⁶ Columbia Statement No. 1-R, pp. 32-33.

While I&E acknowledges that Mr. Tubbs is correct that the Management and Operations Audit expressed no findings regarding the Company's gas operations, it is not to say that the Company does not have room for improvement as Mr. Keller provided the deficits regarding Columbia's customer service, an area of management and operations over which the Company has complete and direct control.¹⁸⁷ By awarding the Company management effectiveness points, it adds an increased cost to ratepayers for service that can and should be improved. As stated above, any savings from effective operating and maintenance cost measures should flow through to ratepayers and/or investors. These claimed savings would likely be offset by the addition of basis points for management effectiveness as ratepayers would have to fund the additional costs. If the Company were to be awarded management effectiveness basis points, it would defeat the purpose of cutting expenses to benefit ratepayers. Ensuring that cost saving measures flow to ratepayers is especially important now as many have recently experienced reduced household income as a result of job loss or reduction in hours due to the global pandemic where the Pennsylvania unemployment rate was 13.7% as of the end of July 2020.¹⁸⁸

I&E witness Keller opines, 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 growth, cost savings, and true efficiency in management and operations is available to be passed on to shareholders. Further, I&E witness Keller states Columbia should not be granted additional basis points

¹⁸⁷ I&E Statement No. 2-SR, p. 35.

¹⁸⁸ <https://www.bls.gov/web/laus/laumstrk.htm>, accessed September 3, 2020.

for doing what it is required to do in order to provide adequate, efficient, safe, and reasonable service,¹⁸⁹ i.e., the requirements of 66 Pa. C.S. § 1501. Therefore, I&E recommends the Commission reject Columbia’s unwarranted management performance points.

IX. MISCELLANEOUS ISSUES

A. Low-Income Customer Issues

I&E has not addressed low-income customer issues.

B. Pipeline Replacement Issues

1. DIMP

Columbia, as a NGDC, is mandated to adhere to its Distribution Integrity Management Program (“DIMP”) under the Code of Federal Regulations (“CFR”).¹⁹⁰ This DIMP, created by the Company, is then used to evaluate risks to its system.¹⁹¹

a) DIMP Risk Scores

According to the Company, Columbia uses both its DIMP and Optimain software to assess system risks, and upon review I&E witness Apetoh found that its system risks are ranked as high, medium, or low depending on severity. The Company also mentioned that it is implementing its Safety Management System (“SMS”) to better identify and mitigate risks to its system.¹⁹²

During I&E witness Apetoh’s review of the Company’s DIMP, it was unclear whether Columbia’s use of two different mechanisms, DIMP and its newly implemented SMS, to assess risks were using the same risk ranking classifications. In direct

¹⁸⁹ I&E Statement No. 2-SR, pp. 36-37.

¹⁹⁰ 49 Part 192.1001-192.1015, Subpart P.

¹⁹¹ I&E Statement No. 4, p. 3.

¹⁹² Columbia Statement No. 7, p. 27.

testimony, I&E witness Apetoh recommended that the Company develop a process and procedure to normalize the two different risk ranking systems it uses so the effectiveness of the DIMP plan can be evaluated.¹⁹³

In rebuttal, Columbia witness Davidson claimed that Columbia does not use two different risk scores for DIMP risk ranking but rather two inputs to generate one DIMP risk score. According to Mr. Davidson, the two inputs comprise quantitative data on one hand and qualitative data from the Company's SMEs on the other hand. Further, Mr. Davidson claimed that Columbia uses the performance measures associated with the highest risks in its system to evaluate the effectiveness of its DIMP Plan.¹⁹⁴

In surrebuttal, I&E witness Apetoh accepted the Company's explanation of using two inputs to generate one DIMP risk score, however, Mr. Apetoh reiterated that Columbia's current DIMP is unclear as to the explanation that was provided by witness Davidson. Therefore, based on the explanation from Mr. Davidson, I&E recommends that Columbia amend its DIMP to explain its method of using two inputs to generate one DIMP risk score and present proof of the update to I&E Pipeline Safety at the conclusion of this proceeding.¹⁹⁵

b) Inclusion of All Historical Data in Risk Calculation

In direct testimony, I&E witness Apetoh recommended that the Company use all available historical data prior to 2016 to better evaluate trends and changes in risks to its system.¹⁹⁶

Company Mr. Davidson responded to I&E's recommendation and stated that

¹⁹³ I&E Statement No. 5, pp. 6-7.

¹⁹⁴ Columbia Statement No. 7-R, pp. 9-10.

¹⁹⁵ I&E Statement No. 5-SR, p. 5.

¹⁹⁶ I&E Statement No. 5, p. 7.

Columbia is unable to perform a fair comparison of risk rankings for the current year's leakage data against leakage data prior to 2016. Witness Davidson explained that due to several process changes the Company made in 2016 regarding the collection of leakage data and the leakage data quality assurance/quality control processes that this would be difficult to achieve. Mr. Davidson added that Columbia utilizes post 2016 historical leakage data for trending analysis.¹⁹⁷

In response, I&E witness Apetoh clarifies that the changes that occurred in 2016 that Mr. Davidson mentioned cover leakage data only. However, in addition to leakage, high risks to Columbia's system include third party damages, external corrosion, over pressure, cast iron, cross bores, and field assembled risers. I&E notes that Mr. Davidson claimed that Columbia has already updated this Section of its DIMP by expanding the use of incident data and that asset-threat combinations related to incidents over the previous five years now have a higher consequence of failure score.¹⁹⁸ However, the Company's revision to its DIMP to expand the use of incident data and place a higher consequence of failure score on incidents in the last five years is acceptable only if the Company intends to include all available historical data on leakage history, third party damages, external corrosion, over pressure, cast iron, cross bores, and field assembled risers.¹⁹⁹

Therefore, I&E continues to recommend that Columbia update Section 7.1.2.2 of its DIMP to reflect the inclusion of all historical data including leakage history, third party damages, external corrosion, over pressure, cast iron, cross bores, and field assembled risers in the evaluation of its risks and present the revision to I&E Pipeline

¹⁹⁷ Columbia Statement No. 7-R, pp. 10-11.

¹⁹⁸ Columbia Statement No. 7-R, p. 11.

¹⁹⁹ I&E Statement No. 5-SR, p. 6.

Safety at the conclusion of this proceeding.

2. Pipeline Replacement

I&E recommends Columbia to increase its pipe replacement so that the 2029 priority pipe replacement goal as stated in the Company's most recent LTIIIP will be met.²⁰⁰

Columbia filed its LTIIIP with the Commission in 2017.²⁰¹ Columbia averred in the LTIIIP filing that it experienced an increasing number of leaks in areas with a high concentration of aging pipe. Columbia stated that its corrosion leaks represented 65% of all leakage that occurs on main lines in its system.²⁰² Columbia stated in the LTIIIP that removal of bare steel and cast-iron pipe will reduce the Company's leakage based on corrosion.²⁰³ Columbia's LTIIIP claims that the Company will replace all cast iron and bare steel pipe in its system by 2029.²⁰⁴

I&E witness Niambele stated that he is concerned that the Company will not meet the 2029 target stated in the Company's LTIIIP.²⁰⁵ Based on the numbers provided in the LTIIIP, on January 1, 2017, Columbia had 1,350 miles of unprotected bare steel mains, 24.5 miles of cast iron mains, and 83 miles of wrought iron mains in its distribution

²⁰⁰ I&E Statement No. 4-SR, p. 10.

²⁰¹ 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 at Docket No. P-2017-2602917.

²⁰² 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 at Docket No. P-2017-2602917, p. 6.

²⁰³ Columbia Gas Second LTIIIP, Docket No. P-2017-2602917, pp. 10-11 (Order Entered September 21, 2017).

²⁰⁴ Columbia Gas Second LTIIIP, Docket No. P-2017-2602917, p. 5 (Order Entered September 21, 2017).

²⁰⁵ I&E Statement No. 4, p. 12.

system.²⁰⁶ Mr. Niambele explains that in order for the Company to hit its target date of replacement, the Company must replace or retire on average, over 100 miles of pipe per year from the date this plan was filed in 2017. Company witness Huwar's testimony indicated that, Columbia replaced 91 miles of priority pipes in 2016, 96 miles of priority pipes in 2017, 57 miles of priority pipes in 2018 and 98 miles of priority pipes in 2019.²⁰⁷ I&E witness Niambele goes on to state that although the Company may be ahead of its projected five-year goal in the LTIIIP, at the current pace, Columbia will not meet its planned 2029 target date for replacement of all bare steel, cast-iron, and wrought iron mains. Even though the mileage of at risk pipe is decreasing, the Company would need to replace at least 112 miles of pipe each year from 2017 to 2029 in order to meet its planned target date of 2029. The Company's current LTIIIP plan expires at the end of 2022, at which point the Company will need to file a new LTIIIP plan for the next five years. Although the Company may increase the amount of pipeline replacement in the next LTIIIP, it is not guaranteed that the Company will meet its 2029 replacement target date. Based on the fact that less than the 112²⁰⁸ miles were replaced in 2017, 2018 and

²⁰⁶ 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 at Docket No. P-2017-2602917, p. 3.

²⁰⁷ Columbia Statement No. 1, p. 13, figure 3.

²⁰⁸ To determine that fewer than 112 miles were replaced by Columbia from 2017-2019, Mr. Niambele used the Company's stated number of miles of pipeline needing replacement as of 2017 being 1,457 miles and divided it by the Company's total LTIIIP 13 years (2017-2029).

2019, the Company would now need to retire approximately 118²⁰⁹ miles per year for years 2020 through 2029.²¹⁰

Company witness Kitchell responded to I&E's recommendation in rebuttal testimony. According to Mr. Kitchell, Columbia's ability to meet its projections cannot be measured by a straight-line, average approach due to, among other things, the uniqueness of each project.²¹¹ Further, Witness Tubbs stated that if the 2029 completion target date was in jeopardy Columbia would file a modification to its LTIP and further claimed that these issues are better addressed in the LTIP proceeding rather than this base rate case.²¹²

In response to Mr. Kitchell, I&E witness Niambele explains that his analysis was simply to illustrate how many miles of pipeline would need to be replaced in order to meet the goal stated in its LTIP. As mentioned above, Columbia has to replace on average 118 miles per year to meet the Company's goal by 2029. Historically, the Company has only been able to replace over 100 miles of pipe twice between the years 2007 to 2019.²¹³ While Mr. Niambele recognizes that projects are unique, the fact remains that Columbia has not consistently replaced over 100 miles of pipe over the past thirteen years. Based on this information, I&E believes it is necessary to raise this

²⁰⁹ To determine that the Company would need to replace at least 118 miles of pipeline to meet its LTIP goal, Mr. Niambele used the Company's actual replacements found in the 2019 DOT Annual Report (1,181 miles) and divided it by the 10 years remaining on the Company's current LTIP (2019-2029).

²¹⁰ I&E Statement No. 4, p. 13.

²¹¹ Columbia Statement No. 14-R, pp. 3-4.

²¹² Columbia Statement No. 1-R, pp. 13-17.

²¹³ Columbia Statement No. 1, p. 13, figure 3.

concern and recommend that the Company increase its pipeline replacement to meet its LTIIP goal and to reduce overall risk in its system.²¹⁴

Next, Mr. Niamebele opines that although the LTIIP can be modified as Mr. Tubbs stated, the fact remains that risky pipe must be replaced, not left in the ground. I&E witness Niamebele's testimony was to alert the Company that it needs to increase its pipeline replacement in order to meet the goal stated in its current LTIIP. Meeting this goal should be a priority for the Company rather than relying on extending the target date.²¹⁵

I&E also disagrees with Mr. Tubbs argument that these issues are better addressed in an LTIIP proceeding. I&E represents the public interest in rate proceedings and I&E Pipeline Safety's goal through intervention in the rate cases is to bring to light safety impacts with the interconnection and related effects between risk calculations, assets replacement and mitigation, costs, LTIIPs and risk factor indicators, such as incidents and leaks. Increase in risk, like I&E witness Apetoh has identified in his testimony, leads to further examination of all available information. This information can include a company's DIMP, annual reports filed with PHMSA, the company's LTIIP, and information gained during the course of this base rate proceeding. All of this information is analyzed, and appropriate recommendations can be made in a base rate proceeding.²¹⁶

Accordingly, after I&E Pipeline Safety's review of the Company's LTIIP and its replacement projections for the next five years, it led to concern that Columbia may not

²¹⁴ I&E Statement No. 4-SR, p. 4.

²¹⁵ I&E Statement No. 4-SR, pp. 4-5.

²¹⁶ I&E Statement No. 4-SR, p. 5.

meet its stated 2029 replacement goal. Contrary to Mr. Tubbs assertion, I&E believes it is important to alert Columbia to these concerns in this proceeding as part of its charge to represent the public interest and to make appropriate recommendations that would reduce overall system risk.²¹⁷ Accordingly, I&E's recommendation that the Company increase its pipeline replacement efforts to meet the 2029 LTIIP goal should be approved.

3. Pipeline Replacement Costs

In direct testimony, I&E recommended that Columbia draft a cost reduction plan to be submitted to I&E Pipeline Safety Division within the 60 days of the final Order in this proceeding. That plan should outline Columbia's proposed cost containment measures and those reduction measures should be reflected in an update to the Company's LTIIP. Columbia would need to make an effort to negotiate better contracts and coordinate projects with other utility companies and local governments to keep costs down and to itemize expenses on pipeline replacement projects.²¹⁸

In determining I&E's recommendation, I&E witness Niambele reviewed the Company's replacement costs and found that Columbia's capital project costs have increased each year from 2015 through 2017 and in 2019.²¹⁹ Specifically, the increasing costs include paving and restoration costs, construction overhead, and other costs. According to the Company, the decreased costs for 2018 were due to the Merrimack Valley, Massachusetts incident, in which the Company replaced less pipeline mileage in

²¹⁷ I&E Statement No. 4-SR, pp. 7-8.

²¹⁸ I&E Statement No. 4, pp. 18-19.

²¹⁹ I&E Statement No. 4, p. 16 (citing Columbia Statement No. 14, p. 4).

2018 because many of their resources were sent to Massachusetts for the mutual aid response.²²⁰

Mr. Kitchell's direct testimony outlined the increasing pipeline replacement costs from 2008 to 2019.²²¹ The average cost for replaced priority pipes in 2008 was \$81.25 per foot and in 2019 it was \$235.00 per foot.²²² During that period, Columbia replaced or retired approximately 1,010 miles of priority pipe for an average of 84 miles per year.²²³

I&E witness Niambele stated that Columbia's increased pipeline replacement costs raise a concern that municipal restoration requirements continue to drive up the overall replacement cost.²²⁴ As an example, Mr. Niambele pointed to two recent Columbia replacement projects. Phase 1 of Project 1317068 located in the South Side of the City of Pittsburgh had a total cost of \$1,634,598.32. The paving and restoration cost of the project was \$1,161,369.39, which equates to 71% of the total project.²²⁵ Another project, identified as Project 1531242, or The Glenwood Replacement Project, located in Glenwood, PA, had a total cost of \$260,233.31. The project's paving and restoration cost was \$202,200.35, which equates to 78%, of the total budget.²²⁶ These specific projects illustrate Mr. Niambele's concern of high restoration costs relative to the total project costs.²²⁷

²²⁰ Columbia Statement No. 1, p. 13.

²²¹ Columbia Statement No. 14, p. 4.

²²² Columbia Statement No. 14, p. 4.

²²³ Columbia Statement No. 1, p. 13, figure 3.

²²⁴ I&E Statement No. 4, p. 12.

²²⁵ I&E Exhibit No. 4, Schedule No. 7, p. 4.

²²⁶ I&E Exhibit No. 4, Schedule No. 7, p. 10.

²²⁷ I&E Statement No. 4, pp. 17-18.

In rebuttal testimony, Witness Kitchell stated that I&E's recommendations are implemented as part of the Company's existing processes to plan and execute pipeline replacement projects. Columbia believes the cost reduction plan is unnecessary as the Company is already working to reduce restoration costs by carrying out the recommendations put forth by Mr. Niambele's direct testimony. Columbia disagrees that I&E's recommendations would result in a decrease to restoration costs and disputes that it fails to spend prudently on restoration costs.²²⁸

I&E witness Niambele recognizes that the Company is making efforts to reduce replacement costs, but remains concerned that those costs are increasing. Mr. Niambele updated his recommendation for the Company in surrebuttal testimony. I&E now recommends that until the conclusion of the Company's next base rate proceeding, Columbia and I&E's Pipeline Safety Division meet annually for a status update of those efforts. I&E Pipeline Safety would like to discuss replacement cost reduction strategies and best practices the Company is using to reduce all costs.²²⁹ Any cost reductions the Company realizes can be used to replace more pipe and reduce system risk.²³⁰

4. Risk Reduction

a) Root Cause Analysis

Columbia tracks the progress of its risk reduction program by gauging several key risk factors including open grade 2 leaks and the inventory of bare steel and cast-iron

²²⁸ Columbia Statement No. 14-R, pp. 10-16.

²²⁹ I&E Statement No. 4-SR, p. 10.

²³⁰ I&E Statement No. 4-SR, p. 10.

pipes in its system.²³¹ Columbia reduced its open grade 2 leaks by 64.14% from 2015 to 2019. The Company had 937 open grade 2 leaks in 2015 and 336 open grade 2 leaks in 2019.²³²

However, from 2017 to 2019, other risk indicators have risen thus outweighing Columbia's risk reduction efforts. These risk indicators include the number of newly found leaks, excavation damages per thousand tickets, poor record related damages, non-reportable incidents due to poor records, and failures of field-assembled risers on Columbia-owned service lines.²³³ In direct testimony, Mr. Apetoh provides the breakdown for excavation damages²³⁴, facility damages (including mapping errors,²³⁵ poor records,²³⁶ unmarked facilities,²³⁷ Columbia fault,²³⁸ and third-party at fault²³⁹, non-reportable incidents²⁴⁰ and failed field-assembled risers.²⁴¹ Due to the increase in other risk indicators, I&E recommends that Columbia perform a root cause analysis²⁴² to determine why the number of leaks found does not correlate with the amount of pipeline replacement for the past four years and for Columbia to present the results of the said

²³¹ I&E Exhibit No. 5, Schedule No. 9, p. 1.

²³² I&E Statement No. 5, p. 6.

²³³ I&E Statement No. 5, p. 6.

²³⁴ I&E Statement No. 5, p. 7.

²³⁵ I&E Statement No. 5, p. 8.

²³⁶ I&E Statement No. 5, p. 9.

²³⁷ I&E Statement No. 5, p. 9.

²³⁸ I&E Statement No. 5, p. 10.

²³⁹ I&E Statement No. 5, pp. 10-11.

²⁴⁰ I&E Statement No. 5, p. 11.

²⁴¹ I&E Statement No. 5, pp. 11-12.

²⁴² I&E witness Apetoh explains which type of root cause analysis is requested of the Company in his surrebuttal testimony. He explains that the objective of a root cause analysis is to determine the most fundamental reason for an incident or condition, which if removed will prevent recurrence or minimize the risk of the incident or condition. Additionally, there are several root cause analysis techniques. A systematic root cause analysis, which is the one referred to in this case, is an analytical technique or method used to perform two primary functions. These functions include organizing data into patterns to help determine root causes and generating questions for inquiry. There are six key attributes he looks for in a root cause analysis including: (1) Thoroughness; (2) Fairness; (3) Efficiency; (4) People, plant, and procedures; (5) Safety precedence sequence; and (6) Overt management support. I&E Statement No. 5-SR, p. 8.

analysis to I&E Pipeline Safety, which should include any corrective actions the Company takes, no later than September 30th, 2021. Additionally, Mr. Apetoh recommended that the Company continue its leakage reduction program.²⁴³

In rebuttal testimony, Company witness Davidson stated that the Company did experience a slight increase over the three year period of 2017 to 2019, which can be attributed to two key factors: (1) aggressive replacement of aging infrastructure through its accelerated infrastructure replacement program where the impact of these efforts is expected to be gradual as the remaining pipeline to be replaced continues to degrade at an accelerated pace, and (2) an increase in surveyed pipeline.²⁴⁴ Mr. Davidson also noted that I&E witness Apetoh's analysis overstates the percent change of leaks associated with priority pipes.²⁴⁵ According to Mr. Davidson, the data Mr. Apetoh based his analysis on, which Columbia provided in response to I&E-GS-3,²⁴⁶ are not limited to priority pipes but also include probable leaks source as well as facility damage leaks. Additionally, Mr. Davidson stated that the analysis should have included pipe material.²⁴⁷

Further, Mr. Davidson agrees that as a prudent operator, a root cause analysis is essential to understanding and evaluating pipelines system risks and stated that Columbia performs its own analysis through its DIMP under 49 CFR Part 192.1001-192.1015, Subpart P of the Code of Federal Regulations and through operations work planning processes.²⁴⁸ Mr. Davidson states that Columbia does not believe a formal root cause analysis is necessary at this time as it already evaluates leakage data in its current DIMP

²⁴³ I&E Statement No. 5, pp. 12-13.

²⁴⁴ Columbia Statement No. 7-R, pp. 11-12.

²⁴⁵ Columbia Statement No. 7-R, p. 13.

²⁴⁶ I&E Exhibit No. 5, Schedule No. 1.

²⁴⁷ Columbia Statement No. 7-R, p. 13.

²⁴⁸ Columbia Statement No. 7-R, p. 13.

and operations work planning processes.²⁴⁹

I&E witness Apetoh responded to Mr. Davidson's arguments in surrebuttal testimony. First, in regard to his analysis on leaks per mile of priority pipe, Mr. Apetoh explains that most leaks occur on "bad pipes," which Columbia refers to as priority pipes. Taking that into account, I&E witness Apetoh points out that priority pipes will be the source of most of the leaks in the raw data provided by Columbia in response to I&E-GS-3. Therefore, the outcome of Mr. Apetoh's analysis will fall within a reasonable range of confidence.²⁵⁰

Next, Mr. Apetoh explains that, in general, utilities conduct studies or analyses to determine which segments of their systems they should target first during a replacement project. Based on the result of those studies, riskiest pipes or segments are replaced first. Here, Columbia uses a computer software program, Optimain, to determine its riskiest pipes.²⁵¹ Despite the Company's explanation, the upward trend in leaks from 2017 to 2019 is concerning to I&E Pipeline Safety. Mr. Apetoh states that in order to determine whether the Company is targeting the right segments during replacement projects, the Company would need to conduct a root cause analysis. As explained above, a root cause analysis will provide a specific cause as to the increase in leaks in Columbia's system using the six key attributes. Mr. Apetoh acknowledges that Columbia performs its own risk assessment in accordance with DIMP, however, a root cause analysis is generally accepted in the industry and provides a great amount of detail necessary to pinpoint the

²⁴⁹ Columbia Statement No. 7-R, pp. 13-14.

²⁵⁰ I&E Statement No. 5-SR, p. 11.

²⁵¹ Columbia Statement No. 7-R, p. 5.

exact cause or causes of leakage increases.²⁵²

Finally, both I&E Pipeline Safety and the Company agree that overall leaks found have increased on Columbia's system from 2017 to 2019. Additionally, Columbia and I&E Pipeline Safety concur on the importance of conducting a root cause analysis. Therefore, I&E continues to recommend that the Company perform a root cause analysis and submit the results to I&E Pipeline Safety no later than September 30, 2021.

b) Field-Assembled Risers

I&E Pipeline Safety defines a riser is a section of pipe that connects fuel lines and meter sets. Field-assembled risers are risers that are assembled in the field by Company employees as opposed to factory-assembled risers. Riser failures can lead to leaks resulting in explosions, deaths, or property damages.²⁵³

After analyzing information provided by Columbia in response to discovery, I&E witness Apetoh shows the following concerning failed field assembled risers:²⁵⁴ from 2015 through 2019, Columbia's failed field-assembled risers increased 100.00% from 24 in 2015 to 48 in 2019²⁵⁵ and from 2017 to 2019, the Company's failed field-assembled risers increased 4.35% from 46 in 2017 to 48 in 2019.²⁵⁶

Due to the increase in failed field-assembled risers, witness Apetoh recommended that the Company complete updating its records, which would allow Columbia to identify the locations of all field-assembled risers including those on customer-owned service lines. Additionally, Mr. Apetoh recommended, Columbia complete the inspection of all

²⁵² I&E Statement No. 5-SR, pp. 9-10.

²⁵³ I&E Statement No. 5, p. 11.

²⁵⁴ I&E Exhibit No. 5, Schedule No. 25, pp. 1-2.

²⁵⁵ I&E Exhibit No. 5, Schedule No. 26.

²⁵⁶ I&E Exhibit No. 5, Schedule No. 27.

field-assembled risers in the Company's system as soon as possible and develop a plan to replace all of the field-assembled risers in its system, including those on customer-owned service lines.

Company witness Davidson responded to I&E's recommendations to which he stated the Company was already taking proactive actions to address the concerns and recommendations made by I&E witness Apetoh.²⁵⁷

c) Maps and Records

In order to reduce risks involving excavation damages mentioned above, which include mapping errors, poor records, unmarked facilities, I&E recommended that the Company finish updating its maps and records by the end of 2021 if the Commission approves its request for an additional O&M cost of \$491,000.²⁵⁸

In response, Company witness Davidson stated that Columbia cannot guarantee completion of its maps and records by the end of 2021. However, the Company agreed not only to provide documentation to I&E Pipeline Safety as soon as it is available but to keep I&E apprised of its progress.²⁵⁹

I&E accepts Columbia's proposal to keep I&E Pipeline Safety apprised of any progress with updates to maps and records.²⁶⁰

²⁵⁷ Columbia Statement No. 7-R, page 19.

²⁵⁸ I&E Statement No. 5, pp. 13-14.

²⁵⁹ Columbia Statement No. 7-R, p. 15.

²⁶⁰ I&E Statement No. 5-SR, p. 12.

X. RATE STRUCTURE

A. Introduction

A utility's rate structure addresses how the Commission's approved revenue increase will be allocated among the utility's various tariffed rate classes. Once a class revenue allocation is determined, development of a rate design will address how the tariffed rates and rate elements will generate the allocated revenues. A properly designed rate structure will not unduly burden one class of ratepayers to the benefit of another. Under the Public Utility Code, "[n]o public utility shall...make or grant any unreasonable preference to any person, corporation....No public utility shall establish or maintain any unreasonable difference as to rates, either as between localities or as between classes of service."²⁶¹ Differences in rates charged to different classes are permissible so long as there is reasonable basis for the discrepancy.²⁶² "Public utility rates should enable the utility to recover its cost of providing service and should allocate this cost among the utility's customers in a just, reasonable and nondiscriminatory manner."²⁶³

B. Cost of Service

An allocated cost of service ("ACOS") allocates or assigns a utility's revenue requirement based on provision of service to a defined set of customer classes that are different in terms of demand and usage patterns. An ACOS is a formalized analysis of costs that attempts to assign to each customer or rate class its proportionate share of the company's total cost of service. The results of each service can be utilized to determine

²⁶¹ 66 Pa. C.S. § 1304.

²⁶² *Peoples Natural Gas Company v. Pa. P.U.C.*, 409 A.2d 446 (Pa. Cmwlth 1979).

²⁶³ *Pa. P.U.C. v. West Penn Power*, 73 Pa. P.U.C. 454, 510, 199 PUR 4th 110 (1990).

the relative cost of service for each class and help determine the individual class revenue requirements and, to the extent a particular class is above or below the system average rate of return, show the additional revenues each class receives or conversely the additional revenues that each class contributes to the company's overall revenues. In addition to the relative provision of revenues, a relative rate of return is also provided, which shows how the rate of return for each class compares to the system average rate of return.²⁶⁴

The rate of return is the Commission authorized return on rate base that is determined in a base rate proceeding. A relative rate of return indicates how the rate of return of each customer class compares to the system average rate of return. In general, a relative rate of return that provides revenue equal to its cost to serve would have a relative rate of return equal to 1.0.²⁶⁵

In this case, the Company performed and provided three ACOS studies in its filing: (1) a customer demand ACOS, (2) a peak and average ACOS, and (3) an average of the customer-demand and peak and average ACOS.²⁶⁶ The Company proposes to utilize the third method, the average of the customer-demand study and the peak and average study, to allocate the proposed revenue increases.²⁶⁷ In direct testimony, I&E disagreed with this recommendation as it believes that the peak and average ACOS study should be utilized.

²⁶⁴ I&E Statement No. 3, pp. 12-13.

²⁶⁵ I&E Statement No. 3, p. 13.

²⁶⁶ Columbia Exhibit No. 111, Schedule 1; Columbia Statement No. 3, p. 11.

²⁶⁷ Columbia Statement No. 11, p. 3.

The difference between the customer-demand ACOS and the peak and average ACOS is in the way that each study allocates costs of mains. Consequently, the two ACOS studies yield different relative rates of return for each rate class.²⁶⁸ Generally, the customer-demand study is more favorable to the industrial class and the peak and average study is more favorable to the residential class.²⁶⁹ The customer-demand methodology classifies distribution mains as partially customer related and partially demand related. The customer portion of mains is then allocated to the various customer classes based on the total number of customers, while the demand portion is allocated to classes based on peak day contributions or demand. Applying this methodology, the relative rate of return for the RSS/RDS customer classes is 0.73 meaning the Company does not recoup the full costs it incurs to provide service for those customer classes.²⁷⁰ This methodology has been rejected by the Commission in other natural gas base rate cases.²⁷¹

The peak and average ACOS allocates distribution mains to classes based partially on contributions to peak day demand and partially on annual consumption or average demand. Utilizing this methodology, the relative rate of return for the RSS/RDS customer classes is 1.25 meaning the customer classes pay more than the Company incurs to provide service to them under present rates.²⁷² This methodology has been accepted by the Commission in previous cases and is recommended by I&E in this proceeding.

²⁶⁸ I&E Statement No. 3, p. 14.

²⁶⁹ I&E Statement No. 3, p. 14 (citing Columbia Statement No. 11, p. 3).

²⁷⁰ I&E Statement No. 3, p. 15 (citing Columbia Exhibit No. 111, Schedule 1, p. 2, line 14, column D).

²⁷¹ *Pa. P.U.C. v. Philadelphia Gas Works*, Docket No. R-00061931 (Order Entered September 28, 2007) (“Reviewing the record, we find that the allocation of distribution mains investment costs should be done using both annual and peak demands.”).

²⁷² I&E Statement No. 3, p. 15 (citing Columbia Exhibit No. 111, Schedule 1, p. 2, line 14, column D).

In rebuttal testimony, the Company, OSBA and PSU disagreed with I&E's recommendation to use the peak and average methodology. Columbia witness Notestone claimed that throughput has no impact on the determination of the size, length, or cost of the distribution main serving the customers.²⁷³ Mr. Notestone goes on to cite to the National Association of Regulatory Utility Commissioners' 1989 Gas Distribution Rate Design Manual, Columbia objected to the use of a single COSS in revenue allocation and rate design.²⁷⁴

Mr. Notestone then discusses an example provided by OCA witness Mierzwa's direct testimony.²⁷⁵ The example is that on one street are 10 residential customers with a peak demand of one Dth each and on another street is one commercial customer with a peak demand of 10 Dth. If the commercial customer is torn down and replaced with five high-usage residential customers who each have a peak demand of 2 Dth, the main that was sized to deliver 10 Dth is adequate and that is not the number of customers but rather the load that is the determining factor in the main investment.

The Company claims that the example is incorrect because the commercial customer would pay a contribution in aid of construction ("CIAC") because it provides less revenue than the residential customers and that, therefore, the mains investment made by the Company for one residential customer is more than the investment for the commercial customer. However, the Company determined the need for, and amount of, CIAC that will be required by comparing the revenue received by the commercial customer with the revenue received by the residential customer. The revenue received

²⁷³ Columbia Statement No. 11-R, p. 6.

²⁷⁴ Columbia Statement No. 11-R, p. 2.

²⁷⁵ Columbia Statement No. 11-R, pp. 11-13.

from each customer includes a calculation based on the throughput. Therefore, the throughput of the customer is a factor in the cost of the mains.²⁷⁶

Finally, Mr. Notestone rejects I&E's reference to the 1994 National Fuel Gas Distribution Corporation ("NFG") Order on page 52 because in the 1994 NFG case, NFG only submitted studies based on the peak and average methodology and not multiple methodologies as the Company did in the current case.²⁷⁷ However, in the 1994 NFG case, NFG submitted two different peak and average cost of service studies. Witness Notestone disregards the fact that the Commission had the authority to reject the peak and average method and determine whether a different methodology would be appropriate. The Commission did not reject the peak and average method, and in the Order stated that the "Peak & Average method that allocates mains equally is a sound and reasonable method of cost allocation and should remain intact."²⁷⁸

In surrebuttal testimony, I&E witness Cline responded to Mr. Notestone's arguments regarding throughput and multiple cost of service studies. First, Mr. Cline disagreed with Company witness Notestone that throughput is not a determining factor when it comes to main investment. Mr. Cline explains that the purpose of a natural gas distribution company, such as Columbia, is to deliver gas at all times, 365 days a year. The two main reasons an NGDC invests in its distribution system is to improve safety and to meet the gas supply needs of its customers. The Company states that "the availability of receiving gas service 365 days a year is a reason the customer requests gas

²⁷⁶ I&E Statement No. 3-SR, p. 16.

²⁷⁷ Columbia Statement No. 11-R, p. 20.

²⁷⁸ *Pa. P.U.C. v. National Fuel Gas Distribution Co.*, 83 Pa. PUC 262 (1994).

service and causes the gas distribution company to invest in the purchase and installation of gas mains but has nothing to do with Columbia's incurred cost of the pipe or the cost of installing the gas main to provide service to the customer."²⁷⁹ With that statement, the Company claims that a customer who wants gas service is the reason that Columbia incurs the cost of serving that customer but providing the requested service has nothing to do with the cost of connecting that customer, which makes no sense.²⁸⁰

I&E disagrees that multiple cost of service studies are necessary when allocating costs. Mr. Notestone failed to provide any support in which the Commission has made such a distinction regarding allocations based on multiple cost of service studies. Mr. Cline opines that requiring multiple cost of service studies could be overly burdensome to other utilities. Whether a utility presents a single or multiple cost of service studies in a base rate case should be decided based on the utility's decision, prior Commission Orders, or the specific requirements of each base rate case. If multiple cost of service studies are presented, it is then up to the Commission to decide whether to adopt all, one, or none of the studies presented on a case by case basis.²⁸¹

As mentioned above, the OSBA also disagreed with I&E's recommendation to use the peak and average study. In rebuttal testimony, OSBA witness Knecht pointed out that recent Commission precedent for electric distribution utilities specifically affirms the use of a customer-demand allocation methodology for classifying electric distribution system costs and refers to two recent PPL Electric Utilities Corporation rate cases.²⁸² Mr.

²⁷⁹ Columbia Statement No. 11-R, p. 6.

²⁸⁰ I&E Statement No. 3-SR, pp. 15-16.

²⁸¹ I&E Statement No. 3-SR, p. 17.

²⁸² OSBA Statement No. 1-R, p. 12.

Knecht claims that the conceptual argument for customer-demand allocation for gas and electric distribution companies is identical.²⁸³

I&E disagrees with the OSBA as it appears Mr. Knecht does not take into account that there are often distinct differences between electric distribution companies and natural gas distribution companies. Mr. Cline explains that these differences include the fact that electric distribution cost of service studies use customer and demand allocators, while gas and water companies also use volumes as an allocator; additionally, there are differences as it relates to geographical and customer density characteristics. PPL is largely rural in nature and is required to run distribution lines along every public road and also provide service to virtually every residence and business within its service territory. The same is not true for natural gas distribution companies that do not have this same service requirement.²⁸⁴

Next, PSU witness Crist opposed I&E's recommended use of the peak and average ACOS only in allocating costs in this proceeding stating that there are valid reasons that there are other ACOS methodologies that have a sound technical and economic basis to them.²⁸⁵ I&E witness Cline agrees that it is reasonable for the Commission to examine alternative methods for cost allocation and in this case, he examined the Company's recommended alternative methods for cost allocation. However, for the reasons stated above I&E continues to recommend the Commission use the Peak and Average ACOS to allocate costs in the current proceeding.²⁸⁶

²⁸³ OSBA Statement No. 1-R, p. 12.

²⁸⁴ I&E Statement No. 3-SR, p. 19.

²⁸⁵ PSU Statement No. 1-R, p. 14.

²⁸⁶ I&E Statement No. 3-SR, pp. 19-20.

While the Company, OSBA, and PSU disagree with I&E's recommended use of the peak and average study, Mr. Cline points out that in general, any system must be designed to handle peak usage and year-long usage. Furthermore, Mr. Cline believes that although mains serve customers, the type of main investment is properly determined by the throughput.²⁸⁷

Lastly, the OCA responded to I&E's recommendation to use the Company's peak and average study. While the OCA agreed that the peak and average cost allocation method should be accepted in this proceeding, Mr. Mierzwa did not agree that the peak and average ACOS study presented by the Company should be accepted for two reasons. First, Mr. Mierzwa disagrees with the Company's assignment of distribution mains investment into three separate categories and allocates these costs to classes based on the original cost of its distribution mains investment. Second, Mr. Mierzwa claims that the Company's ACOS study fails to properly allocate the cost associated with major account representatives.²⁸⁸

I&E witness Cline disagrees with the OCA for two reasons. First, Mr. Cline believes Columbia's allocation of mains investment because the Company's allocation of depreciation reserve is matched to the allocation of plant in service to determine net plant is reasonable. Second, Mr. Cline agrees with Company witness Notestone that, if the major accounts representatives were assigned only to large customers then the specific representatives that are experts in residential marketing should only be assigned to

²⁸⁷ I&E Statement No. 3-SR, p. 18.

²⁸⁸ OCA Statement No. 4-R, p. 2.

residential customers. Therefore, I&E witness Cline believes the Company's approach to allocating major accounts representatives is reasonable.²⁸⁹

For the reasons stated above, I&E's recommendation to use the peak and average ACOS is reasonable and based upon the Commission's previous acceptance of the peak and average methodology and its rejection of including the cost of distribution mains as a customer cost. Therefore, I&E continues to recommend that the Commission use the peak and average ACOS to allocate the final revenue increases among the different customer classes.

1. Customer Coast Analysis

A customer cost analysis is part of a cost of service study ("COSS") that is used to determine the appropriate fixed customer charges for the various classes and meter sizes. A customer cost analysis includes customer costs only. It is necessary to perform a customer cost analysis because a fixed customer charge represents the revenue that the Company is guaranteed to receive each month, regardless of the level of usage.²⁹⁰ There is a tradeoff between revenue stability from a high customer charge, and affordability and conservation from a low customer charge and higher usage rates.²⁹¹

There are two different customer costs: direct and indirect. A direct customer cost is a cost that changes with the increase or decrease of a single customer. An indirect customer cost is a customer related cost that does not change with the increase or decrease of a single customer. The Commission has allowed, in past instances, certain

²⁸⁹ I&E Statement No. 3-SR, p. 20.

²⁹⁰ I&E Statement No. 3, p. 20.

²⁹¹ AWWA Manual of Water Supply Practices M1 Principles of Water Rates, Fees, Charges, Seventh Edition. pp. 154-155.

indirect customer costs to be included in a customer cost analysis and thus recovered in a customer charge. As an example, in previous cases, the Commission has allowed Employee Pension and Benefits as an indirect cost.²⁹²

The Company prepared two customer cost analyses.²⁹³ The first customer cost analysis allocates a portion of the cost of mains to customers.²⁹⁴ The second customer cost analysis does not allocate any portion of the cost of mains to customers.²⁹⁵ The results of the Company's customer cost analyses are presented in the following table:

Customer Class	Including Mains (Columbia Ex. No. 111, Sch. 1, p. 16, line 41)	Excluding Mains (Columbia Ex. No. 111, Sch. 1, p. 25, line 37)
RSS/RDS	\$54.16	\$23.05
SGS/DS-1	\$60.16	\$25.87
SGS/DS-2	\$108.42	\$43.99
SDS/LGSS	\$459.97	\$191.02
LDS/LGSS	\$2,161.40	\$919.89
MLDS	\$1,170.32	\$1,032.73
FLEX	\$4,868.08	\$1,548.69

According to Columbia witness Melissa J. Bell, the Company designed its rates to strike a balance between fairness and gradualism.²⁹⁶ I&E witness Cline disagrees with Columbia's customer cost analysis because the Commission has established in previous

²⁹² I&E Statement No. 3, p. 20.

²⁹³ Columbia Exhibit No. 111, Schedule 1, pp. 14-30.

²⁹⁴ Columbia Exhibit No. 111, Schedule 1, pp. 14-22.

²⁹⁵ Columbia Exhibit No. 111, Schedule 1, pp. 22-30.

²⁹⁶ Columbia Statement No. 3, p. 35.

cases that mains are not properly included in a customer cost analysis.²⁹⁷ The Commission stated in the PGW base rate case that it found “PGW’s proposal to allocate a percentage of the cost of the distribution mains as a customer cost not to be acceptable.”²⁹⁸ Additionally, the Company failed to provide support for its position and did not provide any Commission Order where the Commission allowed the cost of mains to be included in the customer cost analysis.²⁹⁹ Therefore, I&E continues to recommend the Company’s customer cost analysis that includes the cost of mains should be rejected.

C. Revenue Allocation

1. Proposed Revenue Allocation and Alternatives

I&E recommends that, if less than the full increase is granted, all customer charges and usage rates that have been proposed an increase are scaled back proportionately based on the allocated cost of service study that is ultimately approved by the Commission.³⁰⁰

In rebuttal, Company witness Bell stated that the Company will utilize the approved allocated cost of service to scale back proportionally all revenue requirements for revenue and rate design purposes.³⁰¹ Accordingly, I&E requests the ALJ recommend and the Commission order a proportional scale back of rates if less than the full increase is granted.

²⁹⁷ I&E Statement No. 3, pp. 22-23.

²⁹⁸ *Pa. P.U.C. v. Philadelphia Gas Works*, Docket No. R-00061931, p. 46 (Order Entered September 28, 2007).

²⁹⁹ I&E Statement No. 3, pp. 22-23.

³⁰⁰ I&E Statement No. 3, pp. 24-25.

³⁰¹ Columbia Statement No. 3-R, p. 15.

2. Flex Customers

Columbia's current tariff allows it to grant discount or "flex-rates" to certain customers who can show that they have a competitive alternative to the Company's gas supply.³⁰² During this proceeding, the Company's present and proof of revenue schedules show revenue from flex-rate customers for several rate schedules.³⁰³

In this case, I&E recommends that Columbia provide an update to the competitive alternative analysis for any customer that has not had their alternative fuel source verified for a period of 10 years or more at the point at which Columbia Gas files its base rate case. Witness Cline explains that it is important to periodically analyze competitive alternatives to ensure that the rates of flex-rate customers are not discounted lower than is necessary to avoid the customer choosing the alternative supply. Providing excessive discounts to customers is not in the public interest and would be harmful to both the Company and its customers since the other customers make up the lost revenue that results when flex-rate customers pay less than tariff rates.³⁰⁴

I&E witness Cline describes two situations in which a competitive alternative analysis could benefit Columbia and its customers. First, Mr. Cline explains a situation could arise where a larger pipeline project is needed to serve both the flex-rate and tariff customers. In that instance, if the Company were to terminate the flex-rate contract, based on the findings of a competitive alternative analysis, showing that there was no reasonable alternative it could result in the scale-back or cancellation of the larger

³⁰² I&E Statement No. 3, p. 5. In direct testimony, I&E witness Cline cites to the Company's flex-rate provisions in Supplement 221 to Columbia Tariff Gas – PA P.U.C. No. 9, p. 68.

³⁰³ I&E Statement No. 3, p. 5.

³⁰⁴ I&E Statement No. 3, p. 6.

pipeline project, and avoidance of capital and operating expense, which would result in savings for the Company and its customers.³⁰⁵ Second, a situation could arise where the customers may no longer have a viable alternative supply, or the customer no longer no longer has a viable alternative source or gas or gas capacity, or the cost of the alternative supply to customers as increased or will increase. I&E witness Cline provides an example where a customer may have had access to an interstate pipeline that is now no longer available. This is an especially important consideration when dealing with the natural gas industry which is constantly changing. The cost and difficulty a customer could face to construct interconnections to pipelines may have increased over the time since the last competitive alternative was verified due to inflation, public concerns, restoration costs, and environmental impacts.³⁰⁶

In rebuttal testimony, Columbia witness Tubbs disagreed with I&E's recommendation. Mr. Tubbs referenced that 2018 Columbia rate case settlement where the Company agreed to provide updates on alternative supply verifications and complied with that term but stated that "Columbia does not believe this analysis is necessary going forward."³⁰⁷ Mr. Tubbs further stated that Columbia prefers to enter into contracts that are less than 10 years in length and agreed that facts and circumstances may change through the life of the contract. Mr. Tubbs then provided the example of a 30-year mortgage at a time

³⁰⁵ I&E Statement No. 3, pp. 6-7.

³⁰⁶ I&E Statement No. 3, pp. 6-7.

³⁰⁷ I&E Statement No. 3-R, pp. 3-4 (citing Columbia Statement No. 1-R, p. 62).

when the market supported a 3% interest rate, which the lender would not be permitted to change even if circumstances warranted a different rate.³⁰⁸

Mr. Cline disagreed with the Company's position regarding flex-rate customers and rejects Mr. Tubbs' mortgage example. Mr. Cline explains that the mortgage example does not compare to the contract provided to a flex-rate customer because the interest rate of a mortgage does not affect the interest rates of other home buyers and is not contingent upon a lower interest rate alternative being available through the life of the loan. Customers under flex rates are not paying the full cost of service rate that they would otherwise be charged absent a verifiable alternative, which creates a revenue shortfall that must be subsidized by the other rate classes. As mentioned previously, providing excessive discounts to customers would be harmful to both the Company and its customers, because other customers must make up the lost revenue that results when flex-rate customers pay less than tariff rates. Therefore, providing an accurate and up-to-date analysis of competitive alternatives is necessary and reasonable. In Mr. Tubbs example, the other home buyers and the lender are not harmed by the interest rate of the mortgage of one home buyer. Columbia's comparison of flex-rate customers to mortgages has no merit and should be rejected.³⁰⁹

The Company actually provides support for I&E's recommendation for an alternative supply analysis and flex-rate customers be evaluated every 10 years when it stated that the facts and circumstances surrounding flex-rate customers are constantly

³⁰⁸ Columbia Statement No. 1-R, pp. 62-63.

³⁰⁹ I&E Statement No. 3-SR, p. 4.

changing. As I&E witness Cline indicated, this analysis is needed to ensure that flex-rate customers make the maximum contribution to fixed costs.³¹⁰

For the reasons stated above, I&E's recommendation that Columbia provide an update to the competitive alternative analysis for any customer that has not had their alternative fuel source verified for a period of 10 years or more at the point at which Columbia Gas files its base rate case is reasonable and should be adopted.

3. Allocation of Universal Service Costs

I&E did not address allocation of universal service costs.

³¹⁰ I&E Statement No. 3-SR, p. 5.

D. Rate Design

1. Residential Rate Design

a) Residential Customer Charge

Columbia proposes the following customer charges for each rate class receiving a proposed increase:

Columbia's Proposed Customer Charges³¹¹				
Rate Schedule (Therms, annually)	Present Rate	Change	Proposed Rate	Percent Increase
RS, RDS, RCC				
All Usage	\$16.75	\$6.25	\$23.00	37.31%
SGSS1, SCD1, SGDS1				
<u><6,440</u>	\$22.75	\$7.25	\$30.00	34.51%
SGSS2, SCD2, SGDS2				
>6,440 to ≤64,440	\$48.00	\$12.00	\$60.00	25.00%
SDS/LGSS				
>64,400 to ≤110,000	\$229.75	\$60.25	\$290.00	26.22%
>110,000 to <u><540,000</u>	\$757.34	\$182.60	\$940.00	24.11%
LDS				
>540,000 to ≤1,074,000	\$1,947.06	\$472.94	\$2,420.00	24.29%
>1,074,000 to ≤3,400,000	\$3,028.76	\$731.24	\$3,760.00	24.14%
>3,400,000 to ≤7,500,000	\$5,841.18	\$1,408.82	\$7,250.00	24.12%
>7,500,000	\$8,653.60	\$2,076.40	\$10,730.00	23.99%

³¹¹ Columbia Exhibit No. 103, Schedule 8, pp. 5-9.

I&E recommends reducing the customer charges for the SGSS1, SGSS2 and SDS /LGSS classes based upon I&E’s recommended customer cost analysis discussed above. Witness Cline accepts the Company’s proposed customer charges to the RS/RDS/RCC and LDS classes. I&E’s recommended customer charges for the SGSS1, SGSS2, and SDS/LGSS are shown in the table below:

I&E Corrected Customer Charge Table³¹²				
Rate Schedule (Therms, annually)	Customer Cost Analysis	Company Proposed Rate	Change	I&E Proposed Rate
RS, RDS, RCC				
All Usage	\$23.05	\$23.00	\$0.00	\$23.00
SGSS1, SCD1, SGDS1				
<u><6,440</u>	\$25.87	\$30.00	(\$4.00)	\$26.00
SGSS2, SCD2, SGDS2				
>6,440 to ≤64,440	\$43.99	\$60.00	(\$15.00)	\$45.00
SDS/LGSS				
>64,400 to ≤110,000	\$191.02	\$290.00	(\$98.98)	\$191.02
>110,000 to <u><540,000</u>	\$919.89	\$940.00	(\$20.00)	\$920.00

In rebuttal testimony, the Company and the OCA disagreed with I&E’s customer charge recommendations. Company witness Bell disagreed with I&E’s recommendation and continued to support the Company’s proposed customer charges listed above. OCA witness Mierzwa disagreed with I&E’s recommendations because he believes that the

³¹² I&E Statement No. 3-SR, p. 22; I&E’s recommended customer charge table was updated in surrebuttal testimony to correct inadvertent errors in the direct testimony table.

40% increase to residential customers violates the principle of gradualism and Columbia's customer charge is already the highest in the Commonwealth.³¹³

I&E acknowledges that a 40% increase in customer charge is significant; however, I&E's recommendation does not violate the principle of gradualism because I&E recommends that customer charges should be included in any scale back of rates.³¹⁴ Furthermore, witness Cline iterates that each Pennsylvania natural gas distribution company has its own specific costs and allocation of these costs produces different results and that the rates of each company should be determined based on the facts and data specific to that company. Mr. Cline based his recommendations on the customer cost analysis using data specific to this case.³¹⁵ Therefore, I&E recommends that the Company's customer charges for RS/RDS/RCC and LDS classes and I&E's reduction to the SGSS1, SGSS2 and SDS /LGSS classes reflected in the above table be adopted.

b) Weather Normalization Adjustment

The Weather Normalization Adjustment ("WNA") was initially established as a pilot program after Commission approval in Columbia's 2012 base rate case and was made a permanent Rider after Columbia's 2018 base rate case. The purpose of the WNA is to adjust the temperature sensitive portion of a customer's bill in order to mitigate the impacts of warmer or colder than normal weather.³¹⁶ In other words, customers are billed

³¹³ OCA Statement No. 4-R, p. 2.

³¹⁴ I&E Statement No. 3-SR, p. 23.

³¹⁵ I&E Statement No. 3-SR, p. 24.

³¹⁶ Columbia Statement No. 3, p. 16.

less than what a traditional bill calculation would require during colder than normal heating seasons and billed more during warmer than normal heating seasons.³¹⁷

Currently, the WNA has a 3% “deadband”, which the Company is proposing to remove in this proceeding.³¹⁸ The 3% deadband is a provision that the Company agreed to as a part of the 2018 base rate case settlement at Docket No. R-2018-2647577. As stated in Columbia Tariff Supplement 282 to Tariff Gas – Pa. P.U.C. No. 9 Tenth Revised Page No. 162, paragraph (h):

A 5% deadband shall be effective through the January 2019 cycle billing. The WNA for a billing cycle will apply only if the AHDD [Actual Heating Degree Days] or the billing cycle are lower than 95% or higher than 105% of the NHDD [Normal Heating Degree Days] for the billing cycle. A billing adjustment will only occur if the variation of AHDD is lower than 95% or higher than 105% of the NHDD for an individual billing cycle. Beginning with the February 2019 cycle billing, the deadband will be 3%. At that time, the WNA for a billing cycle will apply only if the AHDD for the billing cycle are lower than 97% or higher than 103% of the NHDD for an individual billing cycle.

The example provided by the Company is that, if a billing cycle is 2% warmer or colder than normal, then no adjustment would be made.³¹⁹

I&E recommends that the Company’s proposal to remove the 3% deadband be denied. I&E witness Cline explains that a WNA is a departure from traditional ratemaking in that it allows the Company to actually adjust a customer’s base rate bill, which was calculated based on Commission approved rates, outside the scope of a base rate case. Mr. Cline believes that such a departure from traditional ratemaking should

³¹⁷ Columbia Statement No. 3, pp. 17-18.

³¹⁸ Columbia Statement No. 3, p. 19.

³¹⁹ Columbia Statement No. 3, p. 19.

only occur due to circumstances that are an extraordinary departure from normal operating conditions, such as abnormal weather. Mr. Cline opines that there is no need to reconcile the day-to-day temperature variations that can be considered a normal part of doing business. Therefore, a 3% deadband is a reasonable provision, because it allows for a range of what is considered “normal” weather in which the Company’s Commission-approved rates would be applied without adjustment.³²⁰

In rebuttal testimony, Company witness Bell disagrees with I&E’s recommendation to deny the 3% deadband removal for two reasons. First, Columbia witness Bell opines that she does not agree that the WNA only serves as an extreme weather fix.³²¹ Ms. Bell further reiterates that the goal of the WNA is to “eliminate revenue and bill variations due to warmer and colder than normal weather.”³²² Second, witness Bell provides an example of the revenue impact of 2.5% colder than normal weather on a typical residential customer with the 3% deadband in place,³²³ which resulted in a 3% variance in customers’ bills.

It is important to note that Company’s WNA proposal is a tariff provision that allows the Company to adjust Commission-approved rates in between rate cases is a departure from traditional ratemaking and such a departure should only occur due to circumstances that are an extraordinary departure from normal operating conditions, such as abnormal weather. Mr. Cline submits that the 3% deadband represents a range of what can be considered “normal” weather and that the WNA with the 3% deadband achieves

³²⁰ I&E Statement No. 3, p. 9.

³²¹ Columbia Statement No. 3-R, p. 4.

³²² Columbia Statement No. 3-R, p. 4.

³²³ Columbia Statement No. 3-R, pp. 4-7.

the Company's stated goal of eliminating revenue and bill variations due to warmer and colder than normal weather. Moreover, Columbia failed to provide any support to show that weather variations within 3% above or below an established base line could or should not be considered "normal" weather. Mr. Cline explains that weather is inherently variable, and he continues to believe that there is no need to reconcile day-to-day temperature variations that fall within the 3% deadband.³²⁴

Columbia witness Bell explained that the deadband applies to the billing month as a total and that small variances in the weather throughout the month could potentially offset the larger adjustment, or "extreme" days.³²⁵ However, if, in one month, the Company experiences enough variable weather days to offset a larger weather adjustment that the adjustment falls within the 3% deadband, then an adjustment is not necessary.³²⁶

To illustrate how the WNA mechanism would work, the Company provided a theoretical bill impact to a typical residential customer including the 3% deadband as a permanent provision of the WNA. The Company stated that the bill impact for a typical residential customer for a three-month period (January through March) with normal usage and the same three-month period with 2.5% colder than normal usage results is a difference of \$8.07.³²⁷ I&E witness Cline calculated that the \$8.07 difference represents approximately 2%.³²⁸ Mr. Cline explains that a 2% variance in a customers' bill over a three-month period falls within what can be considered normal weather changes and a

³²⁴ I&E Statement No. 3-SR, pp. 6-7.

³²⁵ Columbia Statement No. 3-R, p. 4.

³²⁶ I&E Statement No. 3-SR, p. 7.

³²⁷ Columbia Statement No. 3-R, pp. 5-7.

³²⁸ I&E Statement No. 3-SR, p. 7.

normal part of doing business as a utility. Additionally, such a small variance would likely not be considered detrimental to the Company nor the customer, however this small variance is not a suitable reason to deviate from traditional ratemaking procedures or the Company's Commission-approved rates.³²⁹

Finally, I&E witness Cline states that the proposed Revenue Normalization Adjustment ("RNA") should not be considered when determining whether a 3% deadband in the WNA is reasonable. The RNA, discussed below, is currently at issue in the present proceeding and has not yet been approved by the Commission; therefore, it is not appropriate to consider the benefits, or lack thereof, of a WNA with or without a 3% deadband on a tariff provision that does not yet exist and may not be approved.³³⁰

For the reasons mentioned above, I&E submits that the WNA with the 3% deadband is a reasonable provision because it serves to protect both the Company and customers from the effects of abnormal weather, which cannot be predicted or controlled. Therefore, I&E recommends that the 3% deadband be made a permanent part of the Company's WNA.

c) Revenue Normalization Adjustment

An RNA is a tariff provision that is "designed to 'break the link' between residential non-gas revenue received by the Company and gas consumed by non-CAP residential customers."³³¹ In other words, the Company is proposing to stabilize its

³²⁹ I&E Statement No. 3-SR, p. 7.

³³⁰ I&E Statement No. 3-SR, p. 8.

³³¹ Columbia Statement No. 3, p. 20.

revenue level received from customers by enacting a “benchmark distribution revenue level” and adjusting revenues to that point regardless of actual usage levels.³³²

In this proceeding, the Company is proposing to apply an RNA to its non-CAP residential customers.³³³ The Company proposes to set the benchmark distribution revenue levels by month for the peak period, October through March, and off-peak period, April through September, separately, based on the revenue requirement approved in the present proceeding.³³⁴

I&E witness Cline recommends that the Company’s proposal to use RNA be denied for two reasons. First, Mr. Cline asserts that through Act 11 and the FPFTY, the Company is permitted to build into its revenue requirement an adjustment for revenue lost due to a decline in usage that is projected to occur after rates go into effect. Second, Mr. Cline explains that the purpose of revenue stabilization is to remove the inherent risk of not recovering the full amount of revenue requirement allowed by the Commission due to changes in usage. Between the frequent base rate cases filed by the Company, staying out no more than two years, the FPFTY, the DSIC, and the WNA, the Company has failed to demonstrate a need for further revenue stabilization measures. Additionally, the Company has not indicated that the RNA will result in fewer base rate increases, thus removing any benefit from the residential customers.³³⁵

I&E witness Cline further articulates that RNA can actually cause harm to customers because in order for customers to benefit from the RNA, they would need to

³³² I&E Statement No. 3, p. 10.

³³³ Columbia Statement No. 3, p. 20.

³³⁴ Columbia Statement No. 3, pp. 20-22.

³³⁵ I&E Statement No. 3, p. 11.

use more gas to trigger the refund, which is contrary to conservation efforts. Customers who undertake conservation efforts will see their savings eroded and their investment payback time increase as the Company is permitted to increase rates in response to usage declines. Further, customers who lack the financial means to undertake conservation efforts will be penalized by the RNA, which increases rates to address usage reductions. While the adjustment applies only to non-CAP residential customers, there are potentially many customers whose ability to pay may be compromised as their rates increase to address conservation efforts undertaken by more affluent customers.³³⁶

In rebuttal, the Company disagreed with I&E's recommendation to deny Columbia's RNA proposal. First, the Company claims that "the stability provided by the RNA is beneficial for both the Company and its residential customers."³³⁷ Second, the Company claims that Mr. Cline made two incorrect assumptions in direct testimony that the proposed RNA can cause harm.³³⁸

Columbia witness Bell states that the RNA is beneficial 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."³³⁹ However, as Mr. Cline pointed out, based on the information provided by the Company in the current proceeding, it appears that the Company would be receiving most of the benefit of any revenue stabilization while the customers receive little or no benefit. The ways in which customers could benefit from an RNA is through less frequent base rate cases and

³³⁶ I&E Statement No. 3, pp. 11-12.

³³⁷ Columbia Statement No. 3-R, p. 8.

³³⁸ Columbia Statement No. 3-R, pp. 8-9.

³³⁹ Columbia Statement No. 3-R, p. 8.

receiving revenue credits.³⁴⁰ Here, any benefit to customers is shown to be speculative at best as witness Bell stated that the “Company is not able to state with certainty” that a residential RNA would result in fewer rate cases.³⁴¹

Next, Columbia witness Bell claims that Mr. Cline’s statement regarding conservation efforts is flawed by his failure to recognize the many reasons that a residential customer’s usage could increase.³⁴² Ms. Bell argues that a customer turning up their heat to benefit from the RNA credit would not have lower bills due to the commodity charge and that usage may increase for other reasons such as with the example provided of a customer deciding to work from home, that increase would not be contrary to conservation efforts.

I&E witness Cline asserts that the Company’s example shows that the RNA in general is less beneficial to customers than it is to the Company. Based on the Company’s statement, it is clear that for all residential customers, the credit received for higher usage is mitigated by the increase to their bills due to the commodity cost. However, the Company experiences no such offset when collecting extra revenue under the RNA during times of declining usage. This shows that the RNA is unfairly tilted in favor of the Company at the expense of the customers.³⁴³

While Mr. Cline agrees with the Company that there are other reasons that could cause usage to increase, a large reason for the decline in the usage of gas that the natural gas industry has experienced in recent years is due to conservation efforts. As Columbia

³⁴⁰ I&E Statement No. 3-SR, p. 9.

³⁴¹ Columbia Statement No. 3-R, p. 8.

³⁴² Columbia Statement No. 3-R, pp. 8-9.

³⁴³ I&E Statement No. 1-SR, p. 11.

witness Bell stated, RNA adjustments are calculated on a class-wide basis and are not customer specific.³⁴⁴ Therefore, while the example of a customer deciding to work from home may apply in this case due to the COVID-19 pandemic, there is no evidence of how long that situation will last. Furthermore, the Company failed to provide any evidence to support large sections of residential customers are deciding to work from home long-term and, thus, would not be a class-wide factor of increasing usage.³⁴⁵

Finally, Columbia argues that Mr. Cline's testimony regarding the increase to the investment payback time for customer conservation efforts is incorrect. Company witness Bell stated that, because the adjustments to the RNA are real time, a customer who reduces consumption will experience immediate savings on their bill and provided an example of the type of savings a customer could experience.³⁴⁶ Also, the Company stated that the proposed RNA reflects what happens in a rate case when customers implement conservation measures in that fixed costs are spread over lower volumes and rates for all residential customers would increase.³⁴⁷

In response, Mr. Cline reasserts his position and points out two flaws in the Company's argument. First, if the RNA is simply doing what the normal rate case process does without the benefit of less frequent base rate cases, then there is no need for the RNA as the Company's rates will continue to be adjusted every year or two as has been the Company's pattern of rate case filing. Second, Mr. Cline disagrees that Columbia witness Bell's example regarding conservation savings shown below shows

³⁴⁴ Columbia Statement No. 3-R, p. 9.

³⁴⁵ I&E Statement No. 3-SR, p. 11.

³⁴⁶ Columbia Statement No. 3-R, pp. 9-10.

³⁴⁷ Columbia Statement No. 3-R, p. 10.

that the payback time would not increase.³⁴⁸

The schedule below shows two hypothetical scenarios involving two RNA rates: Rate A at \$0.25 per Dth and Rate B at \$0.75 per Dth. The conservation savings without an RNA, with Rate A, and Rate B generated by a furnace replacement, attic insulation, and wall insulation are shown below.³⁴⁹

	Furnace Replaced	Attic Insulation	Wall Insulation	Total
No RNA Savings	\$175.17	\$122.19	\$173.01	\$470.37
Rate A	\$17.46	\$18.69	\$17.51	\$10.64
Rate A Savings	\$157.71	\$103.50	\$155.50	\$459.73
% of Total Savings	90%	85%	90%	98%
Rate B	\$52.38	\$56.06	\$52.53	\$31.91
Rate B Savings	\$122.79	\$66.13	\$120.48	\$438.46
% of Total Savings	70%	54%	70%	93%

Mr. Cline explains that this table clearly shows that the customer who installs the furnace replacement would have their savings reduced to 90% of the no-RNA savings under RNA Rate A and 70% of the no-RNA savings under Rate B. With the customer saving less through their investment in conservation efforts each year after the first, the time it takes for the customer to recover their investment will take longer. Therefore, the Company's assertion that Mr. Cline's statement is incorrect, is incorrect.³⁵⁰

³⁴⁸ I&E Statement No. 3-SR, p. 12.

³⁴⁹ Columbia Exhibit MJB-1R, columns 9-12, lines 13-19.

³⁵⁰ I&E Statement No. 3-SR, p. 13.

Columbia's RNA proposal is not in the public interest as the Company's RNA proposal shows little to no benefit to Columbia's customers and may even have potential to harm them. For those reasons and the reasons discussed above, I&E continues to recommend that the Company's proposal to use RNA be denied.

2. Small C&I Customer Rate Design

I&E did not address small C&I customer rate design.

3. Large C&I Customer Rate Design

I&E did not address large C&I customer rate design.

4. Gas Procurement Charge Rider

I&E did not address the gas procurement charge rider.

E. Bill Impacts

In its filing, Columbia provided that an average customer using 70 therms would be billed \$89.13 per month at current rates and \$104.80 at proposed rates or a 17.58% increase.³⁵¹ At the same usage, I&E forecasts the average residential bill applying all of I&E's recommendations would increase to \$101.17 or by 13.51%. It is important to note that I&E's projected average residential bill may be impacted by the cost of service study, scale back, and rate design.

XI. CONCLUSION

Columbia has failed to bear its burden of proof with respect to each and every element of its proposed \$100.3 million rate increase. The Company's proposal must be amended to reflect the necessary and appropriate adjustments proposed by the Bureau of Investigation & Enforcement fixed utility financial analyst and engineer witnesses. For

³⁵¹ Columbia Exhibit 111, Schedule 6, p. 1.

the reasons stated herein, the Bureau of Investigation & Enforcement respectfully requests the Administrative Law Judge and the Commission to adopt its recommendations in this proceeding, which includes adjustments and modifications as supported herein and reflected on the attached I&E tables.

Respectfully submitted,

A handwritten signature in cursive script that reads "Erika L. McLain".

Erika L. McLain
Prosecutor
PA Attorney ID No. 320526

Bureau of Investigation and Enforcement
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

Dated: October 16, 2020

Appendix A

TABLE I
Columbia Gas of Pennsylvania, Inc.
INCOME SUMMARY
R-2020-3018835

	Pro Forma						Total Allowable Revenues	
	Pro Forma Present Rates	Company Adjustments	Present Rates	I&E Adjustments	I&E Pro Forma	I&E Revenue Increase		
	(1)	(1)	(1)		Present Rates			
	\$	\$	\$	\$	\$	\$	\$	
Operating Revenue	572,769,574	0	572,769,574	0	572,769,574	75,934,562	648,704,136	
Expenses:								
O&M Expense	336,662,770	0	336,662,770	(5,111,731)	331,551,039	862,138	332,413,177	
Depreciation	98,832,789	0	98,832,789		98,832,789	0	98,832,789	
Taxes, Other	3,825,546	0	3,825,546	(275,672)	3,549,874	0	3,549,874	
Income Taxes:								
State	42,372	0	42,372	237,046	279,418	3,303,187	3,582,605	
Federal	16,484,249	0	16,484,249	1,081,575	17,565,824	15,071,540	32,637,364	
Deferred Income Tax	0	0	0	0	0	0	0	
ITC	(257,415)	0	(257,415)	0	(257,415)	0	(257,415)	
Total Expenses	455,590,311	0	455,590,311	(4,068,782)	451,521,529	19,236,865	470,758,394	0
Net Income Available for Return	117,179,263	0	117,179,263	4,068,782	121,248,045	56,697,697	177,945,742	(0)
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%		4.88%		5.05%		7.41%	

(1) Company Rebuttal

0

TABLE I(A) - As filed
Columbia Gas of Pennsylvania, Inc.
RATE OF RETURN
R-2020-3018835

Company Rebuttal

	<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			2.07000000%		
Long-term Debt	42.22%	4.73%	2.00000000%		2.00%
Short-term Debt	3.59%	2.06%	0.07000000%		0.07%
Preferred Stock	0.00%	0.00%	0.00000000%	0.755240	0.00%
Common Equity	<u>54.19%</u>	10.95%	<u>5.93000000%</u>	0.755240	<u>7.85%</u>
	<u>100.00%</u>		8.00000000%		9.92%
Pre-Tax Interest Coverage	4.96				
After-Tax Interest Coverage	4.00				

I&E Recommendation

Total Cost of Debt			2.07000000%		
Long-term Debt	42.22%	4.73%	2.00000000%		2.00%
Short-term Debt	3.59%	2.06%	0.07000000%		0.07%
Preferred Stock	0.00%	0.00%	0.00000000%	1.000000	0.00%
Common Equity	<u>54.19%</u>	9.86%	<u>5.34000000%</u>	1.000000	<u>5.34%</u>
	<u>100.00%</u>		7.41000000%		7.41%
Pre-Tax Interest Coverage	3.71				
After-Tax Interest Coverage	3.71				

TABLE I(B)
Columbia Gas of Pennsylvania, Inc.
REVENUE FACTOR
R-2020-3018835

100%	<u>1.00000000</u>
Less:	
Uncollectible Accounts Factor	0.01135370
PUC, OCA, OSBA Assessment Factors	0.00000000
Gross Receipts Tax	0.00000000
Other Tax Factors	<u>0.00000000</u>
	0.98864630
State Income Tax Rate	<u>0.04400000</u>
Effective State Income Tax Rate	<u>0.04350000</u>
Factor After Local and State Taxes	0.94514630
Federal Income Tax Rate	<u>0.21000000</u>
Effective Federal Income Tax Rate	<u>0.19848100</u>
Revenue Factor (100% - Effective Tax Rates)	<u><u>0.74666530</u></u>

TABLE II
Columbia Gas of Pennsylvania, Inc.
SUMMARY OF I&E RECOMMENDED ADJUSTMENTS
R-2020-3018835

<u>Adjustments</u>	<u>Rate Base</u>	<u>Revenues</u>	<u>Expenses</u>	<u>Depreciation</u>	<u>Taxes-Other</u>	<u>State Income Tax</u>	<u>Federal Income Tax</u>
	\$	\$	\$	\$	\$	\$	\$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(IVB38)						
Taxes (Table V)	(VIP34)						
O&M (Table VI)	(VIB42)						
CWC							
REVENUES:							
Average revenues		0			0	0	0
EXPENSES:							
Rate Case Expense			(424,000)			18,656	85,122
Labor			(3,053,528)			134,355	613,026
Other Employee Benefits			(500,968)			22,043	100,574
Incentive Compensation			(784,686)			34,526	157,534
PUC, OCA, OSBA, DPC fees			(348,549)			15,336	69,975
						0	0
						0	0
						0	0
						0	0
						0	0
						0	0
						0	0
						0	0
TAXES:							
FICA Tax Expense					(275,672)	12,130	55,344
Interest Synchronization (Table III)						0	0
TOTALS	<u>0</u>	<u>0</u>	<u>(5,111,731)</u>	<u>0</u>	<u>(275,672)</u>	<u>237,046</u>	<u>1,081,575</u>

TABLE III
Columbia Gas of Pennsylvania, Inc.
INTEREST SYNCHRONIZATION
R-2020-3018835

	Amount \$
Company Rate Base Claim	2,401,427,019
I&E Rate Base Adjustments	<u>0</u>
I&E Rate Base	2,401,427,019
Weighted Cost of Debt	<u>2.07000000%</u>
I&E Interest Expense	49,709,539
Company Claim (1)	49,709,539
Total I&E Adjustment	(0)
Company Adjustment	<u>0</u>
Net I&E Interest Adjustment	(0)
State Income Tax Rate	<u>4.40%</u>
State Income Tax Adjustment	<u>0</u>
Net I&E Interest Adjustment	(0)
State Income Tax Adjustment	<u>0</u>
Net I&E Adjustment for Federal Income Tax	(0)
Federal Income Tax Rate	<u>21.00%</u>
Federal Income Tax Adjustment	<u><u>0</u></u>

(1) Company Rebuttal

TABLE IV
Columbia Gas of Pennsylvania, Inc.
CASH WORKING CAPITAL - Interest and Dividends
R-2020-3018835

Accrued Interest	Long-Term Debt		Short-Term Debt		Preferred Stock Dividends	
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>2.00000000%</u>	<u>0.07%</u>	Weighted Cost Pref. Stock	<u>0.00000000%</u>		
ALJ Annual Interest Expense	<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 Expense	\$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	<u>\$0</u>	<u>\$0</u>	Company Claim	<u>\$0</u>		
ALJ Adjustment	<u>\$0</u>	<u>\$0</u>		<u>\$0</u>		
Total Interest & Dividend Adj.	<u>\$0</u>					

TABLE VI
Columbia Gas of Pennsylvania, Inc.
CASH WORKING CAPITAL -- O&M EXPENSE
R-2020-3018835

Description	Company Pro forma FPFTY 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	<u>\$0</u>				
ALJ Adjustment	<u>#DIV/0!</u>				

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

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

CERTIFICATE OF SERVICE

I hereby certify that I am serving the foregoing **Main Brief** dated October 16, 2020, in the manner and upon the persons listed below:

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