Whitney E. Snyder
(717) 236-1300 x260
wesnyder@hmslegal.com

Thomas J. Sniscak
(717) 236-1300 x224
tjsniscak@hmslegal.com

Phillip D. Demanchick Jr.
(717) 236-1300 x225
pddemanchick@hmslegal.com

100 North Tenth Street, Harrisburg, PA 17101 Phone: 717.236.1300 Fax: 717.236.4841 www.hmslegal.com

September 12, 2023

Via Electronic Filing

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

Re: Columbia Water Company; 2023 General Base Rate Increase Filing; Docket No. R-2023-3040258; **COLUMBIA WATER COMPANY'S MAIN BRIEF**

Dear Secretary Chiavetta:

Enclosed for filing with the Commission is the Main Brief of Columbia Water Company in the above-referenced matter. Copies of the Company's Main Brief have been served in accordance with the attached Certificate of Service, as well as upon Administrative Law Judges Mary D. Long and Charece Collins.

Copies of this filing are being provided via e-mail as indicated on the attached Certificate of Service.

Very truly yours,

/s/ Phillip D. Demanchick Jr.

Thomas J. Sniscak
Whitney E. Snyder
Phillip D. Demanchick Jr.

Counsel for Columbia Water Company

PDD/das
Enclosure
cc: Administrative Law Judge Mary D. Long (malong@pa.gov)
Administrative Law Judge Charece Collins (charcollin@pa.gov)
Per certificate of service

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R-2023-3040258
	:	
	:	
Columbia Water Company	:	

MAIN BRIEF OF
COLUMBIA WATER COMPANY

Before Administrative Law Judges
Mary D. Long
Charece Z. Collins

Whitney E. Snyder, Attorney I.D. 316625
Thomas J. Sniscak, Attorney I.D. 33891
Phillip D. Demanchick Jr., Attorney I.D. 324761
Hawke McKeon & Sniscak LLP
100 North Tenth Street
P. O. Box 1778
Harrisburg, PA 17105-1778
(717) 236-1300
wesnyder@hmslegal.com
tjsniscak@hmslegal.com
pddemanchick@hmslegal.com

Counsel for
Columbia Water Company

Dated: September 12, 2023

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I. INTRODUCTION

A. HISTORY OF THE PROCEEDING

On April 28, 2023, Columbia Water Company ("Columbia Water" or the "Company") filed Supplement No 121 to Tariff Water – Pa. P.U.C. No. 7 ("Supplement No. 121"), which contained proposed changes in rates, rules, and regulations calculated to recover an estimated annual increase in base rate revenues of $999,900 from customers of its Columbia and Marietta Rate Districts.[1] Supplement No. 121 is based upon a Future Test Year ("FTY") ending December 31, 2023, and was set to become effective on June 27, 2023. On May 17, 2023, the Company filed an Errata of its supporting data and information, removing all revenues, expenses, and rate base assets associated with the East Donegal Township Municipal Authority ("EDTMA") Rate District from this rate filing.

On May 9, 2023, the Office of Small Business Advocate ("OSBA") filed a Notice of Appearance and Rate Case Complaint, Public Statement and Verification. On May 17, 2023, the Office of Consumer Advocate ("OCA") filed a Notice of Appearance and Rate Case Complaint. Also on May 17, 2023, the Bureau of Investigation and Enforcement ("I&E") filed a Notice of Appearance. On June 9, 2023, the Commission served the Formal Rate Complaints of Sandra E. Shaub and Vincent E. Collier III.

[1] Currently, Columbia Water has three water rate districts. The Marietta Rate District applies to water service provided in Marietta Borough and portions of East Donegal Township in Lancaster County and portions of Hellam Township in York County. The Columbia Rate District applies to water service provided in Columbia and Mountville Boroughs and in West Hempfield, portions of East Donegal and Manor Townships, all located in Lancaster County. The East Donegal Township Municipal Authority ("EDTMA") Rate District, which was established after Columbia acquired EDTMA pursuant to Commission Order at Docket No. A-2021-3027134, applies to water service provided in portions of East Donegal Township, Lancaster County that were previously served by EDTMA. CWC St. 1 at 2:19 – 3:4.

On June 13, 2023, Columbia Water served the Direct Testimonies of David Lewis (CWC Statement No. 1), Gary Shambaugh (CWC Statement No. 2) and Dylan D'Ascendis (CWC Statement No 4). On June 21, Columbia Water Company served the Direct Testimony of David Fox (CWC Statement No. 3).

On June 15, 2023, the Commission issued an order suspending Supplement No. 121 by operation of law until January 27, 2024. This matter was assigned to the Office of Administrative Law Judge and further assigned to Administrative Law Judges Mary Long and Charece Z. Collins ("ALJs" or the "Presiding Officers") for the scheduling of hearings.

A Prehearing Conference was convened on June 23, 2023, with counsel for the Company, I&E, OCA, and OSBA participating. A Prehearing Order was later issued on June 26, 2023, setting forth, *inter alia*, a litigation schedule, modifications to the Commission's discovery regulations, and briefing instructions. Extensive informal and formal discovery was conducted by the OCA, I&E, and OSBA in this proceeding. The Company received over 200 discovery requests and provided numerous pages of information in response to those requests.

On June 28, 2023, the Presiding Officers issued a Protective Order in this proceeding setting forth protections for proprietary information filed as part of this proceeding. Two Public Input Hearings were also held on July 12, 2023. No customers testified at the Public Input Hearings.

On July 26, 2023, the Company filed an Errata to the Direct Testimony of David Fox. On August 4, 2023, I&E and the OCA filed their Direct Testimony in this proceeding. Pursuant to an agreement between the parties, the OSBA filed its Direct Testimony on August 7, 2023. On August 14, 2023, the Company, OSBA, and the OCA each filed Rebuttal Testimony. On August 22, 2023, I&E, the OCA, and OSBA filed their respective Surrebuttal Testimony. On August 25,

2023, the Company filed its Rejoinder Testimony. On Monday, August 28, 2023, an evidentiary hearing was convened. At the evidentiary hearing, the written testimony and exhibits of each Parties' witnesses were admitted into the record and provided to the court reporter.

On August 30, 2023, the Presiding Officers issued an Interim Order on Briefs and Closing of the Record memorializing briefing instructions, setting forth the due dates for briefs in the proceeding, and the closing of the record. On September 7, 2023, the Presiding Officers issued an Interim Order Admitting OCA Statement 3SR – Errata, which corrected certain OCA testimony and exhibits. The Company now submits its Main Brief in support of its position.

B. BURDEN OF PROOF

The public utility seeking a rate increase has the burden of proof to establish the justness and reasonableness of each element of its request. This standard is set forth in Section 315(a) of the Public Utility Code ("Code"), which provides:

> **Reasonableness of rates.** – in any proceeding upon motion of the Commission, involving any proposed or existing rate of any public utility, or in any proceeding upon complaint involving any proposed increase in rates, the burden of proof to show that the rate involved is just and reasonable shall be upon the public utility.[2]

The Commonwealth Court of Pennsylvania described a utility's burden of proof in a rate proceeding under Section 315(a) as follows:

> Section 315(a) of the Public Utility Code, 66 Pa. C.S. Section 315(a), places the burden of proving the justness and reasonableness of a proposed rate hike squarely on the public utility. It is well-established that the evidence adduced by a utility to meet this burden must be substantial.[3]

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[2] 66 Pa. C.S. § 315(a).

[3] *Lower Frederick Twp. Water Co. v. Pa. Pub. Util. Comm'n.*, 409 A.2d 505, 507 (Pa. Cmwlth. 1980).

In general rate increase proceedings, the burden of proof does not shift to parties challenging a requested rate increase. Rather, the utilities burden of proof to establish the justness and reasonableness of every component of its rate request is an affirmative one, and that burden of proof remains with the public utility throughout the course of the rate proceeding. The Pennsylvania Supreme Court has held:

> [T]he appellants did not have the burden of proving that the planned additions were improper, unnecessary or too costly; on the contrary, that burden is by statute on the utility to demonstrate the reasonable necessity and cost of the installations, and that is the burden which the utility patently failed to carry.[4]

However, a public utility does not need to affirmatively defend every claim it has made in its filing, even those which no other party has questioned, in proving that its proposed rates are just and reasonable. The Commonwealth Court has aptly explained:

> While it is axiomatic that a utility has the burden of proving the justness and reasonableness of its proposed rates, it cannot be called upon to account for every action absent prior notice that such action is to be challenged.[5]

Additionally, Section 315(a) does not place the burden of proof on the utility with respect to an issue or adjustment that was not in its general rate case filing but rather raised or sought by another party. In this situation, the burden of proof must be on a party to a general rate increase case who proposes an adjustment to a rate sought by the utility.[6]

II. SUMMARY OF ARGUMENT

Columbia Water is seeking an annual increase in base rate revenue in the amount of $999,900. Columbia Water has provided substantial and compelling evidence demonstrating that

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[4] *Berner v. Pa. Pub. Util. Comm'n,* 116 A.2d 738, 744 (Pa. 1955).

[5] *Allegheny Center Assocs. v. Pa. Pub. Util. Comm'n,* 570 A.2d 149 (Pa. Cmwlth. 1989); see also, *Pa. Pub. Util. Comm'n v. Equitable Gas Co.,* 73 Pa. PUC 301, 359-360 (1990).

[6] *Pa. Pub. Util. Comm'n v. Columbia Water Company*, Docket Nos. R-2008-2045157, *et al*., 2009 WL 1708836 (Opinion and Order entered Jun. 10, 2009) (*CWC* 2009).

its requested increase is just and reasonable. Specifically, as set forth in **Appendix A**, the Company has proven that it is entitled to an increase of $1,294,828 based upon a FTY of December 31, 2023. This rate increase request is necessary to ensure that the Company earns a fair return on its investments, including the capital additions that the Company has placed into service since its last base rate proceeding and that are projected to be placed in service during the FTY, to support its ongoing Commission-approved long-term infrastructure replacement program designed to enhance safety and reliability, and to recover higher levels of operating expenses that are necessary for the provision of safe and reliable water distribution service, which are the result of, among other things, **increasing economic inflation**, supply chain shortages, and general cost increases.

However, the Company has voluntarily reduced its requested increase to $999,900 by implementing a BlackBox Customer Discount Adjustment, reducing its revenue requirement by approximately $294,928, or by 23%, for the benefit of its customers.[7] Thus, under the Company's requested revenue increase, the Company can begin to earn a fair return on its plant in service, continue to provide safe, efficient, adequate, and reasonable service to its customers, while mitigating the impacts of the Company's rate increase to its customers.

Notwithstanding the Company's voluntary and extraordinary efforts to mitigate its rate increase, I&E and the OCA have recommended confiscatory and unreasonable adjustments to the Company's rate filing in an attempt to arbitrarily further reduce the Company's requested revenue requirement without any reasonable basis. Moreover, I&E, the OCA, and OSBA challenge the Company's proposed revenue allocation and rate design to recover the requested increase. A summary of the principal issues is presented next.

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[7] $1,294,828 - $999,900 = $294,928 / $1,294,828 = 22.77%.

RATE OF RETURN. The largest driver of the OCA and I&E's unreasonable allowable revenue positions is rate of return. The issue of rate of return is particularly important because a compensatory cost of common equity is critical for Columbia Water to continue to attract capital investment, where, as here, the Company's ability to obtain debt financing is constrained. Moreover, investors have a range of choices of where to invest. As such, a deficient return will demonstrate to the investment community that Columbia Water is not a reliable investment. The Commission must provide the Company with a fair return on its investment. Otherwise, the Commission's decision would run afoul of the principles set forth in *Bluefield Waterworks & Improvement Company v. Public Service Commission*, 262 U.S. 679 (1923) and *Federal Power Commission v. Hope Natural Gas Company*, 320 U.S. 592 (1944), discussed *infra*, and would be eminently unreasonable in light of: (1) the Company's exemplary performance, (2) the recent improvements the Company has made to its system, and (3) its voluntary efforts to discount a significant portion of the revenue requirement in this proceeding, approximately 23%, by way of the BlackBox Customer Discount Adjustment.

The Company has proposed a cost rate for common equity of 11.25%, which is based upon an evaluation of multiple financial models and is discussed at length by Company witness D'Ascendis. Moreover, the Company has presented evidence of a 3.15% cost of long-term debt and an actual capital structure comprised of 36.66% long-term debt and 63.34% common equity. However, the OCA and I&E have presented several unreasonable adjustments to the Company's claimed cost of capital that would be detrimental to the Company's ability to earn a fair return on its investment.

Most egregiously, I&E and the OCA have recommended a hypothetical capital structure, which results in a substantial reduction from the actual capital structure of Columbia Water. While

Columbia Water's capital structure is slightly more equity rich (~90 basis points) than the Company's utility proxy group, clear precedent holds that a hypothetical capital structure should not be used unless the actual structure is atypical. Here, however, the Company has explained that the Commission has previously authorized the use of Columbia Water's actual capital structure previously in the Company's 2008 and 2013 Rate Case, which is not far removed from the actual capital structure in this proceeding.[8] Moreover, no party to this proceeding has alleged that Columbia's approach to managing its capital structure is unreasonable, uneconomical, or an abuse of its managerial discretion. Rather, the Company's relatively strong capital structure benefits both the Company and its ratepayers by providing financing flexibility and access to capital when required, as evidenced by its lower cost of debt than the Company's utility proxy group.

A decision to adopt a hypothetical capital structure would result in equity investors receiving a debt return on part of their investment, causing an investor to require a higher equity return or potentially withdrawing their investment from the Company altogether. Yet, as explained below, investors cannot receive the required equity return at the rates the OCA and I&E have proposed. The only solution would be for the Company to take out a significant amount of additional debt to manage its capital structure to that of the hypothetical capital structure. The Company's ability to do so, however, is constrained because it is already very close to its debt service coverage ratio limitation and taking on more debt would more likely than not cause a default on these loans, resulting in higher interest rates and, in turn, higher rates for its customers. Thus, the Commission should not adopt the hypothetical capital structure adjustment for these reasons.

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[8] As set forth in the table in Section VII.B.2, the actual capital structure approved by the Commission in the Company's 2008 rate case was 35.8% long-term debt and 64.2% common equity. *See CWC 2009*, *infra*. The Company's actual capital structure approved by the Commission in the Company's 2013 rate was 35.6% long-term debt and 64.4% common equity. *See CWC 2013*, *infra*.

Moreover, both the OCA and I&E have recommended an unreasonable cost of common equity and virtually ignored present inflation driven economic conditions. I&E presents an unreasonable return on equity ("ROE") of 7.84%. I&E's recommendation is problematic because of its sole reliance on its discounted cash flow ("DCF") methodology, which is contrary to Commission precedent that other financial models, such as the capital asset pricing model ("CAPM") is important to the Commission's consideration of a final ROE. The use of a single methodology to derive a ROE recommendation ignores the flaws inherent in each method. I&E's reliance on only its DCF results completely ignores its CAPM result of 11.11%. Additionally, I&E's CAPM result is likewise problematic for its failure to rely on 30-Year Treasury Bond Yields, instead opting to rely on 10-Year Treasury Bond yield rates, which does not appropriately match the life of the underlying investment.

The OCA has recommended a 9.40% ROE, but only if the OCA's hypothetical capital structure is adopted. Otherwise, the OCA recommends an ROE of 8.80%. The OCA supports its recommendation using a CAPM that relies on a series of questionable assumptions to produce a market risk premium ("MRP") that is well below the historical experience Mr. Garrett claims to use as a guide. OCA witness Garrett, as well as I&E witness Keller, also fails to recognize that Columbia's smaller size relative to the Company's utility proxy group indicates greater relative business risk to the Company. Simply put, smaller companies face increased business risk as they are less equipped to cope with significant events that affect sales, revenues, and earnings, as the loss of a few larger customers will have a greater effect on a smaller company than a larger company. Both the OCA and I&E's positions on rate of return should not be adopted by this Commission.

For these reasons, and those stated elsewhere in this Main Brief, the Commission should adopt the rate of return recommendation of the Company. This will allow the Company to continue to provide safe, reliable, and affordable service to its customers, while also meeting the needs of its investors by assuring confidence in the Company's financial integrity and its ability to maintain its credit and attract capital. Such a decision is also appropriate in light of the Company's decision to voluntarily reduce its requested revenue requirement by almost $300,000 for the benefit of its customers and its exemplary performance over the past five years, as demonstrated by, *inter alia*, the Company's ability to meet all federal and state water quality testing standards, the lack of customer complaints, its recent acquisition of the EDTMA Rate District, and its significant efforts to replace aging infrastructure and continued improvement of its facilities.

EXPENSES. In addition to the OCA and I&E's unreasonable position on rate of return, they also recommend numerous unreasonable adjustments to the Company's expenses that are not fact-based and are speculative at best. For instance, notwithstanding the removal of all EDTMA revenues, capital assets, and expenses from this rate filing, the OCA has made duplicative and unreasonable allocations of additional expenses to the EDTMA Rate District over and above what Columbia Water had already allocated to the EDTMA Rate District and removed from this filing. The Company's allocations are based on the Company's first-hand knowledge of Columbia Water's operations and reflect the actual costs spent operating the EDTMA Rate District. Conversely, the OCA's allocations are based on grossly unreasonable allocation factors that do not represent the actual costs to provide service to the EDTMA Rate District.

The OCA also attempts to significantly reduce the Company's claim for materials and supplies and other-maintenance expense on their unproven and speculative theory that supply chain pressures will resolve resulting in price decreases that will not be offset by future inflation.

The OCA attempts to support its position by referring to the 12-month percentage change in the Consumer Price Index ("CPI"), which is not only irrelevant but shows that economic inflation remains historically high compared to the previous ten years of data. Additionally, the OCA solely relies on a biased, political report of the Biden Administration to assume that supply chain shortages will resolve in the future. The OCA's attempt to make speculative judgments about the economy well past the FTY should not persuade the Commission. Moreover, the OCA's tenuous position is further strained by its invitation to look backward to 2020 and expect prices to return to pre-pandemic levels, which do not reflect any of the significant inflationary impacts that have occurred over the past few years. This is not realistic. Rather, the Company has provided actual cost-based evidence demonstrating that the Company is on pace to exceed its claimed level of expense for the FTY due to general economic conditions that have and are still occurring.

The OCA and I&E also propose to normalize the Company's claimed rate case expense over a period of five years, rather than the Company's claimed period of three years. The Company has provided compelling reasons to support its three-year normalization period. Specifically, (1) the Company will need to address the rates of its EDTMA Rate District once the agreement to maintain its existing rates expires in March 2025, (2) the Company's replacement of aging infrastructure pursuant to its Long-Term Infrastructure Improvement Plan will require the Company to spend approximately $840,000 over the next three years, (3) the Company's pending Lead Service Line Replacement Program will require additional Company expenditures, and (4) general economic conditions continue to create upward cost pressures for the Company.

I&E also incorrectly argues that the revenue the Company collects from its customers for the PENNVEST[9] surcharge is not taxable income. The Company, however, has demonstrated that

[9] Pennsylvania Infrastructure Investment Authority ("PENNVEST").

the revenue it receives to pay its PENNVEST loan is taxable income, just like any other revenue the Company receives from its customers. It is not appropriate to remove this revenue from the Company's calculation of its state income tax liability. The Company is entitled to recover its actual state income tax expense.

Ultimately, the OCA and I&E's additional expense reductions should be rejected. They are manifestly unreasonable and do not consider the fact that the Company has voluntarily agreed to significantly reduce its requested rate increase at a time of increased costs and upward economic pressures.

QUALITY OF SERVICE. The Company has provided evidence of its exemplary managerial performance and quality customer service since its last base rate proceeding. The OCA, however, has made several recommendations regarding the Company's system operations and practices, including recommending an aggressive schedule for exercising non-critical isolation valves, providing a more detailed complaint log, and contacting a customer that complained about smelling "chlorine" in the Company's water. The Company has reasonably responded to the OCA's allegations. The Company has demonstrated that it has complied with the isolation valve exercising requirements from the Company's 2017 rate case and is on pace to exercise the remaining non-critical isolation valves in the next five years, that its complaint log included all the information required under the Commission's regulations, and that the Company was able to resolve all concerns with the customer concerned with a "chlorine" smell from his water. For these reasons, and consistent with the Company's managerial discretion to operate its system in a prudent and reasonable manner, the OCA's concerns have already been resolved and, to the extent the OCA disagrees, its recommendations should not be adopted.

REVENUE ALLOCATION AND RATE DESIGN. The Company has proposed allocating a portion of the increase to fire protection charges, the fixed customer charge, and the rest to its volumetric charges. The Company's proposal is based upon a Cost-of-Service Study ("COSS") prepared by Company witness Fox that relies on the Base-Extra Capacity Method. Based on Mr. Fox's COSS, the Company's proposed allocation and rate design seeks to consolidate rates across its Columbia and Marietta Rate Districts while also moving each class closer to its cost to serve. As discussed in this Main Brief, the Company's proposal is reasonable and should be adopted by the Commission. The Company's rate impact analysis is set forth in **Appendix B** to this Main Brief.

III. RATE BASE

A. FAIR VALUE

The Company's proposed rate base represents the Company's claimed measures of value at the end of the FTY and equals $18,750,106.[10] Columbia's claim for rate base in its filing is based upon a FTY ending December 31, 2023.[11] The Company will address the following rate base elements in support of its position: (1) Plant in Service, (2) Depreciation Reserve, (3) Materials and Supplies, (4) Cash Working Capital, (5) Contributions In Aid of Construction ("CIAC"), and (6) Accumulated Deferred Income Taxes ("ADIT"). As set forth below, the Company has provided extensive evidence for its claimed measures of value, and it should be approved by the Commission without modification.[12]

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10 *See also* Exhibit GDS No. 1-R at 1-9.
11 Exhibit GDS No. 1 at 1-1 (Revised).
12 Exhibit GDS No. 1-R at 1-9.

B. PLANT IN SERVICE

The Company's claim for utility plant in service begins with the actual Historic Test Year ("HTY") ending balance as of December 31, 2022.[13] For its Columbia Division, this HTY ending balance for its Columbia rate district was approximately $42,491,763.[14] The HTY ending balance for its Marietta rate district was approximately $6,100,848.[15] The Company's booked utility plant in service funded by PENNVEST loans has not been included in this base rate filing.[16] Supporting Schedules 3 and 4 of Exhibit GDS No. 1 shows the Company's actual utility plant in service as of December 31, 2022.

The HTY figures were then increased to reflect FTY plant additions of $2,681,975, net of retirements of approximately $17,194 associated with the anticipated construction projects.[17] Company witness Shambaugh provided the anticipated additions and retirements of water assets for the FTY in Supporting Schedule 3 of Exhibit GDS No. 1.[18] Company witness Lewis also provided a description of the projects to be completed during the FTY, which included needed improvements to the Company's distribution facilities.[19]

The Company's claim for rate base was also modified to exclude the plant assets associated with the former-EDTMA that was acquired by the Company in March 2022.[20] The Company is not seeking to earn a return on and of the capital assets that serve the EDTMA Rate District as part of this proceeding.[21]

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13 Exhibit GDS No. 1, Supporting Schedule No. 4.

14 Exhibit GDS No. 1 at 2-9 (Revised).

15 Exhibit GDS No. 1 at 2-16 (Revised).

16 Exhibit GDS No. 1 at 1-5 (Revised). However, for the reasons discussed in Section VI.B, the Company has included the interest expense deduction associated with the PENNVEST loans when calculating its state income tax liability.

17 Exhibit GDS No. 1 at 1-5 (Revised).

18 Exhibit GDS No. 1 at 2-5 (Revised) – 2-6 (Revised).

19 CWC St. 1 at 17:21 – 18:8.

20 CWC St. 2 at 14:9-16.

21 *Id*.

None of the other parties to this proceeding challenged the Company's claim for utility plant in service at the end of the FTY. Therefore, and for the reasons more fully explained in the Company's initial filing, the Company's claim for water utility plant in service of $45,156,565 for the Columbia Rate District and $6,100,848 for the Marietta Rate District should be accepted without modification.[22]

C. DEPRECATION RESERVE

The Company's total level of accumulated depreciation in its rate case filing was approximately $20,935,229.[23] The Company's depreciation reserve was calculated by Company witness Shambaugh and is based upon the Straight Line/Average Service Life Method and was applied to the original costs of Company plant in service at December 31, 2022 and December 31, 2023, with the PENNVEST-funded plant removed.[24] The Company also removed any depreciation reserve associated with the Company's EDTMA capital assets to coincide with the removal of those assets from plant in service.[25] Deductions were also made to the December 31, 2023 accrued depreciation amounts to reflect the depreciation attributed to Contributions in Aid of Construction.[26]

The only adjustment to the Company's claim for depreciation reserve was OCA witness Rogers recommending that the Company remove the following negative accumulated depreciation balances appearing in certain Company plant accounts, which is set forth in the following table[27]:

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22 Exhibit GDS No. 1 at 1-19 (Revised).
23 Exhibit GDS No. 1 at 1-19 (Revised).
24 Exhibit GDS No. 1 at 1-5 (Revised).
25 *Id*.
26 GDS Exhibit No. 1 at 1-5 (Revised) – 1-6 (Revised).
27 OCA St. 1 at 20:7-9.

The Columbia Water Company Summary of Negative Net Salvage		
Account No.	Account Description	Depreciation Reserve at 12/31/2023
320.3	Water Treatment Equipment	$ 279,909
331.4	Distribution Mains	103,513
331.4	Distribution Mains	17,011
	Total	$ 400,433

Ms. Rogers initially claimed that the negative balance in these accounts is equivalent to negative net salvage and should be removed from rate base and amortized over a period of five years.[28] If approved, this adjustment would have increased the Company's accumulated depreciation accounts, reduced the Company's rate base claim by same, and resulted in a concomitant adjustment to Company expenses to reflect the amortization of these negative balances.[29]

Company witness Shambaugh recommended that the Commission deny the adjustment in its entirety. Mr. Shambaugh testified that these plant balances represent the cost of removal of utility assets. In the case of Account 320.3, Water Treatment Equipment, the negative balance represents an early retirement that was replaced by equipment funded by a PENNVEST loan, which is not included the Company's claim for rate base.[30] Thus, the negative balance only exists once the PENNVEST-funded plant is removed from rate base.[31] Moreover, as Account 320.2 is subject to group depreciation, that negative balance will reverse as other assets in the depreciation

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28 OCA St. 1 at 22:3-9, 23:1 – 24:2.
29 *See* OCA St. 1 at 22:5-9.
30 CWC St. 2-R at 8:3-6.
31 CWC St. 2-R at 8:2-3.

group attaining service lives beyond the average life of the group recoups the unrecovered cost of the units which were retired early.[32]

Moreover, while the negative reserve balances of $17,011 and $103,513 in the Marietta accounts are subject to unit depreciation and, therefore, will stay on the Company's books, Mr. Shambaugh testified that all three of these negative balances were properly booked to the Company accounts in accordance with Section 108 (Accumulated Depreciation) of the National Association of Regulatory Utility Commissioners ("NARUC") Uniform System of Accounts.[33] Mr. Shambaugh concluded that the OCA's adjustment would improperly reduce the Company's rate base and create a permanent mismatch in the Company's accumulated depreciation accounts preventing the Company from earning a fair return.[34]

In response, OCA witness Rogers withdrew her adjustment.[35] Accordingly, the adjustment should be denied by the Commission. The Company's depreciation reserve accounts are in accordance with NARUC's Uniform System of Accounts. Moreover, recognition of these negative balances is necessary to ensure that the Company earns a fair return on its investment.[36] For these reasons, the Company's claim for depreciation reserve as of the end of the FTY should be accepted without modification.

D. ADDITIONS TO RATE BASE

1. Cash Working Capital

Cash working capital is the capital requirement arising from the difference between (1) the lag in the receipt of revenue for rendering service and (2) the lag in the payment of cash expenses incurred to provide that service. The Company's claim for cash working capital was calculated

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32 CWC St. 2-R at 7:8-15.
33 CWC St. 2-R at 8:8-14.
34 CWC St. 2-R at 9:8-11.
35 OCA St. 1SR at 22:6-7.
36 CWC St. 2-R at 9:5-12.

based on the 45-day, or 12.5 percent-of-operating expense method.[37] This method has been approved by the Commission as a reasonable, cost-effective way to calculate cash working capital for smaller utilities.[38] Based on certain adjustments to the Company's claimed operating expenses made during the course of this proceeding, the Company's revised cash working capital claim is $501,510.[39]

While the OCA and I&E do not dispute the Company's method of calculating cash working capital, the OCA and I&E both recommend downward adjustments to the Company's claim because of their respective adjustments to the Company's claimed operating expenses.[40] OCA has recommended a negative adjustment in the amount of $25,501.[41] I&E has recommended a negative adjustment of $6,373 based on expense adjustments they have recommended during this case.[42]

With respect to OCA and I&E's proposed adjustments to cash working capital, these adjustments should be rejected for the same reasons the Company explains that the OCA and I&E's respective adjustments to the Company's expenses should be rejected. Notwithstanding, the Company recognizes that a final allocation to cash working capital will occur upon a final Commission determination of the total operations & maintenance expense amount.[43]

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37 CWC St. 2 at 13:7-12.

38 CWC St. 2 at 13:7-10; s*ee also CWC 2009*, 2009 WL 1708836; *Luckie v. Clean Treatment Sewage Co*., Docket No. R-911918, 1992 WL 12789838 (Opinion and Order entered Jan. 23, 1992); *Pa. Pub. Util. Comm'n v. Bloomsburg Water Co*., Docket No. R-870854, 1988 WL 1664393 (Opinion and Order entered Jul. 21, 1988).

39 Exhibit GDS No. 1-R at 1-9.

40 *See* OCA St. 1 at 6:1-14; *see also* I&E St. 1 at 17:3-17.

41 OCA St. 1SR, Sch. JLR-4.

42 I&E St. 1-SR at 9:12-15.

43 CWC St. 2-R at 10:1-2; *see also* OCA St. 1 at 2:18-21; I&E St. 1 at 17:21 – 18:3.

2. Materials and Supplies

The Company's claim for rate base also includes an addition of $68,174 for materials and supplies.[44] A normalized level of $68,174 was utilized based on a three (3) year average of the Company's materials and supplies balances.[45]

No parties challenged the Company's claim for an addition to rate base for materials and supplies. Therefore, the Company's claim should be approved without modification.

E. DEDUCTIONS FROM RATE BASE

1. Contributions in Aid of Construction

The Company's measures of value included total contributions in the amount of $12,177,178 of utility plant in service less the accrued depreciation reserve of $5,317,819 as of December 31, 2023.[46] Accordingly, the Company's claim for rate base was reduced by $6,859,359 to reflect zero cost utility plant in service.[47] The original cost of the CIAC and the related accrued depreciation, shown by detailed plant account, is set forth in Supporting Schedule No. 6 on pages 2-20 (Revised) and 2-21 (Revised) of GDS Exhibit No. 1.

No parties challenged the Company's deduction from rate base for CIAC. Therefore, the Company's claim should be approved without modification.

2. Accumulated Deferred Income Taxes

The Company has reduced its measures of value claim to reflect the economic benefit of deferred federal income taxes.[48] The deferred federal income taxes are associated with the liability that is recorded on the balance sheet that results from income already earned and recognized for

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[44] Exhibit GDS No. 1 at 1-19 (Revised).
[45] Exhibit GDS No. 1 at 1-7 (Revised).
[46] CWC St. No. 2 at 13:15-16.
[47] CWC St. No. 2 at 13:16-18.
[48] CWC St. No. 2 at 14:3-4.

accounting, but not tax, purposes.[49] The reduction of $5,282,403 in deferred income taxes is a benefit that accrues to the ratepayer in the form of reduced customer rates.[50] This deduction to rate base includes the deferred tax benefit of the proposed 2023 fixed capital additions.[51]

No parties challenged the Company's deduction from rate base for ADIT. Therefore, the Company's claim should be approved without modification.

F. CONCLUSION

For the reasons more fully explained above, the Company's final claimed rate base of $18,750,106 is reasonable and, therefore, should be approved.

IV. REVENUES

The Company's claim for pro forma revenues at present rates for the FTY is $7,244,926.[52] Company witness Shambaugh prepared the Company's claimed revenues at present rates along with Company witness Fox. The Company's claim for pro forma revenues was developed by taking the per books revenue for the HTY and making several adjustments.

Specifically, the Company's per books revenue for the year ended December 31, 2022 was $7,473,205.[53] Mr. Fox then obtained copies of the billing records for the twelve (12) months ended December 31, 2022, which contains bill dates, customer identification numbers, customer classification, meter size, and the billed consumption for each of the customers.[54] Based upon the Bill Frequency Analysis, Mr. Fox made two adjustments to the Company's per books revenues, including (1) identifying additional Company revenue of approximately $19,165, which represents the aggregate gain and loss of customers annualized to reflect anticipated revenues for the customer

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[49] CWC St. No. 2 at 14:4-6.
[50] CWC St. No. 2 at 14:6-7.
[51] CWC St. No. 2 at 14:7-8.
[52] Exhibit GDS No. 1-R at 1-1.
[53] *Id*.
[54] CWC St. No. 2 at 5:6-9; *see also* Exhibit DF-10 ("Bill Frequency Analysis").

changes over an entire year and (2) additional revenue of $7,795 to reflect an additional 52 new customers by December 31, 2023.[55] Additionally, Mr. Fox removed revenues of approximately $390,243 associated with Columbia Water's EDTMA rate district as a concomitant adjustment to coincide with the removal of the capital assets and expenses associated with the EDTMA Rate District from this rate case filing.[56] Company witness Shambaugh then made an adjustment of $17,877 to reflect an annualized level of late fees and turn on fees.[57]

Regarding surcharge revenue, the Company then removed approximately $105,428 in revenue associated with the Distribution System Improvement Charge ("DSIC") to reflect the fact that the DSIC will be reset to zero percent when new base rates go into effect.[58] Moreover, Mr. Shambaugh identified an error in the initial rate model that failed to reflect the increased PENNVEST revenue of approximately $1,308,122.[59] Mr. Shambaugh corrected this error and reflected $222,555 in additional PENNVEST Revenue for the FTY.[60]

Based upon the Company's per books revenues and the resulting adjustments, the Company's claim for pro forma revenues for the year ended December 31, 2023, is approximately $7,244,926. No parties challenged the Company's pro forma revenue. Therefore, the Company's claim for pro forma revenue should be approved without modification.

V. EXPENSES

As part of this proceeding, the Company has proposed recovering a broad range of expenses incurred by the Company to provide service to its customers. The Company's claim for

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[55] CWC St. No. 3 at 7:2-13. As part of the May 17, 2023 Errata, the going-level revenue adjustments were modified to exclude any impacts related to the EDTMA Rate District. CWC St. 3 at 7:20-22.

[56] Exhibit GDS No. 1 at 1-12 (Revised).

[57] Exhibit GDS No. 1 at 1-4 (Revised); *see also* Exhibit GDS No. 1 at 1-12 (Revised).

[58] Exhibit GDS No. 1 at 1-12 (Revised); *see also* 66 Pa. C.S. § 1358(b)(1).

[59] CWC St. 2-R at 5:2-6; *see also The Columbia Water Company Supplement No. 117 To Tariff – Water Pa. P.U.C. No. 7*, Docket No. R-2022-3036936 (Order entered Feb. 9, 2023), available at https://www.puc.pa.gov/pcdocs/1773526.pdf.

[60] CWC St. 2-R at 5:8-13.

operations and maintenance expense ("O&M Expense"), as modified in the Company's rebuttal testimony, is approximately $4,079,604.[61] The full range of these expenses, as modified by the Company in rebuttal testimony, are reflected in the Company's Exhibit GDS No. 1-R at 1-5 through 1-8.

Moreover, the Company's claimed annual accrual for depreciation expense is $1,174,375 based upon the utility plant in service as of December 31, 2023.[62] This amount excludes the annual depreciation expense associated with CIAC.[63] This also excludes the annual depreciation expense of $192,875 associated with the EDTMA plant assets, which are not included in rate base as part of this filing.[64] Details of the annual depreciation expense calculations are contained in Supporting Schedule Nos. 4 and 5 of Exhibit GDS No. 1.

A subset of the expenses included in the Company's filing have been challenged by I&E and the OCA and are described in this section of the Company's Main Brief. In *Butler Township Water Co. v. Pa. Pub. Util. Comm'n*, the Commonwealth Court concluded:

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

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[61] Exhibit GDS No. 1-R at 1-5. As discussed further in Section VIII, the Company implemented a BlackBox Customer Discount Adjustment, voluntarily capping its requested increase at $999,900. As set forth in Company witness Shambaugh's rebuttal testimony, the BlackBox Customer Discount Adjustment reduced the Company's claim for O&M Expense by approximately $291,594 so that the requested increase of $999,900 would reflect an 8.28% rate of return. CWC St. 2-R at 6, fn. 6; *see also* Exhibit GDS No. 1-R at 1-4. Notwithstanding, and as discussed in Section VIII below, any adjustments to the Company's O&M expense should start from the justified O&M Expense amount of $4,079,604.

[62] CWC St. 2 at 11:16-17.

[63] CWC St. 2 at 11:17-19.

[64] CWC St. 2 at 11:19-21.

> evidence in the record that the… expenses claimed here were unreasonable, imprudently incurred or excessive in amount.[65]

As the Commonwealth Court determined in *Butler Township*, the relevant question in a base rate proceeding is whether the expense is reasonable and appropriate for the furnishing of service to customers. As the Company will show herein, the expenses it has included in this proceeding are reasonable and appropriate to provide service to its customers. Therefore, its expense claims should be approved.

A. EDTMA EXPENSES

To coincide with the removal of the capital assets and revenues associated with the EDTMA Rate District, the Company also removed expenses attributable to the EDTMA Rate District.[66] The expenses that were removed from the Company's per books amounts were identified in Supporting Schedule No. 10 of Exhibit GDS No. 1 and reduced the Company's claim for O&M Expense by approximately $153,369.[67] Among the expenses removed were wages and salaries of three employees, utilities, chemical expense, lease fees, engineering costs, and insurance costs.[68] Additionally, the Company removed FTY increases that were directly related to the EDTMA Rate District, which included additional deductions to salaries and wages related to salary increases for employees that perform work for the EDTMA Rate District, incremental rental property expense, fees associated with electronic payments, and water testing costs.[69] Removal of the FTY expenses associated with the EDTMA Rate District further reduced the Company's claim for O&M Expense by an additional $19,621.[70]

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[65] 473 A.2d 219, 221 (Pa. Cmwlth. 1984) (*Butler Township*); *See also T.W. Phillips Gas and Oil Co. v. Pa. Pub. Util Comm'n*, 474 A.2d 355 (Pa. Cmwlth. 1984).

[66] CWC St. 2 at 10:16-22.

[67] CWC St. 2 at 10:20-22.

[68] Exhibit GDS No. 1, Supporting Schedule No. 10.

[69] CWC St. 2 at 10:24 – 11:12.

[70] Exhibit GDS No. 1 at 1-15 (Revised).

The OCA, however, challenged the Company's allocation of EDTMA expenses arguing that the Company is unreasonably burdening the Columbia and Marietta Rate Districts with responsibility for all of the Company's general operating costs by only removing those costs which could be directly assigned to the EDTMA Rate District exclusively.[71] The OCA proposes to employ several allocation factors to determine and remove what the OCA claims is the EDTMA proportional share of the total Company expenses for all three divisions.[72] The OCA asserts that this adjustment is consistent with traditional principles of ratemaking and allocation factors are commonly used to assign costs to certain utility operations.[73] The OCA's adjustment, as modified by their surrebuttal testimony would reduce the Company's claimed O&M Expense by an additional $48,987 to reflect the allocation of EDTMA expenses.[74]

The OCA's adjustment should be rejected. As Mr. Shambaugh testified, the Company acquired the EDTMA system on March 31, 2022, three months into the HTY of this proceeding.[75] Since its acquisition, the Company has been able to separately track and identify all specific expenses associated with the EDTMA Rate District, including expenses that increased in the FTY because of providing service to the EDTMA Rate District.[76] Those costs have been removed from the Company's rate case filing.[77]

Moreover, the Company has demonstrated that the EDTMA system is being run by the same part-time operators that ran the system prior to the Company's acquisition of EDTMA. Their salaries, future wage increases, and employment taxes were all also removed from the Company's rate filing. Moreover, the EDTMA system is automated with level controls to obviate the need for

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71 OCA St. 1 at 15:20-23.
72 OCA St. 1 at 16:3 – 18:2.
73 OCA St. 2-SR at 17:12-23.
74 OCA St. 1-SR, Sch. JLR-15, pg. 2.
75 CWC St. 2-R at 11:6-8.
76 CWC St. 2-R at 11:6-12; *see also* Exhibit GDS No. 1 at 2-27 (Revised).
77 Exhibit GDS No. 1-R at 1-5.

full-time oversight of the system.[78] Put simply, the costs identified and removed by the Company represent the costs to the Company to operate the EDTMA Rate District and have been appropriately removed.

Conversely, the OCA's adjustment contains numerous duplicative and rapacious allocations which do not represent – and overstate - the real cost to operate the EDTMA Rate District. For instance, OCA witness Rogers proposed to allocate Company expenses to the EDTMA Rate District for which the Company had already made an adjustment to allocate expenses to the EDTMA rate district. This includes insurance-related expenses, mailing expense, and management fees (bank charges).[79] Accepting the OCA's adjustments, which should not be done, would result in inappropriately removing these costs twice.

Most egregiously, the OCA attempts to allocate a significant amount of the Company's materials and supplies expense (approximately $22,193) to the EDTMA Rate District, even though the OCA already proposes to reduce the Company's claim for materials and supplies expense by an additional $59,017 based upon averaging the three most recent years (2020, 2021, 2022) of materials and supplies expense.[80] However, the 2020, 2021, and 2022 cost figures that the OCA relies on substantially predate the Company's March 31, 2022 acquisition of the EDTMA Rate District. As Mr. Shambaugh testified, "because Ms. Rogers is using numbers that pre-date the acquisition of EDTMA, her Materials and Supplies allocation to EDTMA improperly allocates costs that have been and will continue to be attributable to the Columbia and Marietta divisions. Ms. Rogers cannot have it both ways."[81]

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78 CWC St. 2-R at 11:13 – 12:2.
79 CWC St. 2-RJ at 4:15 – 5:8.
80 CWC St. 2-RJ at 5:9-18.
81 CWC St. 2-RJ at 5:15-18.

Ultimately, the OCA's adjustment unreasonably penalizes the Company for its acquisition of EDTMA by duplicating adjustments already made by the Company and trying to over-allocate reasonable and prudently incurred costs to operate its Columbia and Marietta Rate Districts to the EDTMA Rate District using crude allocation factors that do not represent the costs to serve the EDTMA Rate District.[82] Rather, the Company has explicitly identified and provided evidence of the direct costs charged to the EDTMA Rate District and removed those costs from the Company's filing.[83] Thus, the Commission should not adopt the OCA's confiscatory adjustment.

B. EMPLOYEE BENEFITS AND PENSION EXPENSE

The Company's claim for O&M Expense included a claim for employee benefits and pension expense of $397,801.[84] The Company's claim was based upon a per books value of $368,923, with two going-level adjustments to reflect (1) increased health insurance costs of $24,796 and (2) increased pension costs of $4,082.[85]

In his direct testimony, I&E witness Keller disagreed with the Company's claim because he alleged that that Company failed to remove the pension and benefits expense associated with the Company's EDTMA Rate District.[86] Thus, I&E witness Keller recommended removing 4.7% of the Company's claimed pro forma pension and benefits expense, which is the percentage of EDTMA salaries and wages to total Company salaries and wages.[87]

In his rebuttal testimony, Company witness Shambaugh disagreed with I&E witness Keller's adjustment because the part-time employees that operate the EDTMA rate district do not receive any pension or benefits and, as such, it is inappropriate to make such an adjustment.[88]

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82 CWC St. 2-R at 12:3-11.
83 CWC St. 1-SR at 4-8.
84 Exhibit GDS No. 1 at 1-15 (Revised).
85 Exhibit GDS No. 1 at 1-15 (Revised and 1-18 (Revised).
86 I&E St. 1 at 15:11-13.
87 I&E St. 1 at 15:16 – 16:1.
88 CWC St. 2-R at 14:4-6.

In his surrebuttal testimony, I&E witness Keller stated that after reviewing Mr. Shambaugh's testimony, he was withdrawing his recommendation to reduce the Company's claim for employee pension and benefits expense.[89]

Accordingly, the Company's pro forma claim for employee benefits and pension expense of $397,801 should be accepted by the Commission.

C. MATERIALS AND SUPPLIES

The Company's claim for O&M Expense included a claim for materials and supplies of $432,400 for the year ended December 31, 2023.[90] The Company's claim for materials and supplies was based on the Company's 2022 per books amount of $377,390 with a going-level adjustment of $55,010 to reflect known and measurable increasing costs to the Company during a period of rampant inflation and supply chain shortages.[91]

The OCA disagreed with the Company's claim for materials and supplies expense.[92] The OCA asserts that the Company's 2022 per books value was abnormally high for a highly variable cost element of Company operations.[93] The OCA's assertion is based on its misguided belief that improvements in the supply chain would result in price decreases to goods and services the Company uses and that such price decreases would not be offset by future inflation in the short-term because recent actions by the Federal Reserve have reduced current inflation rates.[94] Lastly, the OCA asserts that the $55,010 going-level adjustment includes one-time costs of $18,000 that should be normalized over a period of five years rather than recovered annually by the Company.[95] The OCA, thus, recommends that the Commission average materials and supplies expense using

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[89] I&E St. 1-SR at 8:3-6.
[90] Exhibit GDS No. 1 at 1-15 (Revised).
[91] *Id*.
[92] OCA St. 1 at 7:14-16.
[93] OCA St. 1 at 8:1-2.
[94] OCA St. 1-SR at 10:13 – 11:6.
[95] OCA St. 1 at 7:1-17.

the average of the most recent three years (2020, 2021, and 2022), reducing the Company's claim by $59,017, and normalize the $18,000 one-time costs over a period of five years, reducing the Company's claim by another $14,400.[96] The Company will address both OCA adjustments in turn.

1. Average Adjustment

The OCA's average adjustment to the Company's claimed materials and supplies expense should be rejected by the Commission. Importantly, the evidence relied upon by the OCA to support its assumptions are highly speculative and are not reasonably likely to occur. First, the OCA cites the CPI arguing that there has been a decline in the 12-month percentage change in the CPI to support their assertion that inflation is on the decline. However, as Mr. Shambaugh testified, the CPI represents a basket of goods and services consumed by the average urban consumer, not the goods and services that Columbia Water will need to purchase in the ordinary course of its operations.[97] OCA witness Rogers appropriately concedes this point.[98] Moreover, as Company witness Shambaugh demonstrated, the 12-month percentage change in the CPI, while recently declining year over year, was still historically high compared to the previous ten years and is further depicted in the chart below:[99]

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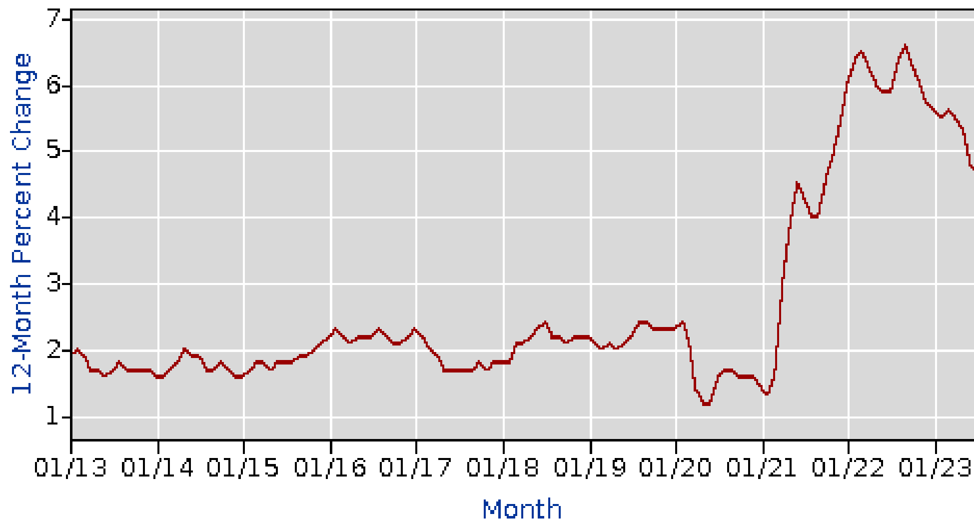
[96] OCA St. 1 at 9:3-18; *see also* OCA St. 1, Sch. 7-8.
[97] CWC St. 2-RJ at 7:14-15.
[98] CWC St. 2-RJ at 7:12-15; *see also* OCA St. 1-SR at 4:16-19.
[99] CWC St. 2-RJ at 7:10 – 8:3.



Thus, inflation is still at a historic high compared to the previous ten years and will likely continue into the foreseeable future. Accordingly, this evidence does not support the OCA's gross speculations concerning future inflation trends.

Additionally, the OCA's dependence on a White House Report to support its claim that supply chain pressures are improving and that prices will decrease in the future should not be found to be persuasive. The cited report is a politically motivated, biased report of the Biden Administration's efforts to address what continues to be higher costs and supply chain congestion.[100] Rather, the OCA does not present sufficient or compelling evidence to demonstrate that supply chain pressures have or will continue to improve, let alone compelling evidence that prices for goods and services the Company uses will decrease because of it. Thus, the OCA has not cited any studies or reports to support its argument that improving supply chain pressures and declining inflation rates will undo the impacts that economic conditions have exacted over the past several years.[101]

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[100] CWC St. 2-RJ at 9:3-10.
[101] CWC St. 2-R at 15:5-13.

Furthermore, the OCA's position is further weakened by its attempt to use cost data from as far back as 2020 to support its adjustment. Specifically, the OCA recommends averaging the three most recent years of materials and supplies expense (2020, 2021, and 2022). As Company witness Shambaugh testified, "using data from the year 2020 is flawed because that no longer represents a normal year of expenses as it predates the significant inflation that has occurred to date and does not represent the actual costs to operate the Company's business anymore."[102] In total, the OCA's recommendation would unreasonably set the Company's materials and supplies expense well below what the Company is actually incurring and reasonably expects to incur during the remainder of the FTY.[103]

In fact, as both Company witnesses Lewis and Shambaugh testified, the Company's materials and supplies expense though August 7, 2023, is on pace to significantly exceed the Company's claim for materials and supplies expense in the FTY. As Mr. Shambaugh stated:

> Moreover, the Company has taken a conservative approach in setting its claimed level of materials and supplies expense. The Company is already on track to exceed the claimed level of materials and supplies expense based on current levels of spend. For example, for the period January 1, 2023 through August 7, 2023, the total expensed was $293,841. That is an average of $1,348 per day ($293,841 / 219 days = $1,342 per day). Annualized, that works out to $489,830 ($1,348 x 365 days = $489,830). The $489,830 is about $112,440 more than the HTY 2022 amount of $377,390 and $57,430 more than the FTY 2023 amount of $432,400.[104]

Thus, the Company has provided actual evidence that its FTY claims for materials and supplies expense is on pace to be met and exceeded this year by over 13%.[105]

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[102] CWC St. 2-RJ at 9:12-15.
[103] OCA St. 1-SR, Sch. JLR-7.
[104] CWC St. 2-R at 15:14-21.
[105] $57,430/$432,000 = 13.29%.

Moreover, the OCA's argument that these projections do not incorporate seasonality effects in the fall and winter should be rejected. As Company witness Lewis demonstrated, in both 2020 and 2021, the Company spent significantly more in the fourth quarter than *any* prior quarter for materials and supplies expense.[106] Moreover, in 2022 spending in the second half of the year was more or less similar to spending in the first half of the year.[107] Rather, the Company's claim that materials and supplies expense will increase in the FTY is consistent with previous years where, as Mr. Lewis testified, each year the total amount spent has increased.[108]

For these reasons, the OCA's unreasonable recommendation to average the three most recent years of materials and supplies expense should be rejected and the Company's claim of $432,400 for the FTY should be adopted. The Company has presented uncontroverted evidence that based on its current, actual levels of spending, it will significantly exceed its claimed level of materials and supplies expense for the FTY. This known and measurable evidence should not be dismissed in favor of OCA's unsupported speculations of future economic conditions.[109]

Alternatively, even if the Commission were to adopt the OCA's flawed adjustment, which it should not, it should not average the years 2020, 2021, and 2022 for the reasons set forth above. It should average the years 2021, 2022, and 2023 as 2020 data is no longer representative of the current costs to operate the Company. The alternative recommendation is set forth in the chart below:[110]

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[106] CWC St. 1-RJ at 2:8-9.
[107] CWC St. 1-RJ at 2:10-13.
[108] CWC St. 1-RJ at 2:9-10.
[109] *CWC 2009*, 2009 WL 1708836 (rejecting OTS' recommendation to average the three most recent years of office expense in favor of Columbia Water's position to use known and measurable data from the most recent year of office expense).
[110] CWC St. 2-RJ at 12:2-3.

Description	Amount
Per Books Year Ended 12/31/2022 Expense for Materials and Supplies	$377,390
2021 Actual Expense for Materials and Supplies	$295,427
2022 Actual Expense for Materials and Supplies	$377,390
2023 Projected Expense for Materials and Supplies	$432,400
Average 2021 through 2023	$368,406
Adjustment to O&M Expenses	($8,984)
Comparison to OCA's Materials and Supplies Average Adjustment	($59,017)[111]

2. Normalization Adjustment

The OCA's recommendation to normalize approximately $18,000 of the Company's claimed FTY materials and supplies expense should also be rejected. The nature of the materials and supplies expense account is to reflect and recover costs related to a variety of projects and Company operations that are similar in scope and effort from year to year.[112] In other words, while these costs relate to a specific roadway restoration project occurring in 2023, the Company undertakes similarly scoped projects every year to maintain adequate, efficient, safe, and reasonable service.[113] As Company witness Shambaugh testified, to assume the Company will not have future main breaks and, therefore, no road repair expenses, is not realistic.

In fact, Mr. Lewis provided this exact evidence. As Mr. Lewis stated, the Company repairs roadways every year and is a task that every water distribution utility undertakes when replacing or improving infrastructure under roadways.[114] Specifically, in 2023, the Company incurred separate and additional costs of $29,000 for a different additional pavement restoration project to the one reflected in the Company's claim for materials and supplies expense for 2023.[115] Thus, the

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111 OCA St. 1SR, Sch. JLR-7.
112 CWC St. 2-R at 16:2-3.
113 CWC St. 2-R at 16:3-6.
114 CWC St. 1-R at 2:3-5.
115 CWC St. 1-R at 2:9-11.

Company's claimed level of materials and supplies expense is a conservative estimate. For these reasons, the OCA's normalization adjustment should not be adopted.

3. Conclusion as to Materials and Supplies Expense

Neither of the OCA's adjustments to materials and supplies expense should be accepted by the Commission, particularly when their adjustments are based upon indemonstrable speculation of a distant strong economy with low inflation. Moreover, it would be unreasonably duplicative to adopt both the OCA's position to average the three most recent years of materials and supplies expense and then further adjust the Company's claim to normalize annually recurring costs. Furthermore, such adjustments are unreasonable and unnecessary considering the Company's decision to voluntarily reduce its requested increase by approximately $300,00, or by 23%, by way of the BlackBox Customer Discount Adjustment. These two adjustments, separately and in combination, are unreasonably confiscatory and prejudicial to the Company's ability to provide efficient, adequate, and reasonable service.

D. OTHER-MAINTENANCE EXPENSE

The Company's claim for O&M Expense included a claim for other-maintenance expense of $288,451 for the year ended December 31, 2023.[116] The Company's claim for other-maintenance expense was based on the Company's 2022 per books amount of $263,888 with a going-level adjustment of $36,902 to reflect known and measurable increasing costs to the Company during a period of rampant inflation and supply chain shortages.[117]

The OCA disagreed with the Company's claim for other-maintenance expense for the same reasons it disagrees with the Company's claim for materials and supplies expense.[118] The OCA

116 Exhibit GDS No. 1-R at 1-5.
117 *Id*. Note that approximately $12,339 was removed as being related to the EDTMA district.
118 OCA St. 1 at 9:22 – 11:2.

asserts there will be improvements in the supply chain resulting in price decreases and that such price decreases would not be offset by future inflation in the short-term because recent actions by the Federal Reserve have reduced current inflation rates.[119] The OCA, thus, recommends that the Commission average other-maintenance expense using the average of the most recent three years (2020, 2021, and 2022), reducing the Company's claim by $28,660.[120]

For the reasons explained above regarding the Company's materials and supplies expense, the OCA's average adjustment should not be adopted by the Commission. The evidence provided by the OCA is not substantial or compelling evidence to support their argument that prices will return to comparable prices from 2020 and 2021.[121] What is more compelling is that the Company must be permitted to recover costs it has already actually incurred and will incur this year to provide reasonable adequate, efficient, and safe service to its customers. As Mr. Shambaugh testified:

> As I have demonstrated, the Company is incurring its claimed level of FTY expense currently. Ms. Rogers invitation to look backward and to essentially ignore current real-world costs actually experienced by the Company to date should be rejected. Certainly, if she went to a store and claimed she should pay lower prices from years ago, it would not be accepted by that store which bases its goods on current prices.[122]

Furthermore, such adjustments are unreasonable and unnecessary considering the Company's decision to voluntarily reduce its requested increase by approximately $300,00, or by 23%, by way of the BlackBox Customer Discount Adjustment. Accordingly, the Commission should not adopt the recommendation of the OCA.

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119 OCA St. 1-SR at 10:13 – 11:6.
120 OCA St. 1, Sch. JLR-9.
121 CWC St. 2-RJ at 7:10 – 8:10.
122 CWC St. 2-RJ at 10:17 – 11:2.

Alternatively, if the Commission were to adopt the OCA's adjustment, which it should not, it should not average the years 2020, 2021, and 2022 for the reasons previously stated, *i.e.*, 2020 costs no longer represent the actual costs to operate the Company anymore as it significantly predates the general economic conditions that have caused prices to increase over the past several years.[123] Additionally, the Commission should not, as the OCA suggests simply discount or ignore the costs incurred by the Company in 2022 and 2023 simply because they are higher than previous years.[124] It should average the years 2021, 2022, and 2023 as the Company has demonstrated that 2020 costs are no longer representative of the costs to operate the Company. The alternative recommendation is set forth in the chart below:[125]

Description	**Amount**
Per Books Year Ended 12/31/2022 Expense for Other - Maintenance	$263,888
2021 Actual Expense for Other – Maintenance	$229,295
2022 Actual Expense for Other – Maintenance	$263,888
2023 Projected Expense for Other - Maintenance	$288,451
Average 2021 through 2023	$260,545
Adjustment to O&M Expenses	($3,343)
Comparison to OCA's Other-Maintenance Expense Adjustment	($28,660)[126]

E. RATE CASE EXPENSE

The Company's claim for O&M Expense includes a claim for rate case expense. The claimed rate case expense is approximately $390,330.[127] The Company also provided a current level of spend of rate case expense through August 21, 2023, indicating the Company is on pace

123 CWC St. 2-RJ at 9:12-15. *See* Section V.C., *supra*.
124 CWC St. 2-RJ at 9:10-12.
125 CWC St. 2-RJ at 9:16.
126 OCA St. 1SR, Sch. JLR-9.
127 Exhibit GDS No. 1 at 1-16 (Revised).

to expend the full amount of projected rate case expense.[128] The Company further proposed to normalize the cost for rate-making purposes over a 36 month period (*i.e.*, three years), because the Company anticipates a three year interval between this proceeding and the Company's next base rate case.[129]

While no party opposed the Company's claimed level of rate case expense on a total basis, both I&E and OCA have proposed an adjustment to the Company's proposed normalization period, which, if adopted, would reduce the Company's claim for normalized rate case expense by approximately $51,000 and $52,000, respectively.[130] I&E and OCA recommend that a normalization period of approximately five years be used in lieu of the three-year normalization period the Company employed.[131] Both witnesses based their proposed five-year normalization period on an average of the historical interval between the filing of the Company's 2008, 2013, and 2017 rate cases.[132]

The I&E and OCA's proposed normalization period is not reasonable or appropriate. Although rate cases should take into consideration the history of prior filings, there are circumstances that require the consideration of future circumstances.[133] Indeed, while history is one factor to be considered, it is not the only factor the Commission considers.[134] Thus, while history can provide guidance on anticipated future conditions, it cannot and should not be the sole

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[128] Exhibit GDS No. 1-RJ (CONFIDENTIAL).

[129] CWC St. 2-R at 17:7-8.

[130] I&E St. 1 at 10:13-15; *see also* OCA St. 1, Sch. JLR-6

[131] *Id*.

[132] I&E St. 1 at 11:6-17; *see also* OCA St. 1 at 7:1-5.

[133] *See Pa. Pub. Util. Comm'n v. Emporium Water Company*, Docket No. R-2014-2402324 (Order Entered Jan. 18, 2015), , at pp. 48-49 (citing *Pa. Pub. Util. Comm'n v. PPL Electric Utilities Corp.*, Docket No. R-2012-2290597, *et al*., 2012 WL 6758304 (Opinion and Order entered Dec. 28, 2012) (*PPL 2012*), available at https://www.puc.pa.gov/pcdocs/1339803.docx.

[134] *See, e.g., Butler Township*, 473 A.2d at 222-223 (the Court affirmed that while historic practice was informative it need not be the exclusive factor relied upon by the Commission).

basis for determining revenue requirements as this would defeat the purpose of using a FTY in setting rates.

Here, the Commission should not rely on the past to determine the normalization period for rate case expense. The Company has demonstrated significant evidence of conditions that were not present in the Company's previous rate cases that supports a normalization period of three years. Notably, the Company has an agreement to maintain existing rates for its EDTMA customers.[135] That agreement expires on March 31, 2025, or less than two years from the time of this filing.[136] The Company will need to address the rates associated with its EDTMA rate district at the expiration of that agreement. Additionally, the Company is currently implementing its second Long-term Infrastructure Improvement Plan with the Company committing to expend $840,000 over the next three years to replace aging infrastructure.[137] The Company's Lead Service Line Replacement Program is also pending before the Commission, which, if approved, will result in additional expenditures not incorporated into this rate case.[138] Lastly, the Company has experienced significant price increases over the past few years that will likely persist for years to come.[139]

These factors will necessitate the filing of another rate case in approximately three years representing materially different circumstances than previous rate cases. Accordingly, the historic filing frequency is not the appropriate measure for normalization of rate case expense. For these

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[135] CWC St. 2-RJ at 12:9-10.

[136] CWC St. 2-RJ at 12:10-11; *see also Application of Columbia Water Company for approval of the right to: (1) acquire, by sale, substantially all the water system assets of East Donegal Township Municipal Authority; and (2) offer, render, furnish or supply water service to the public in additional portions of East Donegal Township, Lancaster County, Pennsylvania*, Docket No. A-2021-3027134, *et al*. (Order entered Feb. 3, 2022), at 11 ("Columbia Water covenanted in the APA's Section 14(a) not to raise rates for EDTMA customers for a period of three (3) years from the date of closing, except for limited circumstances.").

[137] CWC St. No. 2-R at 17:14-17.

[138] *Petition of Columbia Water Company for Approval of its Second Long-Term Infrastructure Improvement Plan*, Docket No. P-2022-3034702 (Opinion and Order entered Dec. 8, 2022), at 11.

[139] CWC St. 2-R at 18:5-7.

reasons, the Commission should adopt a three-year normalization period for rate case expense, not five years.

F. OFFICE EXPENSES

The Company's initial claim for O&M Expense includes a claim for office expense of $92,156, which included a going-level adjustment of $35,995 due to an upgrade to the Company's billing software and increased support costs.[140]

OCA witness Rogers testified in her direct testimony that according to the Company's response to OCA Set VII-18, $10,000 of the going-level adjustment is related to support costs, leaving the remainder of $25,995 attributable to the billing software upgrade.[141] Based on this information, the OCA recommends that the billing software upgrade expense of $25,995 be normalized over five years to prevent rates from being set to recover costs that are not incurred annually.[142] Ms. Rogers proposed to normalize theses costs over a period of five years consistent with her normalized period for rate case expense.[143]

The Company does not dispute that the costs to upgrade the Company's billing software is a one-time expense.[144] However, the Company disagrees with the OCA's recommended normalization period. These costs should be normalized over a period of three years consistent with the Company's recommended normalization period for rate case expense.[145] Based upon a three-year normalization period, the normalization of the billing software upgrade costs reduces the Company's claim for office expense by approximately $17,330.[146]

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140 Exhibit GDS No. 1 at 1-15 (Revised), 1-18 (Revised).
141 OCA St. 2 at 11:7-9.
142 OCA St. 2 at 11:9-12.
143 OCA St. 2 at 11:12-14.
144 CWC St. 2-R at 19:4-5.
145 CWC St. 2-R at 19:5-7.
146 CWC St. 2-R at 19:7-8.

For the same reasons set forth above regarding Rate Case Expense, the Commission should adopt the Company's position and normalize these upgraded billing software costs over a period of three years.

G. MEMBERSHIP DUES

The Company's initial claim for O&M Expense included a claim for membership dues of $19,100 for the FTY, which included a going-level adjustment of $4,067 to reflect a $5,134 increase in membership dues to the National Association of Water Companies ("NAWC") and a deduction of $1,067 to remove lobbying fees.[147]

As OCA witness Rogers stated, the Company's going-level adjustment to membership dues was in error. The OCA recommended that the Company clarify the nature of the error and ensure that no lobbying fees were included in the Company's claim to recover membership dues.[148]

In rebuttal, Company witness Shambaugh removed the going-level adjustment of $4,067 from the Company's membership dues and replaced it with a going-level adjustment of $791 to reflect the Company's anticipated FTY membership dues of $15,824 as set forth in Exhibit GDS No. 4-R.[149] Company witness Shambaugh also included a downward adjustment of $2,039 to remove additional lobbying expense included in the Company's membership dues expense account.[150] Mr. Shambaugh explained that the additional deduction was to reflect the lobbying expense associated with its NAWC and American Water Works Association fees that were previously included in the Company's claim for membership fees.[151] Collectively, these

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147 CWC St. 2 at 9:12-15; Exhibit GDS No. 1 at 1-15 (Revised).
148 OCA St. 1 at 11:23 – 12:3.
149 CWC St. No. 2-R at 19:13-16; *see also* Exhibit GDS No. 4-R.
150 CWC St. No. 2-R at 19:18-19.
151 CWC St. No. 2-R at 19:18 – 20:2.

adjustments reduced the Company's claim for membership dues to approximately $13,785 as set forth on Page 1-7 of Exhibit GDS No. 1-R.[152]

In surrebuttal testimony, OCA witness Rogers stated that she agreed with Mr. Shambaugh's changes and accepted the revision to membership dues as proposed in the Company's rebuttal testimony and that the OCA and the Company are now in agreement on the level of membership dues included in the cost of service.[153]

Accordingly, the Company's claim for membership dues, as modified by its rebuttal testimony, should be accepted by the Commission.

H. MAILING EXPENSES

The Company's initial claim for O&M Expense included a claim for mailing expense of $6,400 for the FTY, which included a going-level adjustment of $998.[154] OCA witness Rogers stated that the Company indicated in a discovery response that the going-level adjustment of $998 was related to increased costs due to adding EDTMA customers.[155] The OCA recommended that the Company remove this adjustment as the Company has removed EDTMA expenses from this filing.[156]

In rebuttal, Company witness Shambaugh removed the going-level adjustment of $998 from the Company's mailing expense.[157] This adjustment reduced the Company's claim for mailing expense to approximately $5,402 as set forth on Page 1-5 of Exhibit GDS No. 1-R.

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152 CWC St. No. 2-R at 20:2-4.
153 OCA St. 1-R at 24:3-5.
154 Exhibit GDS No. 1 at 1-15 (Revised).
155 OCA St. 1 at 12:14-20.
156 *Id.*
157 CWC St. 2-R at 20:7-10.

In surrebuttal testimony, OCA witness Rogers stated that she agreed with Mr. Shambaugh's changes and accepted the revision to mailing expense, noting that the OCA and the Company are now in agreement on the level of mailing expense included in the cost of service.[158]

Accordingly, the Company's claim for mailing expense, as modified by its rebuttal testimony, should be accepted by the Commission.

I. DIRECTORS FEES AND EXPENSES

The Company's initial claim for O&M Expense included a per books claim for directors fees and expenses of $100,428 for the HTY, with a going-level adjustment of $10,372 to reflect the addition of a board member that was added on December 31, 2022, for a pro form claim of $110,800.[159]

OCA witness Rogers stated that per the Company response to I&E-RE-30-D, a portion of the Company's per books value of $100,428 will be removed from the Company's rate increase claim in its rebuttal testimony to reflect the removal of $246 attributed to the Lancaster Trophy House and $1,182 attributed to the Hamilton Club.[160] Ms. Rogers reflected that adjustment in Schedule JLR-13 of her direct testimony.[161]

In rebuttal, Company witness Shambaugh made a similar adjustment to the Company's per books value for directors fees and expenses removing costs related to the Lancaster Trophy House and the Hamilton Club that were inadvertently included in the Company's rate filing.[162] This adjustment reduced the Company's per books claim for directors fees and expenses to

[158] OCA St. 1-R at 24:9-12.
[159] CWC St. 2 at 9:18-19; *see also* Exhibit GDS No. 1 at 1-15 (Revised).
[160] OCA St. 1 at 13:5-7.
[161] OCA St. 1, Sch. JLR-13.
[162] CWC St. 2-R at 20:13-16.

approximately $99,000, and the Company's pro forma claim to $109,372, as set forth on Page 1-5 of Exhibit GDS No. 1-R.

In surrebuttal testimony, OCA witness Rogers stated that she agreed with Mr. Shambaugh's changes and accepted the revision to directors fees and expenses, noting that the OCA and the Company are now in agreement.[163]

Accordingly, the Company's claim for directors fees and expenses, as modified by its rebuttal testimony, should be accepted by the Commission.

J. CONCLUSION

For the reasons set forth above, the Commission should not adopt the adjustments of the OCA and I&E, particularly where some of the OCA's adjustments rely on speculative assumptions about the future of the economy. Rather, the Company's justified level of O&M Expense of $4,079,604 and annual depreciation expense of $1,174,375 for the FTY is supported by substantial evidence of costs the Company is actually incurring and will incur in the FTY and should be approved by the Commission.

VI. TAXES

A. TAXES OTHER THAN INCOME TAXES

The Company presented its taxes other than income taxes in Exhibit GDS No. 1 at 1-14 (Revised) and subsequently in Exhibit GDS No. 1-R at 1-4. Taxes other than income taxes include regulatory assessments, payroll taxes, Pennsylvania realty tax, and Pennsylvania property taxes.

1. Regulatory Assessments

The Company's FTY claim for regulatory assessments is set forth in Exhibit GDS No. 1-R, Supporting Schedule 2, Pg. 2. The Company's regulatory assessments claim was calculated

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163 OCA St. 1-R at 24:16-20.

based upon the proposed revenues under proposed rates of approximately $8,244,826 and applying the relevant assessment factors.[164] The OCA only challenged the calculation of these amounts insofar as their recommended level of revenue under proposed rates differs from that of the Company.[165]

The Company disagrees with the OCA's regulatory assessments adjustment in so far as it disagrees with the OCA's recommended revenue increase in this proceeding.[166] Notwithstanding, the Company recognizes that a final determination of regulatory assessments will occur upon a final Commission determination of the total proposed revenue requirement amount in this proceeding.[167]

2. Payroll Taxes

The Company's claim for payroll taxes is set forth in Exhibit GDS No. 1 at 1-14 (Revised) and subsequently in Exhibit GDS No. 1-R at 1-4. The Company's 2022 per books level of payroll taxes was approximately $115,921 on a combined basis (F.I.C.A., Pa. Unemployment, and F.U.T.A).[168] The Company then removed from its filing approximately $5,424 in payroll taxes associated with the employees that operated the EDTMA system, which is set forth in Exhibit GDS No. 1, Supporting Schedule No. 10. Lastly, the Company then calculated the projected level of payroll taxes for the FTY resulting in a total going-level adjustment of $4,590 on a combined basis and as set forth in Exhibit GDS No. 1, Supporting Schedule No. 2.

No party to the proceeding challenged the Company's claimed level of payroll taxes in this proceeding. Accordingly, the Commission should adopt the Company's position.

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[164] Exhibit GDS No. 1-R at 2-4.

[165] *See* OCA St. 1 at 13:16-20.

[166] CWC St. 2-R at 24:2-5.

[167] CWC St. 2-R at 24:5-7.

[168] Exhibit GDS No. 1 at 1-14 (Revised); *see also* Exhibit GDS No. 1-R at 1-4.

3. Public Utility Realty Tax

The Company's claim included approximately $73,910 in Public Utility Realty Tax ("PURTA"), which is set forth in Exhibit GDS No. 1 at 1-14 (Revised) and subsequently in Exhibit GDS No. 1-R at 1-4. The Company claimed its 2022 per books level of PURTA expense.[169] No party to the proceeding contested the Company's claimed level of PURTA. Accordingly, the Company's claimed level of PURTA should be adopted by the Commission.

4. Property Taxes

The Company's claim included approximately $4,211 in Pennsylvania property taxes, which is set forth in Exhibit GDS No. 1 at 1-14 (Revised) and subsequently in Exhibit GDS No. 1-R at 1-4. The Company claimed its 2022 per books level of property tax.[170] No party to the proceeding contested the Company's claimed level of property taxes. Accordingly, the Company's claimed level of property taxes should be adopted by the Commission.

B. INCOME TAXES

The Company's FTY claim for income taxes (current and deferred) under proposed rates, as modified in its rebuttal testimony, is set forth in Exhibit GDS No. 1-R, Supporting Schedule 2, Page 1. The Company only claimed state income tax. The Company did not claim any federal income tax in this proceeding as it has sufficient tax loss carryforwards to avoid federal tax liability for the foreseeable future.[171]

Other than disallowances of state income tax related to proposed adjustments to O&M Expense and return on equity, the only issues raised regarding state income tax concern the taxable

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[169] Exhibit GDS No. 1 at 1-14 (Revised); *see also* Exhibit GDS No. 1-R at 1-4.
[170] Exhibit GDS No. 1 at 1-14 (Revised); *see also* Exhibit GDS No. 1-R at 1-4.
[171] Exhibit GDS No. 1-R at 2-3.

nature of the PENNVEST surcharge revenue, interest synchronization, and the applicable state income tax rate.

1. PENNVEST Surcharge Revenue

In the Company's filing, the Company reflected its PENNVEST surcharge revenue in the Company's total operating revenues for HTY and FTY, as depicted in GDS Exhibit No. 1-R at 1-1. The PENNVEST surcharge is collected from the Company's customers to pay for plant investment that was funded by PENNVEST loans.[172] As the Company stated in its response to I&E discovery:

> Pennvest revenue ***is not*** **from a loan or grant.** Pennvest revenue is the revenue the Company receives from its Pennvest surcharge….. The Pennvest loan is just like any other loan. Revenue used to pay back the loan is taxable for both state and federal purposes just like all other revenue is. The Pennvest surcharge is simply the vehicle for collecting revenue to pay the loan."[173]

Accordingly, the Company's claim for state income tax is based, in part, upon the revenue received from the PENNVEST surcharge.

I&E, however, disagrees with the Company's treatment of PENNVEST revenue as a below-the-line item for income tax purposes.[174] Rather, I&E asserts that the Company has not provided any support for its claim that the loan itself is taxable and that the revenues and expenses associated with the PENNVEST loan should be net zero for income taxes purposes.[175] The Company notes that I&E's witness did not respond to the Company's rebuttal testimony, but continued to reflect PENNVEST revenue as non-taxable income in surrebuttal testimony.[176]

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172 CWC St. 2-R at 21:21 – 22:4.

173 CWC St. 2-R at 21:23 – 22:4 (emphasis in original); *see also* I&E Exhibit No. 1, Pg. 1 (emphasis added).

174 I&E St. 1 at 5-7.

175 I&E St. 1 at 7:2-8.

176 I&E St. 1-SR at 3:11-12.

The Company, however, has provided reasonable evidence to refute I&E's position. First, as Mr. Shambaugh testified, the loan itself is not taxable income when the Company receives it. However, over time, as the Company collects the PENNVEST surcharge from customers to pay the debt service, those revenues are treated as taxable income, just like any other revenue received by the Company.[177] Moreover, to the extent the Company does receive a tax deduction related to these PENNVEST loans to recognize the payment of interest, such costs have been reflected in the Company's interest expense deduction for state income tax purposes, thus, appropriately reflecting the tax impacts associated with these loans for the benefit of the Company's ratepayers.[178]

For these reasons, the Company correctly reflected the tax impacts of the PENNVEST surcharge revenue in its rate case filing. Adopting I&E's position would fail to recognize income tax expenses duly incurred by the Company.

2. Interest Synchronization

The Company's claim for state income tax expense is based, in part, upon an interest expense deduction of $688,965.[179] This interest expense deduction includes the interest expense associated with the Company's weighted cost of debt included in this rate case plus the interest expense associated with its PENNVEST loans.[180] The Company, however, inadvertently included interest expense associated with its EDTMA Rate District and removed it from the rate case filing consistent with removing all aspects of EDTMA costs and capital assets.[181]

The OCA does not agree with the Company's approach to calculating interest expense in this proceeding. As OCA witness Rogers stated:

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[177] CWC St. 2-R at 5-9.

[178] CWC St. No. 2-R at 22:10-19; *see also* Exhibit GDS No. 5-R.

[179] Exhibit GDS No. 1-R at 2-3.

[180] CWC St. No. 2-R at 23:13-17.

[181] CWC St. No. 2-R at 23:18-22. The OCA agreed it was appropriate to remove the interest expense associated with the EDTMA Rate District. OCA St. 1-SR at 27:3-5.

> I have calculated interest synchronization is consistent with the approach that has been accepted by this Commission. Specifically, the plant that is included in rate base for the purpose of determining base rates is the plant on which the interest expense (for the purpose of determining base rates) is determined. To the extent that there is a surcharge to recover PENNVEST financing costs, the surcharge should be grossed-up to recover any taxes net of deductions.[182]

Thus, OCA argues that the interest expense associated with the payment of the PENNVEST loans should not be included in the calculation of state income tax because the PENNVEST-funded plant is not included in rate base in this proceeding and the PENNVEST surcharge can be grossed up to recover any taxes net of deductions.

The Company, however, submits that the Company's position is correct. First, the PENNVEST surcharge cannot be grossed up to recover the state income tax impacts associated with the PENNVEST revenue. As set forth in Section 69.361 of the Commission's regulations:

> PENNVEST loans were established to provide funding to water and wastewater companies for improvements of drinking water and wastewater treatment facilities in this Commonwealth. The Commission is required to establish expedited practices, procedures and policies to facilitate and accomplish repayment of the loan obligations. See section 14 of the PENNVEST Act (35 P. S. § 751.14). Companies with outstanding PENNVEST loans not currently reflected in rates and companies that will receive PENNVEST loans in the future are encouraged to establish under 66 Pa.C.S. § 1307(a) (relating to sliding scale of rates; adjustments) and subject to Commission approval, an automatic adjustment by means of a sliding scale of rates **limited solely to the recovery of PENNVEST principal and interest obligations**, instead of seeking recovery of these amounts under 66 Pa.C.S. § 1308 (relating to voluntary changes in rates) base rate filing.[183]

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[182] OCA St. 1-SR at 26:17-23.

[183] 52 Pa. Code § 69.361 (emphasis added).

Furthermore, in Section 69.364, the Commission explicitly states that "[o]ther expenses incurred by the water company, for example, additional operating and maintenance expenses and depreciation…should be evaluated in a separate Section 1308 proceeding."[184]

Thus, the Company has appropriately included both the taxable impacts of the PENNVEST surcharge revenue, as explained above, and the related interest expense deductions. This is also consistent with Section 1301.1(a) of the Code, which requires that "[i]f an expense or investment is allowed to be included in a public utility's rates for ratemaking purposes, the related income tax deductions and credits shall also be included in the computation of current or deferred income tax expense to reduce rates."[185] Thus, the Commission should adopt the Company's claimed interest expense deduction of $688,965.

Additionally, the Company recognizes that the OCA and I&E's interest expense is based upon their hypothetical capital structure. The Company disagrees with using a hypothetical capital structure for the reasons set forth in this Main Brief. To the extent the Commission uses the traditional method of calculating interest expense, the interest expense calculation should be based on the Company's proposed weighted cost of debt.

3. State Income Tax Rate

The Company's filing relies on a state income tax rate of 8.99 percent. The OCA opposes the use of an 8.99 percent state income tax rate because the Company's rate increase request is suspended until January 27, 2024 and, once new rates go into effect, the 8.49 percent rate will be the applicable tax rate.[186] However, the Company continues to support the use of a state income tax rate of 8.99% because that is the rate currently in effect throughout the duration of the FTY in

[184] 52 Pa. Code § 69.364.
[185] 66 Pa. C.S. § 1301.1(a).
[186] CWC St. 2-R at 23:3-6.

this proceeding.[187] The OCA's concerns are also ameliorated by the Commission's requirement that future state income tax reductions be flowed-through annually through the State Tax Adjustment Surcharge ("STAS").[188] The Company has complied and will continue to comply with these requirements.[189]

C. CONCLUSION

For the reasons set forth above, the Company's claimed level of taxes for the FTY should be approved by the Commission.

VII. RATE OF RETURN

A. INTRODUCTION

The legal standards to be used by the Commission in determining what rate of return is fair for a utility are well-established, having been set forth by the United States Supreme Court in *Bluefield* over eighty years ago:

> Rates which are not sufficient to yield a reasonable return on the value of the property used at the time it is being used to render the service are unjust, unreasonable and confiscatory, and their enforcement deprives the public utility of its property in violation of the Fourteenth Amendment.[190]

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.[191] These principles have been adopted by Pennsylvania appellate courts in numerous cases.[192]

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187 CWC St. 2-R at 23:6-10.

188 *See* 52 Pa. Code § 69.52.

189 *State Tax Adjustment Columbia Water Company*, Docket No. R-2023-3037555 (Secretarial Letter issued Jan. 11, 2023), available at https://www.puc.pa.gov/pcdocs/1770225.pdf).

190 *Bluefield Waterworks & Imp. Co. v. Pub. Serv. Comm'n of W. Va.*, 262 U.S. 679, 690 (1923) (*Bluefield*).

191 *Id.*, at 693.

192 *See, e.g., Lower Paxton Twp. v. Pa. Pub. Util. Comm'n.*, 317 A.2d 917 (Pa. Commw. Ct. 1974).

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

> …a return on the value of the [utility's] property which it employs for the convenience of the public equal to that generally being made at the same time on investments in other business undertakings which are attended by corresponding risks and uncertainties…[193]

Twenty-one years later, the Supreme Court reiterated that standard in Hope, as follows:

> From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.[194]

Later, in reaffirming *Hope*, the Supreme Court, in *Duquesne Light Co. v. Barasch*, observed that "[o]ne of the elements always relevant to setting the rate under Hope is the return investors expect given the risk of the enterprise."[195]

Determining a fair rate of return requires reviewing many factors, including: (1) the earnings necessary to assure confidence in the financial integrity of the company and maintain its credit standing; (2) the need to pay dividends and interest; and (3) the amount of the investment, the size and nature of the utility, its business and financial risks, and the circumstances attending its origin, development and operation.[196]

A key component of a fair rate of return is the identification of the appropriate capital structure for ratemaking purposes. The Commission's established policy is to use the company's

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193 *Bluefield*, 262 U.S. at 692.

194 *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944) (*Hope*).

195 488 U.S. 299, 313-14 (1989) (*Duquesne Light*).

196 *Pa. Pub. Util. Comm'n v. Pennsylvania Gas and Water Co. - Water Div.*, 341 A.2d 239 (1975), *rev'd on other grounds*, 424 A.2d 1213 (Pa. 1980); *Lower Paxton Twp., supra*.

actual capital structure instead of a hypothetical one unless the evidence supports a finding that the company's capital structure is atypical or too heavily weighted on either the debt or equity side.[197]

A reasonable and fair rate of return for the Company has been submitted in this case through the testimony and exhibits of Mr. Dylan W. D'Ascendis. The Company's capital structure should be set at its actual capital structure of 36.66% long-term debt and 63.34% common equity. The Company's long-term cost of debt should be set at 3.15% and its cost of equity at 11.25%. The Company's overall rate of return should be set at 8.28%.

The rate of return positions advanced by the OCA and I&E, however, are extremely troubling and appear to be a clear attempt to reduce the Company's rate increase request at the expense of providing a fair return to the Company. Specifically, both the OCA and I&E propose the use of a hypothetical capital structure, contrary to established precedent, and unreasonably low ROEs based on unreasonable methodologies. As explained by Company witness Lewis, this is extremely concerning to Columbia Water:

> Adoption of a hypothetical capital structure signals to the Company to manage to (*i,e.*, attempt to achieve) that capital structure by decreasing equity because if we do not, equity investors essentially receive a debt return on part of their investment, and this will ultimately cause investors to require a higher equity return to justify their investment in the Company. But the Company in this scenario would not be able to provide the required higher equity return at the rates OCA proposes. Not meeting investor equity requirements signals a reasonable, prudent investor to walk away from additional investment in the Company and potentially withdraw investment from the Company all together. The Company would be left with additional debt as the only potential option for raising additional capital.[198]

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197 *See PPL 2012*, 2012 WL 6758304.

198 CWC St. 1-RJ at 4:1-10.

The Company's ability to take on additional debt is constrained by its cash flow to debt service coverage ratio limitations. Quite frankly, their suggestion is not an appropriate, prudent, or reasonable approach to managing a water company's capital and should not be adopted by the Commission.

As explained in detail below, the Company's proposed use of is actual capital structure is proper and in accordance with precedent. The Company's proposed debt cost rate of 3.15% and proposed return on common equity of 11.25% are also fully supported by the record and should be adopted.

B. CAPITAL STRUCTURE

1. Company's Position

The Company's actual capital structure is composed of 36.66% long-term debt and 63.34% common equity.[199] In his direct testimony, Company witness D'Ascendis explains why it is important for the Company's actual capital structure to be authorized in this proceeding:

> In order to provide safe, reliable, and affordable service to its customers, CWC must meet the needs and serve the interests of its various stakeholders, including customers, shareholders, and bondholders. The interests of these stakeholder groups are aligned with maintaining a healthy balance sheet, strong credit ratings, and a supportive regulatory environment, so that the Company has access to capital on reasonable terms in order to make necessary investments.
>
> Safe and reliable service cannot be maintained at a reasonable cost if utilities do not have the financial flexibility and strength to access the competitive markets on reasonable terms. The authorization of a capital structure other than the Company's actual capital structure will weaken its financial condition and adversely impact the Company's ability to address expenses and investment, to the detriment of customers and shareholders. Safe and reliable service for customers cannot be sustained over the long term if the interests

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199 CWC St. 4 at 16:4-5.

> of shareholders and bondholders are minimized such that the public interest is not optimized.[200]

Thus, the use of the Company's actual capital structure is appropriate to ensure a healthy balance sheet, strong credit ratings, and a supportive regulatory environment, so that the Company has access to capital on reasonable terms.

Moreover, while the Company's capital structure is slightly more equity rich than the Company's utility proxy group, Company witness D'Ascendis explained that common equity more accurately matches the life of the utility, which is also assumed to operate in perpetuity.[201] Consequently, it is both typical and important for utilities to have significant proportions of common equity in their capital structures.[202] In recognition of a slightly more equity-rich capital structure, Company witness D'Ascendis made a downward adjustment to the Company's indicated ROE as discussed below.[203]

2. OCA and I&E's Hypothetical Capital Structures Should Be Rejected

The OCA and I&E recommend that the Company adopt a hypothetical capital structure when setting the Company's cost of capital in this proceeding. I&E recommends a hypothetical capital structure of 50.00% long-term debt and 50.00% common equity on the basis that Columbia Water's capital structure falls outside the range of I&E witness Keller's proxy group.[204] Similarly, the OCA recommends a hypothetical capital structure of 49.40% long-term debt and 50.60% common equity, which is the average capital structure of OCA witness Garrett's proxy group.[205] These recommendations should not be adopted by the Commission.

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[200] CWC St. 4 at 17:10-23.
[201] CWC St. 4 at 17:2-4.
[202] CWC St. 4 at 17:4-6.
[203] CWC St. 4 at 6-8.
[204] I&E St. 1 at 28:6-14.
[205] OCA St. 2 at 7:5-7, 66:3-4.

As stated by the Commission, "the actual capital structure represents the Company's decision, in which it has *full discretion*, on how to capitalize its rate base," which "forms the basis upon which" utilities "attract capital."[206] The Commission has determined that a utility's actual capital structure is to be used, absent circumstances where the actual capital structure is atypical for the type of utility service being offered.[207] For example, in ALLTEL the Commission stated as follows:

> The ALJ recommended use of the Company's stand-alone capital structure since it met the following characteristics of an appropriate capital structure: (1) It was within a reasonable range of similar risk barometer group companies. (2) It reflected the Company's actual capital structure and projected near term capital structure. (3) It is consistent with the Company's apparent capital structure goal. (R.D., p. 28).
>
> We concur with the recommendation of the ALJ, particularly for the reason that the Company's actual capital structure falls within a range employed by similar risk barometer group companies, described by Mr. Shiavo as commensurate with capital ratios employed by other independent telephone operating companies.[208]

This analysis was reaffirmed by the Commission in Aqua Pennsylvania Inc.'s 2021 base rate case.[209] In that case, OCA also proposed that the Commission adopt a hypothetical capital structure. The Commission rejected the OCA's proposal, and stated as follows:

> Like the ALJ, we note the veracity of the OCA's statement that the Commission has the discretion to employ a hypothetical capital structure where a company's actual capital structure is unreasonable or uneconomical. However, because we find no merit in the OCA's arguments that the Company's actual capital structure *is either*

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[206] *PPL 2012*, 2012 WL 6758304.

[207] *See Pa. Pub. Util. Comm'n v. City of Lancaster – Water*, Docket Nos. R-00984567, et al., 1999 Pa. PUC LEXIS 39, at *17 (Order dated Sept. 22, 199); *Pa. Pub. Util. Comm'n v. City of Bethlehem*, 84 Pa. P.U.C. 275, 304 (1995); *Carnegie National Gas Co. v. Pa. Pub. Util Comm'n*, 433 A.2d 938, 940 (Pa. Cmwlth. 1981).

[208] *Pa. Pub. Util Comm'n v. ALLTEL Pa., Inc.*, Docket No. R-942710 et al., 59 Pa. PUC 447, 491, 1985 Pa. PUC LEXIS 53, *106-107 (Order entered May 24, 1985) ("ALLTEL").

[209] *See Pa. Pub. Util Comm'n v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385, *et al.*, 2022 WL 1732770 (Opinion and Order entered May 16, 2022) (*Aqua 2021*).

unreasonable or uneconomical, we shall decline to exercise this discretion in the instant proceeding.

> The use of an actual capital structure represents the Company's decision, in which it has full discretion, on how to capitalize its rate base. This actual capitalization forms the basis upon which Aqua attracts capital. For example, Aqua's long-term debt cost rate of 4.00%, discussed, *infra*, which all Parties have accepted for ratemaking purposes, fully reflects the capitalization determined by the Company to be appropriate.
>
> In both Columbia Gas and PECO Gas, we reaffirmed the legal standard in Pennsylvania for deciding whether to use a party's proposed hypothetical capital structure in setting rates, *i.e.*, we stated that if a utility's actual capital structure is within the range of a similarly situated proxy group of companies, rates are set based on the utility's actual capital structure. More specifically, we reaffirmed this standard, which we articulated in the 2012 PPL Order, as follows:
>
>> Absent a finding by the Commission that a utility's actual capital structure is atypical or too heavily weighted on either the debt or equity side, we would not normally exercise our discretion with regard to implementing a hypothetical capital structure.[210]

In fact, the Commission has already applied these principles to the Company's actual capital structure on two occasions and found that Columbia Water's actual capital structure is not considered atypical. The Commission stated in 2009:

> In order to determine Columbia's overall cost of capital an appropriate capital structure must be used. We agree with the ALJ that Columbia's capital structure is not disproportionately weighted on the equity side. Columbia's capital structure is not unreasonable or uneconomical under the rational of the *Carnegie* decision as discussed earlier. The record evidence does not indicate that Columbia has abused its managerial discretion with regard to the development of its capital structure. Therefore, we will adopt the ALJ's recommendation to use Columbia's actual capital structure of 35.8% debt and 64.2% common equity for ratemaking purposes.[211]

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210 *Aqua 2021*, 2022 WL 1732770 at *80-81.

211 *CWC 2009*, 2009 WL 1708836.

Subsequently, in 2014, the Commission stated:

> Upon review, we shall adopt the Company's *pro forma* capital structure as of December 31, 2013, consisting of 35.6% long-term debt and 64.4% common equity. We agree with the Company that circumstances have not changed materially since the Commission approved a nearly identical capital structure of 35.8% long-term debt and 64.2% in the Company's last rate case. *2009 Rate Case Order* at 71. We also agree with Columbia's assertion that adopting a hypothetical 50/50 capital structure, rather than the Company's actual capital structure, would be somewhat arbitrary, and would fail to recognize the benefits to ratepayers of the Company having ready access to capital markets due to its strong capital structure.[212]

The OCA and I&E have presented no evidence to show that the circumstances in this proceeding materially differ from the facts in the Company's 2008 and 2013 rate case proceedings.

Here, Mr. D'Ascendis has demonstrated that the Company's actual capital structure is only 90 basis points outside the high-end equity ratio range of his utility proxy group.[213] Moreover, the actual capital structure in this case is very similar to the 2008 and 2013 proceedings.[214] Below is a table[215] comparing the capital structures from each proceeding:

Comparison of Columbia Water's Capital Structure		
Year	**Debt**	**Common Equity**
2008	35.8%	64.2%
2014	35.6%	64.4%
2023	36.66%	63.34%

Thus, as seen above, the Company's capital structure, in fact, is less equity-rich than the previous two Commission decisions, where the Commission held that the Company's capital structure was not heavily weighted on the equity side.

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212 *Pa. Pub. Util. Comm'n, et al. v. Columbia Water Company*, Docket Nos. R-2013-2630798, *et al*., 2014 WL 316891, at *25 (Opinion and Order entered Jan. 23, 2014) (*CWC 2013)*.

213 CWC St. 4-RJ at 9:12-15.

214 CWC St. 4-R at 4:27-29.

215 *See CWC 2009, CWC 2013*, 2014 WL 316891 at *25, CWC St. 4 at 16:4-5.

Furthermore, neither the OCA or I&E have provided any evidence suggesting that the Company abused its managerial discretion in obtaining the present capital structure, nor have they shown or even alleged that Columbia Water's capital structure is unreasonable and uneconomical when balancing the goals of safety, prudent management, and economy.[216] Thus, the Company's financing is largely unchanged from prior years and the Company should receive the same treatment from the Commission in this proceeding.

Lastly, adopting the request of the OCA and I&E would be detrimental to the Company and its ratepayers. Adopting a hypothetical capital structure would be akin to providing an investor a debt return for a portion of their investment. To satisfy the investor's expectations, the Company would then be required to give the investor a higher return on the equity portion of its investment, which the Company certainly would not achieve under the ROE proposals of the OCA and I&E.[217] This would leave Columbia Water as an unattractive investment leading to investors walking away.[218] As Mr. D'Ascendis testified this could be problematic because it would require the Company to increase its financial risk and obtain more debt financing at higher, detrimental interest rates:

> As mentioned on page 6 of my Rebuttal Testimony, CWC's relatively strong capital structure provided financing flexibility and access to capital when required, and that was evidenced by relatively low interest rates as compared to my Utility Proxy Group. The Opposing Witnesses' proposed hypothetical capital structures put CWC's current financing flexibility and access to capital at reasonable terms in danger. As discussed in more detail in Company Witness David T. Lewis' rejoinder testimony, the Opposing Witnesses' hypothetical capital structure would cause the Company to default on at least one debt covenant, which would then trigger several other defaults due to cross default provisions in that financing instrument and their other financing instruments. Because of this, it could be assumed that cost of marginal debt (if the

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216 CWC St. 4-R at 6:8-10.
217 CWC St. 1-RJ at 4:1-5.
218 CWC St. 4-RJ at 8:5-11.

Company could raise any) would be consistent with below investment grade, or "junk" bonds. As the Company's 2023 debt issuances already indicate a BB credit rating, the Company's increased debt to equity ratio would lead to further credit degradation. As shown on CWC Exhibit No. DWD-2RJ, the yield on single B and CCC utility bonds non-investment grade bond yields range from 10.59% to 13.38% on July 31, 2023. These yields both exceed the Opposing Witnesses' recommended ROEs in this proceeding.[219]

As further explained by Company witness Lewis:

> In fact, Mr. Garrett goes so far as to suggest the Company should take on more debt. However, despite Mr. Garrett's myopic and ill-informed suggestion, the reality is the Company cannot take on any significant amount of additional debt because the Company's Loan Agreement with M&T Bank, which covers all of the Company's loans with the bank, constrains the Company's ability to take on more debt. I have included the Loan Agreement as **CWC Exhibit DTL-1RJ.** Specifically, the loan agreement has a cash flow to debt service coverage ratio requirement and a maximum debt to capitalization ratio requirement. CWC has taken out two debt issuances in 2023 and CWC is already very close to the cash flow to debt service coverage ratio limitation, and taking on additional debt would more likely than not cause a default on these loans. I have included the calculations for the debt limitations associated with the loan agreements as **CWC Exhibit DTL-2RJ**. This default would have a domino effect as most, if not all, of the Company's loans have cross default provisions, meaning default on one loan results in defaults on the Company's other loans. Witness Garrett's suggestion to take on more debt would likely place the Company in financial ruin to the detriment of customers, not just shareholders. This is also a reason it is so important to have shareholders and investors that are incentivized to provide the necessary capital when such capital cannot be reasonably raised in the debt market.
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> Based on my experience as President and General Manager of a successful water company, Mr. Garrett's suggestions are not an appropriate, prudent, or reasonable approach to managing a water company's capital.[220]

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[219] CWC St. 4-RJ at 6:5-21.

[220] CWC St. 1-RJ at 4:11 – 5:11 (emphasis in original).

Thus, employing a hypothetical capital structure would be to the detriment of the Company's customers, not to their benefit. Contrary to the OCA and I&E's claims, the Company's current capital structure is a significant benefit to customers providing Columbia Water access to low-cost financing. As Mr. D'Ascendis has testified, the Company has relatively low debt cost rates when compared to his utility proxy group.[221]

3. Conclusion as to Capital Structure

The Commission's decision is critical here. Adopting a hypothetical capital structure would jeopardize the Company's ability to attract investors, forcing the Company to obtain additional debt financing at the risk of exceeding its cash flow to debt service coverage ratio limitations, potentially defaulting on its loans, and incurring higher interest rates and greater financial risk. Such a decision would be harmful to the Company, its customers, and inapposite with previous Commission decisions allowing the Company's actual capital structure.

C. DEBT COST RATE

The Company's long-term debt cost rate is 3.15%.[222] No party has challenged the Company's claimed debt cost rate. It should be adopted by the Commission.

D. RETURN ON COMMON EQUITY

1. Company's Position

As Company witness D'Ascendis explains, the use of more than one method to calculate the ROE is appropriate because "reasonable investors use a variety of tools and do not rely exclusively on a single source of information or single model."[223] Moreover, each model focuses on "different aspects of return requirements, and provide different insights to investors' views of

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[221] CWC St. 4-RJ at 6:5-8.
[222] CWC Exhibit DWD-1 at 1.
[223] CWC St. 4 at 19:11-12.

risk and return."[224] Ultimately, "the use of multiple generally accepted common equity cost rate models also adds reliability and accuracy when arriving at a recommended common equity cost rate."[225]

Moreover, in considering cost of equity methodologies, the Commission has recognized that "[s]ole reliance on one methodology without checking the validity of the results of that methodology with other cost of equity analyses does not always lend itself to responsible ratemaking."[226] Accordingly, to determine the fair common equity cost rate for the Company, Mr. D'Ascendis first determined the barometer group of companies based on their comparable risk to the Company. Next, Mr. D'Ascendis calculated the indicated cost of equity using three separate, well-established cost of equity methods: the DCF methodology, the Risk Premium approach, the CAPM. Mr. D'Ascendis then applies these same models to a group of non-regulated companies of comparable risk as a comparison to the broader market. The results of those methods are set forth below:[227]

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224 CWC St. 4 at 19:13-14.
225 CWC St. 4 at 19:21-23.
226 *PPL 2012*, 2012 WL 6758304.
227 CWC St. 4 at 4:7-8.

Table 2: Summary of Common Equity Cost Rate

Discounted Cash Flow Model	9.13%
Risk Premium Model	12.05%
Capital Asset Pricing Model	11.76%
Market Models Applied to Comparable Risk, Non-Price Regulated Companies	11.59%
Indicated Range of Common Equity Cost Rates Before Adjustments for Company-Specific Risk	10.09% - 11.09%
Business Risk Adjustment	1.00%
Financial Risk Adjustment	-0.11%
Indicated Range of Common Equity Cost Rates after Adjustment	10.98% – 11.98%
Recommended Cost of Common Equity	11.25%

As seen above, the indicated range of common equity cost rates applicable to the utility proxy group was then adjusted upward by 1.00%, and downward by 0.11%; to reflect the Company's greater business risk, and lesser financial risk, respectively, relative to the utility proxy group.[228] These adjustments result in a Company-specific range of common equity cost rates between 10.98% and 11.98%.[229] Based upon this, Mr. D'Ascendis concluded that the base cost of equity should be 11.25%, which is consistent with the *Hope* and *Bluefield* standard of a just and reasonable return.[230]

[228] CWC St. 4 at 4:12 – 5:2.
[229] CWC St. 4 at 5:2-3.
[230] CWC St. 4 at 55:16-19.

a. *Development of the Barometer Group*

Company witness D'Ascendis used a proxy group of six water companies, which will be referred to as the "Utility Proxy Group." Company witness D'Ascendis explained the characteristics for qualifying for the Utility Proxy Group in his direct testimony.[231] The following six companies met his criteria: American States Water Company, American Water Works Company, Inc., California Water Service Group, Essential Utilities Inc., Middlesex Water Company, and SJW Group.[232]

The OCA accepted Mr. D'Ascendis' Utility Proxy Group.[233] I&E witness Keller excluded Essential Utilities, Inc. ("Essential") from his proxy group.[234] Essential did not pass I&E's selection criterion that required at least 50% of revenues be attributable to regulated water operations.[235] However, I&E's decision to rely on revenues to determine whether a company should be included in the proxy group is flawed. The correct measure is the measure of earnings. As stated by Mr. D'Ascendis:

> Measures of income are far more likely to be considered by the financial community in making credit assessments and investment decisions than are measures of revenue. From the perspective of credit markets, measures of financial strength and liquidity are focused on cash from operations, which is directly derivative of earnings, as opposed to revenue. As part of its rating methodology, for example, Moody's Investor Service ("Moody's") assigns a 40.00% weight to measures of financial strength and liquidity, of which 22.50% specifically relates to the ability to cover debt obligations with cash from operations.[236]

Essential's net operating income attributable to regulated water operations is 63.12%, which indicates that its market data reflects that of a regulated water utility and that it would be

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231 CWC St. 4 at 14:14 – 15:9.
232 CWC St. 4 at 15:7-9.
233 OCA St. 2 at 17:2-5.
234 CWC St. 4 at 7:14-15.
235 CWC St. 4 at 7:15-16.
236 CWC St. 4-R at 85:3-11.

appropriate for inclusion in a water utility proxy group.[237] It should also be noted that I&E included Essential in its proxy group in *Aqua 2021*.[238] Accordingly, I&E's position to remove Essential form the Utility Proxy Group on the basis of revenues should not be adopted by the Commission.

b. *DCF*

The DCF model seeks to explain the value of an asset as the present value of future cash flows, discounted at the appropriate rate.[239] As part of his analysis, Company witness D'Ascendis uses a single-stage constant growth DCF model.[240] For his dividend yield, Mr. D'Ascendis uses the unadjusted dividend yields of the Utility Proxy Group's dividends divided by the average of the closing market prices for the 60 trading days ending February 2, 2023.[241] However, the dividend yields have been adjusted upward to reflect one-half the average projected growth rate since the companies in the Utility Proxy Group increase their quarterly dividend at various times during the year.[242] For his growth rates, Mr. D'Ascendis used analysts' five-year forecasts of Earnings Per Share ("EPS") growth in his DCF analysis.[243] Based on his DCF analysis, Mr. D'Ascendis concluded that the indicated ROE was 9.13 percent which is an average of the mean result and the median result for the Utility Proxy Group.[244]

c. *CAPM Methodology*

Company witness D'Ascendis also prepared a CAPM analysis to estimate the cost of common equity for the Utility Proxy Group. The CAPM analysis is similar in concept to the risk

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237 CWC St. 4 at 9:3-6.
238 *Aqua 2021*, 2022 WL 1732770, at *77.
239 CWC St. 4 at 20:3-6.
240 CWC St. 4 at 21:7.
241 CWC St. 4 at 21:10-12.
242 CWC St. 4 at 21:17 – 22:2.
243 CWC St. 4 at 22:5-16.
244 CWC St. 4 at 22:18-23.

premium analysis in that it determines a "risk-free" interest rate based on U.S. Treasury obligations and an equity risk premium that is proportional to the beta measure of systematic risk of a stock, which are summed to produce the cost rate of equity.[245] For his analysis, however, Mr. D'Ascendis also uses the Empirical CAPM ("ECAPM"). The ECAPM is a helpful measure because, as Mr. D'Ascendis testified, the standard CAPM underestimates the return required from low-beta securities, such as those of the Utility Proxy Group.[246] For his risk-free rate, Mr. D'Ascendis has used a risk-free rate of 3.85%, which is based on the average of the Blue Chip consensus forecast of the expected yields on 30-year U.S. Treasury bonds.[247] In determining his market risk premium of 10.00%, Mr. D'Ascendis derives it from an average of various sources as set forth in his direct testimony.[248] The result of Mr. D'Ascendis' CAPM/ECAPM analysis was 11.76%, which is an average of the median and mean result for his Utility Proxy Group.[249]

The OCA and I&E criticize Mr. D'Ascendis for his use of an ECAPM. OCA witness Garrett states that that low-beta securities have already been adjusted upwards to account for the fact that low-beta securities may be understated and that empirical evidence suggests Value Line already overstates low-beta industries.[250] Mr. Keller likewise argues that the ECAPM does nothing to solve the inability of the CAPM to accurately predict the cost of capital.[251] These arguments should be dismissed. As discussed in Mr. D'Ascendis' Direct Testimony, numerous tests of the CAPM have confirmed the validity of the ECAPM because the actual Security Market Line ("SML") described by the traditional CAPM is not as steeply sloped as the predicted SML.[252]

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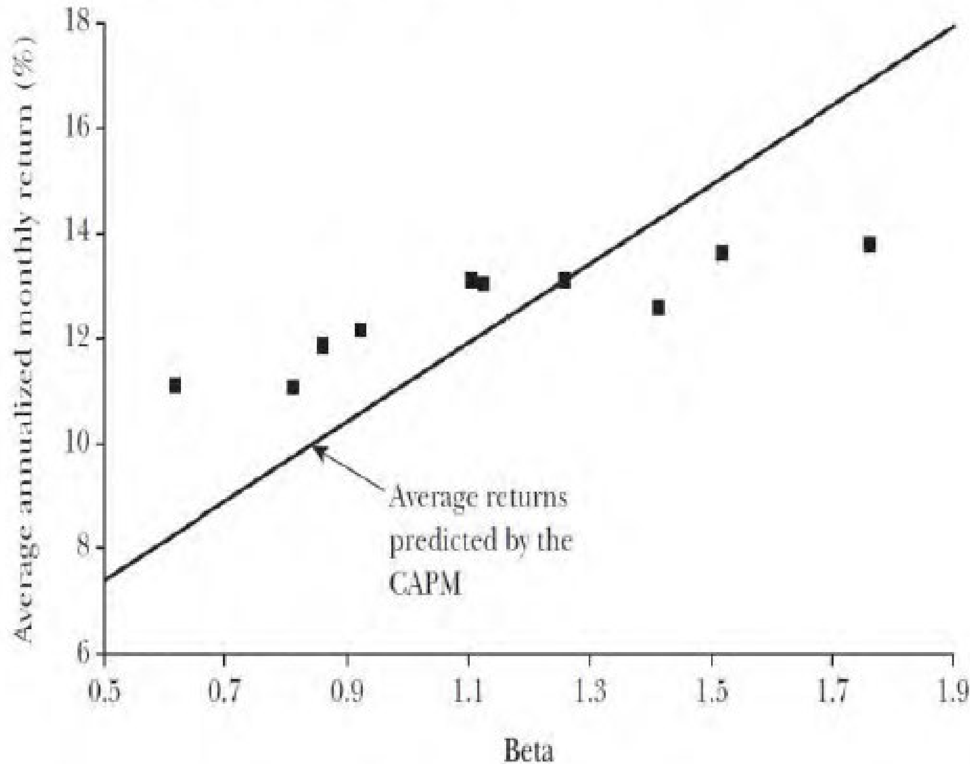
245 CWC St. 4 at 36:13 – 37:1.
246 CWC St. 4 at 37:9-14.
247 CWC St. 4 at 40:7-10.
248 CWC St. 4 at 40:13 – 41:18.
249 CWC St. 4 at 42:5-9.
250 OCA St. 2 at 49:17 – 50:11.
251 I&E St. 1 at 52:2-4.
252 CWC St. 4 at 37:9-16.

As set forth in the chart below, low-beta stocks' average returns were routinely underestimated by the traditional CAPM:[253]



As Mr. D'Ascendis concludes, the academic research on the CAPM, validates the use of the ECAPM.[254] Nevertheless, Mr. D'Ascendis applies both the traditional CAPM and ECAPM to the companies in the Utility Proxy Group and averages his results to make a conservative estimate. Thus, the arguments of the OCA and I&E should be denied.

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[253] CWC St. 4 at 38:1.
[254] CWC St. 4 at 39:22-23.

Additionally, the OCA's argument that Company witness D'Ascendis' equity risk premium of 10.00% is overstated should be denied. OCA witness Garrett argues that Mr. D'Ascendis' equity risk premium ("ERP") is much higher than his ERP of 5.5% because Mr. D'Ascendis relies on data as old as 1926.[255] However, as explained by Mr. D'Ascendis, Mr. Garrett's estimates cannot be compared to Mr. D'Ascendis' estimates because Mr. Garrett relies on unpredictable and unreasonable forecasts and non-transparent data.[256] Moreover, some of Mr. Garrett's cited sources contradict his own approach to forecasting market risk premiums.[257] Rather, contrary to Mr. Garrett's claims, Mr. D'Ascendis' market risk premium estimate of 10.00% falls within the 54th percentile of historical MRPs.[258] Thus, the OCA's comparison is not appropriate, nor useful.

d. *Risk Premium Model*

Company witness D'Ascendis also used a risk premium analysis to determine the cost of common equity. The risk premium analysis is based upon the fundamental principle that an equity investor in a given company has a greater investment risk than a bond holder in the same company.[259] Company witness D'Ascendis relies on the Predictive Risk Premium Model ("PRPM"). The PRPM is not based on an estimate of investor behavior, but rather on the evaluation of the results of that behavior (*i.e.*, the variance of historical equity risk premiums).[260] The inputs to the model are the historical returns on the common shares of each company in the Utility Proxy Group minus the historical monthly yield on long term U.S. Treasury securities through January 2023.[261] Mr. D'Ascendis then added the forecasted 30-year U.S. Treasury Bond

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255 OCA St. 2 at 46:8-19.
256 CWC St. 4-R at 48:22 – 49:9. *See also* Section VII.D.3.a, *infra*.
257 CWC St. 4-R at 49:18 – 50:38.
258 CWC St. 4-R at 60:4-6.
259 CWC St. 4 at 23:5-11.
260 CWC St. 4 at 24:12-14.
261 CWC St. 4 at 24:15-17.

yield of 3.85% to each company's PRPM-derived equity risk premium to arrive at an indicated cost of common equity.[262] The 30-year Treasury yield is a consensus forecast derived from the *Blue Chip Financial Forecasts ("Blue Chip")*.[263] Mr. D'Ascendis used the 30-year Treasury yield because its term is consistent with the long-term cost of capital to public utilities, the long-term investment horizon inherent in utilities' common stocks, and the long-term life of the jurisdictional rate base to which the allowed fair rate of return (*i.e.*, cost of capital) will be applied.[264] Mr. D'Ascendis relied on the average of the mean and median results of the PRPM as applied to the Utility Proxy Group to calculate a cost of common equity rate of 12.52%.[265]

In addition to the PRPM, Mr. D'Ascendis also utilized the total market approach RPM, which adds a prospective public utility bond yield to an average of: (1) an equity risk premium that is derived from a beta-adjusted total market equity risk premium; and (2) an equity risk premium based on the S&P Utilities Index.[266] Using the total market approach, Mr. D'Ascendis calculated a common equity cost rate of 11.57% for the Utility Proxy Group.[267]

Based on these two models, Mr. D'Ascendis derives an overall common equity cost rate of 12.05%, which gives equal weight to the PRPM (12.52%) and the adjusted market approach results (11.57%).[268]

I&E, however, argues against the Company's use of the PRPM because it is not a commonly used method and cannot be evaluated or recreated without software.[269] I&E witness Keller also states that he is unaware of any state that has accepted the PRPM and only complicates

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[262] CWC St. 4 at 25:3-5.
[263] CWC St. 4 at 25:5-7.
[264] CWC St. 4 at 25:16-20.
[265] CWC St. 4 at 26:7-9.
[266] CWC St. 4 at 26:12-15.
[267] CWC St. 4 at 35:11-13.
[268] CWC St. 4 at 36:4-6.
[269] I&E St. 1 at 52:10-15.

the RPM. However, I&E's argument should be dismissed. As Company witness D'Ascendis testified, the PRPM is based on the research of Robert F. Engle, dating back to the early 1980s[270], the PRPM is also in the public domain, having been published six times in academically peer-reviewed journals, none of which have been rebutted,[271] and been accepted by other regulatory commissions.[272] Accordingly, I&E's argument should be dismissed.

e. *Non-Utility Proxy Group*

Because the Company must also compete with non-price regulated firms for capital, Mr. D'Ascendis also selected a group of twenty domestic, non-price regulated companies, hereinafter "Non-Utility Proxy Group," that are comparable in total risk to his Utility Proxy Group and applied the same three market-based costs of equity models to determine an appropriate cost of equity for Columbia Water in this case.[273] This analysis is based on the principle set forth by the United States Supreme Court that a utility should be afforded an opportunity to earn a return on its property equal to that being earned on investments in other businesses with corresponding risks and uncertainties.[274]

The following criteria were used in the selection of the domestic, non-price regulated firms: (i) they must be covered by *Value Line*; (ii) they must be domestic, non-price regulated companies, *i.e.*, non-utilities; (iii) their beta must lie within plus or minus two standard deviations of the

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270 CWC St. 4-R at 39:9-10.

271 CWC St. 4-R at 40:3-8.

272 CWC St. 4-R at 42:10 – 43:2 (citing *Application of Carolina Water Service, Inc. for Adjustment of Rates and Charges and Modification to Certain Terms and Conditions for the Provision of Water and Sewer Service*, Docket No. 2017-292-WS, Order No. 2018-345, at 14 (Pub. Serv. Comm'n S.C. entered May 17, 2018), available at https://dms.psc.sc.gov/Attachments/Order/cdf0809e-03b3-4f0a-b94a-a1f9f2cacdc2 (*Carolina Water Service*); *In the Matter of Application by Carolina Water Service, Inc. of North Carolina, 4944 Parkway Plaza Boulevard, Suite 375, Charlotte, North Carolina, 28217, for an Accounting Order to Defer Incremental Storm Damage Expenses Incurred as a Result of Hurricane Florence*, *et al*., Docket No. W-354, Sub 363, *et al*., Order Granting Partial Rate Increase and Requiring Customer Notice at 72 (N.C. Util. Comm'n entered March 31, 2020), available at https://starw1.ncuc.gov/NCUC/ViewFile.aspx?Id=d8fd3b91-a23b-4a82-8877-5e548ee8e825).

273 CWC St. 4 at 43:16-21.

274 *Bluefield*, 262 US 668.

average unadjusted beta of the Utility Proxy Group; and (iv) the residual standard errors of the *Value Line* regressions which gave rise to the unadjusted betas must lie within plus or minus two standard deviations of the average residual standard error of the Utility Proxy Group.[275] The basis of Mr. D'Ascendis' selection is shown in Schedule DWD-6.

As shown on page 1 of Schedule DWD-7, the results of the DCF, RPM, and CAPM applied to the Non-Price Regulated Proxy Group comparable in total risk to the Utility Proxy Group are 9.26%, 12.69%, and 11.89%, respectively.[276] Mr. D'Ascendis' indicated ROE based on the analysis of the non-utility proxy group was 11.59%, which is an average of the mean and median of these models.[277]

Both I&E and OCA disagree with the Company's use of a Non-Utility Proxy Group as part of the Company's rate of return analysis.[278] These claims should be rejected. As Mr. D'Ascendis stated:

> The role of regulation when setting rates for a utility company is to simulate a competitive market and the returns that the regulator approves should be commensurate with the rates of return earned by firms with comparable risk. That being said, the ranges of the indicated ROEs produced by the common equity models applied to the Utility Proxy Group and Non-Price Regulated Proxy Group in my ROE analysis do mostly overlap…[279]

In other words, it is appropriate to consider that the regulator is approving returns that are commensurate with non-regulated firms with comparable risk. As further stated by the Public Service Commission of South Carolina:

> The Commission finds Mr. D'Ascendis' arguments persuasive. He provided more indicia of market returns, by using more analytical methods and proxy group calculations. Mr. D'Ascendis' use of

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275 CWC St. 4 at 43:22 – 44:6.
276 CWC St. 4 at 45:18-20.
277 CWC St. 4 at 45:20 – 46:2.
278 OCA St. 2 at 56:14 – 57:12; *see also* I&E St. 1 at 55:1-4.
279 CWC St-4-R at 45:5-10.

> analysts' estimates for his DCF analysis is supported by consensus, as is his use of the arithmetic mean. The Commission also finds that Mr. D'Ascendis' non-price regulated proxy group more accurately reflects the total risk faced [by] price regulated utilities and CWS. Furthermore, there is no dispute that CWS is significantly smaller than its proxy group counterparts, and, therefore, it may present a higher risk. An appropriate ROE for CWS is 10.45% to 10.95%. The Company used an ROE of 10.5% in computing its Application, a return on the low end of Mr. D'Ascendis' range, and the Commission finds that ROE is supported by the evidence.[280]

Thus, these arguments should be denied. Providing a greater indicium of evidence, market returns, and analytical methods is beneficial for the Commission's consideration, including comparing the market returns of a Utility Proxy Group to a Non-Utility Proxy Group. The results of market models applied to the Non-Price Regulated Proxy Groups should be accepted by the Commission.

f. *ROE Adjustments*

After deriving a range of ROEs attributable to the Utility Proxy Group between 10.09% and 11.09%, Mr. D'Ascendis made two adjustments to the indicated range of ROE's to reflect (1) a size adjustment and (2) a financial risk adjustment.

i. Size Adjustment

With respect to the size adjustment, Mr. D'Ascendis included an upward adjustment of 1.00% to the indicated range of common equity cost rates to reflect the increased business risk due to the small size of the Company relative to the Utility Proxy Group.[281] The Commission has previously recognized that size should be considered when determining an authorized ROE:

> Based upon the evidence of record, we agree with the recommendation of the ALJs that the Company be awarded a DCF cost of common equity which is one standard deviation above the average of the mean and median proxy group ROE from the Company's DCF analysis. In so doing, we recognize that the Company's size is a factor in assessing its ability to attract capital. Accordingly, we shall reject Citizens' Exception No. 10, I&E's

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280 *Carolina Water Service*, at 14.

281 CWC St. 4 at 50:28 – 51:2.

> Exception No. 4, and the OCA's Exception No. 7, consistent with the following discussion.
>
> We are not convinced by the arguments of I&E and the OCA that the ALJs erred in awarding a size adjustment to Citizens'. Rather, we are of the same opinion as the ALJs that the Company's witness Mr. D'Ascendis offered persuasive record evidence that there is a general inverse relationship between size and risk, such that smaller companies like Citizens' face greater risk.[282]

As the Commission stated, one way to reflect that business risk is to award the utility a cost of common equity which is one standard deviation above the average of the mean and median proxy group ROE from the Company's DCF analysis.[283] As Mr. D'Ascendis testified, the standard deviation of the median and mean results of his DCF analysis is 2.47%.[284] Mr. D'Ascendis also compared the Company's size to that of the Utility Proxy Group finding that the Proxy Group had a market capitalization 97.1x greater than the Company.[285] Mr. D'Ascendis determined that the size premium spread between the two warranted an upward adjustment of 3.91%.[286] Nevertheless, Witness D'Ascendis adopted a conservative upward adjustment of 1.00% to reflect the relative business risk of the Company.[287]

Both OCA and I&E criticize the use of a size adjustment.[288] The OCA argues that the size effect is a dead phenomenon citing to several academic materials.[289] I&E witness Keller also argues that Mr. D'Ascendis' cited literature does not specifically apply to utilities, that academic literature does not support the size effect, and that the Commission did not actually determine that

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282 *Pa. Pub. Util. Comm'n v. Citizens' Electric Company of Lewisburg, PA*, Docket No. R-2019-3008212, 2020 WL 2487407, at *63 (Opinion and Order entered Apr. 27, 2020) (*Citizens 2019*).
283 *Id*.
284 CWC St. 4 at 50:24-26.
285 CWC St. 4 at 49:10-12.
286 CWC St. 4 at 50:1-5.
287 CWC St. 4 at 50:27 – 51:2.
288 OCA St. 2 at 52:5 – 55:4; *see also* I&E St. 1 at 58:10 – 59:20.
289 OCA St. 2 at 53:4 – 55:10.

there was enough evidence to conclude whether size is specifically a risk for utilities.[290] These arguments should be dismissed.

This adjustment appropriately recognizes that Columbia Water's smaller size relative to the Utility Proxy Group indicates greater relative business risk for the Company because, all else being equal, size has a material bearing on risk.[291] As Mr. D'Ascendis testified:

> As discussed in my Direct Testimony, relative company size is a significant element of business risk for which investors expect to be compensated through greater returns. Smaller companies are simply less able to cope with significant events which affect sales, revenues and earnings. For example, smaller companies face more exposure to business cycles and economic conditions, both nationally and locally. Additionally, the loss of revenues from a few large customers would have a far greater effect on a small company than on a larger company with a more diverse customer base. Finally, smaller companies are generally less diverse in their operations and have less financial flexibility. Consistent with the financial principle of risk and return in my Direct Testimony, such increased risk due to small size must be taken into account in the allowed rate of return on common equity.[292]

In addition, Mr. D'Ascendis cites to several studies confirming the existence of the size effect. In his Direct Testimony, Mr. D'Ascendis cites to "Size as a Predictor of Equity Premiums," which discusses the nature of the small-size phenomenon in detail as follows:

> The size effect is based on the empirical observation that companies of smaller size are associated with greater risk and, therefore, have greater cost of capital [sic]. The "size" of a company is one of the most important risk elements to consider when developing cost of equity capital estimates for use in valuing a business simply because size has been shown to be a *predictor* of equity returns. In other words, there is a significant (negative) relationship between size and historical equity returns - as size decreases, returns tend to increase, and vice versa.[293]

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290 I&E St. 1 at 58:4 – 59:19.
291 CWC St. 4 at 47:5-7.
292 CWC St. 4-R at 34:4-15.
293 CWC St. 4 at 47:20 – 48:2 (footnote omitted) (emphasis in original).

Mr. D'Ascendis additionally cites to the "The Capital Asset Pricing Model: Theory and Evidence," in which Fama and French observe that:

> …the higher average returns on small stocks and high book-to-market stocks reflect unidentified state variables that produce undiversifiable risks (covariances) in returns not captured in the market return and are priced separately from market betas.[294]

Finally, Mr. D'Ascendis references noted scholar Eugene Brigham's research identifying the "small-firm effect" as a hindrance to small firm operations:

> A number of researchers have observed that portfolios of small-firms (sic) have earned consistently higher average returns than those of large-firm stocks; this is called the "small-firm effect." On the surface, it would seem to be advantageous to the small firms to provide average returns in a stock market that are higher than those of larger firms. In reality, it is bad news for the small firm; **what the small-firm effect means is that the capital market demands higher returns on stocks of small firms than on otherwise similar stocks of the large firms.**[295]

Accordingly, Mr. D'Ascendis' review of financial literature establishes the inverse relationship between company size and risk.

Moreover, I&E places exclusive weight on a single study by Dr. Annie Wong concluding that there is "no need to adjust for the firm size in utility rate regulation."[296] In response, Mr. D'Ascendis notes that Dr. Wong's study erroneously equates "a change in size to beta, which accounts for only a small percentage of diversifiable company-specific risk."[297] By analyzing only the risk captured in beta, Dr. Wong understates the total impact of size risk. In addition to critiquing Dr. Wong's methods, Mr. D'Ascendis cited to a more recent article by Thomas M. Zepp which also criticized Dr. Wong's study and observed "[t]wo other studies discussed here support a

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294 CWC St. 4 at 48:6-9.
295 CWC St. 4 at 48:16-24 (emphasis added).
296 I&E St. 1 at 58:21.
297 CWC St. 4-R at 35:11-13.

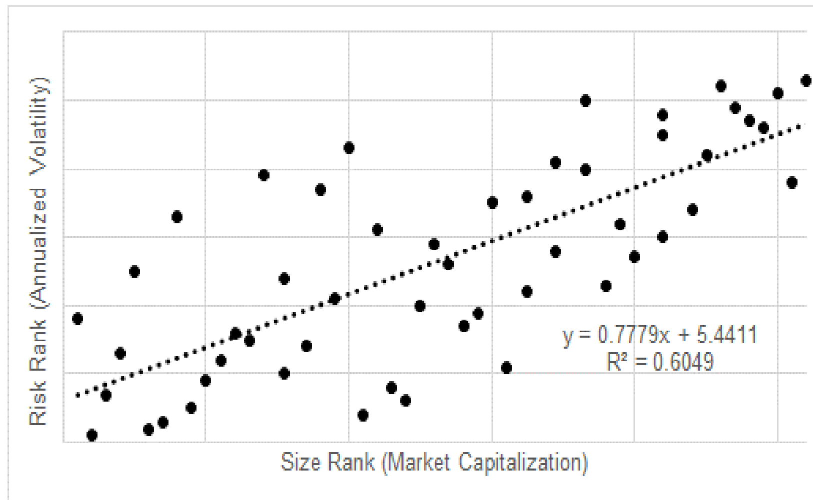
conclusion that smaller water utility stocks are more risky than larger ones. To the extent that water utilities are representative of all utilities, there is support for smaller utilities being more risky than larger ones."[298] While I&E attempts to invalidate Dr. Zepp's observations by critiquing his methods, the indisputable fact remains that Dr. Zepp presented an authoritative analysis disputing Dr. Wong's findings and was not rebutted in the financial literature by Dr. Wong or her advocates. Particularly in light of Mr. D'Ascendis' pointed critique of Dr. Wong's study and the abundance of financial literature supporting the size effect, Dr. Wong's findings that the size effect impacts every industry except utilities should be met with skepticism.

To definitively test Dr. Wong's finding, Mr. D'Ascendis conducted a study as to whether the size effect is applicable to utilities. Mr. D'Ascendis' methodology and the results are presented below:

> My study included the universe of electric, gas, and water companies included in Value Line Standard Edition. From each of the utilities' Value LineRatings & Reports, I calculated the 10-year coefficient of variation ("CoV") of net profit (a measure of risk) and current market capitalization (a measure of size) for each company. After ranking the companies by size (largest to smallest) and risk (least risky to most risky), I made a scatter plot of the data, as shown on Chart 3, below:[299]

[298] CWC St. 4-R at 35:20 – 36:2.
[299] CWC St. 4-R at 36:4-13.

Chart 2: Relationship Between Size and Risk for the *Value Line* Universe of Utility Companies



In assessing the results, Mr. D'Ascendis concluded that there is a statistically significant link between size and risk for utilities.

Lastly, contrary to I&E's claims, it is uncontroverted that the Commission has directly acknowledged that size has a bearing on the risk of a utility stating: "we are of the same opinion as the ALJs that the Company's witness Mr. D'Ascendis offered persuasive record evidence that there is a general inverse relationship between size and risk, such that smaller companies like the Company face greater risk."[300] Thus, in the instant proceeding where the Utility Proxy Group's market capitalization is 97.1x greater than the Company, a size adjustment of 1.00% to the range of indicated ROEs is appropriate, if not conservative.[301]

ii. Financial Risk Adjustment

Mr. D'Ascendis also makes a downward adjustment of eleven basis points to the indicated range of ROEs to reflect the Company's financial risk relative to the proxy group.[302] To determine his downward adjustment to account for financial risk, Mr. D'Ascendis applies two models: the

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300 *Citizens 2019*, 2020 WL 2487407, at *63.
301 CWC St. 4 at 49:10-12.
302 CWC St. 4 at 54:7-11.

Modigliani-Miller Method ("M&M Method") and the Hamada Equation.[303] These methods underscore the notion that the level of financial risk affects the cost of capital, including the cost of common equity.[304] The M&M Method indicated a downward adjustment of -0.13% based on the differences in financial risk between Columbia Water and the Utility Proxy Group.[305] The Hamada Equation, which involves un-levering the Utility Proxy Group's betas based on the Utility Proxy Group's least financially risky actual capital structure, then re-levering the beta using Columbia Water's recommended capital structure, indicated a downward adjustment of -0.10% for the Utility Proxy Group.[306] Accordingly, Mr. D'Ascendis reflected a downward adjustment of -0.11% to the indicated range of ROEs.

iii. Conclusion as to Adjustments

After applying the 1.00% size adjustment and the negative 0.11% financial risk adjustment to the indicated range of ROEs between 10.09% and 11.09%, based on the Utility Proxy Group results, Mr. D'Ascendis determined that a range of common equity cost rates between 10.98% and 11.98% is applicable to Columbia Water.[307]

g. *Conclusion as to the Company's Position*

Mr. D'Ascendis has appropriately determined that a ROE for Columbia Water of 11.25% is appropriate. Mr. D'Ascendis' reasonable judgment is based on his ROE range as determined by using more analytical methods and proxy group calculations allowing him to obtain a well-scrutinized and proper ROE for the Company. For the reasons stated above, it should be adopted by the Commission.

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303 CWC St. 4 at 52:14-16.
304 CWC St. 4 at 52:10-12.
305 CWC St. 4 at 53:9-11.
306 CWC St. 4 at 53:13 – 54:6.
307 CWC St. 4 at 55:4-8.

2. I&E's ROE Analysis Contains Several Flaws

In contrast to Mr. D'Ascendis' detailed analysis addressing the necessity to evaluate the DCF results in conjunction with other models for purposes of this proceeding, I&E maintains an unreasonably narrow focus by relying primarily on the DCF model. Additionally, I&E's testimony critiques the CAPM and RPM analyses while entirely ignoring similar shortcomings associated with the DCF analysis. Based on their flawed analysis, I&E recommends an ROE of 7.84%.[308] The Company will address the issues with I&E's methodology in detail below.

a. *I&E Fails to Recognize the Importance of Other Models*

I&E applies a DCF model and uses the CAPM as a "comparison" to the DCF results but not as a check.[309] As discussed by Mr. D'Ascendis, unfortunately, the results of I&E's DCF and CAPM are 325 basis points apart, which renders the "comparison" useless. Additionally, I&E entirely omits consideration of additional models despite Mr. D'Ascendis providing compelling testimony establishing that market conditions favor reference to other models to correct for inaccuracies embedded in the DCF model.[310]

Moreover, in a Commission order concerning Aqua Pennsylvania, Inc., ("Aqua") the Commission stated the following about the CAPM's ability to reflect changing market conditions better than the DCF:

> We are persuaded by the arguments of Aqua that the ALJ erred by concluding I&E used its DCF and CAPM results to determine Aqua's ROE. In this regard, we note that although I&E did use its CAPM as a comparison to its DCF result, it made no CAPM based adjustment to its final ROE recommendation. I&E M.B. at 47. As Aqua points out, infra, the U.S. economy is currently in a period of high inflation. To help control rising inflation, the Federal Open Market Committee has signaled that it is ending its policies designed to maintain low interest rates. Aqua Exc. at 9. *Because the DCF*

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[308] I&E St. 1 at 40:4-5.

[309] I&E St. 1 at 32:21-22.

[310] CWC St. 4 at 9:13-17.

model does not directly account for interest rates, consequently, it is slow to respond to interest rate changes. However, I&E's CAPM model uses forecasted yields on ten-year Treasury bonds, and accordingly, its methodology captures forward looking changes in interest rates.[311]

Clearly, the Commission recognizes the importance of the CAPM and its ability to account for market changes such as those occurring currently.[312]

Thus, I&E's failure to rely on other models in formulating its ROE analysis is deficient for these reasons, and others stated elsewhere in this Main Brief, and should be dismissed by the Commission.

b. *I&E's CAPM Analysis is Flawed*

I&E first identifies the CAPM analysis as less responsive to changes in the industry.[313] However, I&E's criticism of the CAPM analysis should be given no weight. The Commission recently recognized the importance of the CAPM to better reflect market changes.[314]

Moreover, I&E witness Keller's CAPM analysis is problematic as he relies on the projected 10-Year Treasury bond yield.[315] As Mr. D'Ascendis testified:

> [T]he tenor of the risk-free rate used in the CAPM should match the life of the underlying investment. As noted by Morningstar:
>
> > The traditional thinking regarding the time horizon of the chosen Treasury security is that it should match the time horizon of whatever is being valued. When valuing a business that is being treated as a going concern, the appropriate Treasury yield should be that of a long-term Treasury bond. Note that the horizon is a function of the investment, not the investor. If an investor plans to hold stock in a company for only five years, the yield on a five-year Treasury note would not be appropriate since the

311 *Aqua 2021,* 2022 WL 1732770, at*89 (emphasis added).
312 CWC St. 4 at 10:15 – 11:6.
313 *See* I&E St. 1 at 34:9 – 35:20.
314 CWC St. 4-R at 10:14 – 11:6 (citing *Aqua 2021*).
315 CWC St. 4-R at 27:11-14.

company will continue to exist beyond those five years.

Morin also confirms this when he states:

> [b]ecause common stock is a long-term investment and because the cash flows to investors in the form of dividends last indefinitely, the yield on very long-term government bonds, namely, the yield on 30-year Treasury bonds, is the best measure of the risk-free rate for use in the CAPM… The expected common stock return is based on long-term cash flows, regardless of an individual's holding time period.[316]

Thus, as a practical matter, equity securities represent a perpetual claim on cash flows. 30-Year Treasury Bonds are the longest-maturity securities available to match that perpetual claim. Mr. Keller's use of a medium-term Treasury bond does not match the life of the assets being valued. The use of a 30-Year Treasury bond is the more appropriate risk-free rate.[317]

In addition, Mr. Keller's CAPM analysis fails to reflect the longest projection available for determining the risk-free rate by not incorporating *Blue Chip* forecasts for the period 2030-2034 when determining his risk-free rate.[318] Not only is this inconsistent with the application of the DCF model where the projected growth is constantly in perpetuity, creating a mismatch, but it is also inconsistent with the Efficient Market Hypothesis ("EMH"), which generally stands for the proposition that all information (including long-term forecasts of interest rates) is available to the investor.[319] As Company witness D'Ascendis testifies:

> According to Fama, a market in which prices always "fully reflect" available information is called "efficient." There are three forms of the EMH, namely:

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316 CWC St. 4-R at 28:7-26 (citing Morningstar, Inc., 2013 Ibbotson Stocks, Bonds, Bills and Inflation Valuation Yearbook, at 44; Morin, at 169) (footnote omitted).
317 CWC St. 4-R at 29:1-5.
318 CWC St. 4-R at 29:13-19.
319 CWC St. 4-R at 29:13-19.

> (1) The "weak" form asserts that all past market prices and data are fully reflected in securities prices. In other words, technical analysis cannot enable an investor to "outperform the market."
>
> (2) The "semi-strong" form asserts that all publicly available information is fully reflected in securities prices. In other words, fundamental analysis cannot enable an investor to "outperform the market."
>
> (3) The "strong" form asserts that all information, both public and private, is fully reflected in securities prices. In other words, even insider information cannot enable an investor to "outperform the market."
>
> The "semi-strong" form is generally considered the most realistic because the illegal use of insider information can enable an investor to "beat the market" and earn excessive returns, thereby disproving the "strong" form. The semi-strong form of the EMH assumes that all information (including long-term forecasts of interest rates) are available to the investor, which means the 2030-2034 forecasted interest rate would be considered by investors when making investment decisions and, therefore, should be included in Mr. Keller's CAPM analysis. [320]

Additionally, Mr. Keller's CAPM analysis is deficient for failing to apply the ECAPM to his analysis, which is supported by the Company in more detail in Section VII.D.1.c, *supra*. For all these reasons, the Commission should find I&E's CAPM analysis is not persuasive.

c. *I&E's DCF Analysis Is Not Supported By the Quarterly Earnings Report*

Although Mr. D'Ascendis provides ample support for his reliance on multiple methods, the Commission should also consider that I&E witness Keller's DCF-only result of 7.84% is substantially below the Commission's most recent quarterly earnings report. The Commission's most recent quarterly earnings report suggests an ROE of 9.65% for the water company barometer

[320] CWC St. 4-R at 30:2-19 (footnote omitted).

group.[321] While, the DSIC results are not directly applicable to Columbia Water as it omits consideration of the specific risks faced by the Company, it further demonstrates the unreasonableness of I&E's position.

3. The OCA's ROE Analysis Contains Several Flaws

OCA witness Garrett uses the DCF model and CAPM to derive a range from 8.20% (CAPM) to 9.40% (DCF) and recommends a 9.40% ROE if his hypothetical capital structure is approved, and the midpoint of his range, *i.e.*, 8.80%, if the Company's actual capital structure is approved.[322] There are several reasons why Mr. Garrett's analysis is unreliable.

a. *OCA's CAPM Analysis is Flawed*

OCA witness Garrett's CAPM estimate relies on a risk-free rate of 3.90% and a MRP of 5.50%, and betas as reported by *Value Line*.[323] Those assumptions combined to produce an average CAPM estimate of 8.20%. However, Mr. Garrett's analysis is flawed because (1) he failed to utilize the ECAPM in his analysis and (2) he derives his MRP based on a variety of deficient sources and methods and concludes based on those deficient methods that 5.5%, the average of his range, is appropriate, which is well below historical evidence.[324]

The Company has already explained why the ECAPM is an appropriate model to employ in analyzing the appropriate ROE for the Company.[325]

With respect to his MRP of 5.5%, Mr. Garrett derives his MRP estimate based upon an average of the following: (1) a survey of expected returns from IESE Business School (5.7%); (2)

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[321] *Bureau of Technical Utility Services Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended March 31, 2023*, Docket No. M-2023-3041106 (issued Jul. 13, 2023), at 27.
[322] CWC St. 4-R at 47:9-12.
[323] CWC St. 4-R at 48:7-9.
[324] CWC St. 4-R at 51:3 – 54:18.
[325] *See* Section VII.D.1.c, *supra.*

an expected return reported by Kroll (Duff & Phelps) (6.0%); (3) an implied MRP from Damodaran (4.9%); and (4) an "Implied Equity Risk Premium" calculation (5.4%).[326]

With respect to the survey of expected returns by the IESE Business School and Kroll, Mr. D'Ascendis testified, these sources are of little value:

> A forecast is only as good as its inputs, and if the assumptions within those forecasts are by its nature unpredictable (e.g. productivity growth forecasts), they are of little value. In addition, the determination of the MRP as calculated by Kroll is not transparent, especially in view of the historical data presented in Kroll Stocks, Bonds, Bills, and Inflation ("SBBI") 2023 Yearbook ("SBBI – 2023"), or the composition of its supply side method, which are already well known by investors. Because of the transparency of the historical data and how to gather and use the components of the supply side model, both the historical MRP (using the long-term arithmetic mean return on large company stocks less the long-term arithmetic income returns on long-term Government bonds) and the supply side model are superior measures of the MRP, when comparing to Kroll's simplistic and opaque MRP forecast.[327]

More to the point, Mr. D'Ascendis refers to Domodaran, a source heavily cited by Mr. Garrett, which concludes that the surveys of expected returns that Mr. Garrett relies upon are not widely used:

> While survey premiums have become more accessible, very few practitioners seem to be inclined to use the numbers from these surveys in computations and there are several reasons for this reluctance:
>
> 1. Survey risk premiums are responsive to recent stock prices movements, with survey numbers generally increasing after bullish periods and decreasing after market decline. Thus, the peaks in the SIA survey premium of individual investors occurred in the bull market of 1999, and the more moderate premiums of 2003 and 2004 occurred after the market collapse in 2000 and 2001.
>
> 2. Survey premiums are sensitive not only to whom the question is directed at but how the question is asked. For

326 CWC St. 4-R at 48:16-20.
327 CWC St. 4-R at 48:22 – 49:9.

instance, individual investors seem to have higher (and more volatile) expected returns on equity than institutional investors and the survey numbers vary depending upon the framing of the question.

3. In keeping with other surveys that show differences across sub-groups, the premium seems to vary depending on who gets surveyed. Kaustia, Lehtoranta and Puttonen (2011) surveyed 1,465 Finnish investment advisors and note that not only are male advisors more likely to provide an estimate but that their estimated premiums are roughly 2% lower than those obtained from female advisors, after controlling for experience, education and other factors.

4. Studies that have looked at the efficacy of survey premiums indicate that if they have any predictive power, it is in the wrong direction. Fisher and Statman (2000) document the negative relationship between investor sentiment (individual and institutional) and stock returns. In other words, investors becoming more optimistic (and demanding a larger premium) is more likely to be a precursor to poor (rather than good) market returns.

As technology aids the process, the number and sophistication of surveys of both individual and institutional investors will also increase. However, it is also likely that these survey premiums will be more reflective of the recent past rather than good forecasts of the future.[328]

Accordingly, Mr. Garrett's own sources are inapposite to his own position.

With respect to Mr. Garrett's implied MRP, Mr. Garrett relies on a two-stage form of the DCF model that relies on the following assumptions:

Over the coming five years, the S&P 500 Index (the "Index") will appreciate at a rate equal to the compound growth rate in "Operating Earnings" from 2012 through 2022;

Cash flows associated with owning the Index will be equal to the historical average earnings, dividends, and buyback yields, applied to the projected Index value each year; and

[328] CWC St. 4-R at 50:1-38 (footnotes omitted).

> Beginning in the terminal year, the Index will appreciate, in perpetuity, at a rate equal to the 30-day average yield on 30-year Treasury securities, as of July 18, 2023.[329]

However, even the slightest changes to those assumptions have a considerable effect on Mr. Garrett's calculated market return.[330] For example, Mr. Garrett's terminal growth rate, which is perpetual, assumed the average 30-Year Treasury yield between June 5, 2023 and July 18, 2023 is the best measure of expected earnings growth beginning five years from now and extending indefinitely into the future, or at a rate of 5.21%.[331] However, historical experience tells us that over the long-term the broad economy has grown at a long-term compound average growth rate of approximately 6.09%.[332] Similarly, Kroll (Duff & Phelps) reports the long-term rate of capital appreciation on large company stocks to be 7.90%.[333] This is problematic because, as Mr. D'Ascendis testified:

> Mr. Garrett has not explained why growth beginning five years in the future, and extending in perpetuity, will be less than one-half of long-term historical growth. From a somewhat different perspective, assuming long-term inflation will be approximately 2.00% implies perpetual real growth will be approximately 1.86%. Nowhere in his testimony has Mr. Garrett explained the fundamental, systemic changes that would so dramatically reduce long-term economic growth, or why they are best measured by the long-term Treasury yield over 30 days between June 5, 2023 to July 18, 2023.[334]

Thus, Mr. Garrett's calculation is based on a series of questionable assumptions, to which a small set of very reasonable adjustments produces a market return estimate more consistent with (yet still below) the historical experience he considers relevant.

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329 CWC St. 4-R at 51:9-21.
330 CWC St. 4-R at 52:1-2.
331 CWC St. 4-R at 53:5-8, 15-17.
332 CWC St. 4-R at 53:11-13.
333 CWC St. 4-R at 53:14-15.
334 CWC St. 4-R at 53:18 – 54:5.

For these reasons, the OCA's CAPM analysis is flawed and should not be relied upon by the Commission. The Company's CAPM analysis is the more appropriate measure.

b. *OCA's Fails to Recognize the Size Risk of the Company*

The OCA has failed to account for the business risk inherent in the Company due to its small size relative to the Utility Proxy Group.[335] As discussed above, Company witness D'Ascendis has demonstrated with citations to academic sources and previous Commission decisions that there is an inverse relationship between size and business risk.[336] The OCA's failure to recognize that relationship renders its analysis deficient.

E. CONCLUSION

The weight of evidence on the appropriate rate of return in this proceeding supports a capital structure of 36.66% Long-Term Debt and 63.34% Common Equity at cost rates of 3.15% and 11.25%, respectively, as recommended by Company witness D'Ascendis. This results in an overall rate of return of 8.28% for the Company.[337] The failure to grant the Company an adequate overall return will make it more difficult to meet its capital requirements and access capital markets at a reasonable cost and provide reliable and high-quality service for its customers.

VIII. MISCELLANEOUS ISSUES

A. BLACKBOX CUSTOMER DISCOUNT ADJUSTMENT

As part of this proceeding, the Company has voluntarily decided to reduce its requested rate increase to $999,900.[338] Thus, while the Company has fully proven that it is entitled to an increase of $1,294,828 as set forth in Appendix A, the Company is requesting an annual increase of $999,900.

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[335] CWC St. 4-R at 56:2-6.
[336] *See* Section VII.D.1.f.i, *supra*.
[337] CWC St. 4 at 55:4-8.
[338] Exhibit GDS No. 1 at 1-8 (Revised) – 1-9 (Revised).

In its filing, the Company implemented a BlackBox Customer Discount Adjustment to reduce the Company's increase to $999,900. Specifically, as presented in Exhibit GDS No. 1-R, the BlackBox Customer Discount Adjustment reduces the Company's claimed level of O&M expense for the FTY such that a $999,900 increase results in a net operating income sufficient to allow the Company to earn a fair rate of return of 8.28% for ratemaking purposes.

Company witness Shambaugh explained how the BlackBox Customer Discount Adjustment impacts the Company:

> By capping its requested increase at $999,900 the Company is actually generating a 6.86% rate of return. However, the Company has utilized the Blackbox Customer Discount Adjustment to offset a portion of its operations and maintenance expense so that the $999,900 increase reflects a pro forma net income of $1,552,509 with an overall rate of return of 8.28%. Please note that the Company is not actually requesting a 6.86% rate of return but is providing this information to illustrate one way the BlackBox Customer Discount Adjustment could be considered to impact the Company.

Thus, the BlackBox Customer Discount Adjustment benefits customers by reducing the overall increase requested in this case even though the Company could have justified a higher revenue requirement in this proceeding.

No party challenged or objected to the Company's implementation of the BlackBox Customer Discount Adjustment. However, I&E witness Keller stated that "when a company requests an increase for an amount lower than what it indicates it can justify in a base rate proceeding, I&E always starts with the amount that company indicates it can justify (as opposed to the mitigated increase amount) and makes its adjustments to that higher amount."[339]

For the purposes of the Company's Main Brief, and as set forth in Appendix A, the Company has reflected its justified increase of $1,294,828 and agrees that any adjustments or

[339] I&E St. 1 at 4:5-8.

modification to the Company's claims in this proceeding should start at the justified amount. The Company, however, submits that if the Commission's final revenue requirement determination is more than $999,900 the Commission should cap the annual rate increase at $999,900.

B. QUALITY OF SERVICE

In his Direct Testimony, Company witness David Lewis, President and General Manager of the Company, discussed the Company's current quality of service and performance. As Mr. Lewis discussed, the Company "meets or exceeds all Federal and State water quality standards and requirements."[340] Moreover, the Company's "water pressure throughout its system meets all standards."[341] Also, there have been no formal or informal service complaints since January 2018, and only one informal complaint in 2020 and one in 2021, both of which were evaluated by the Commission's Bureau of Consumer Services and were not found to be justified complaints.[342]

Additionally, Company witness Lewis testified at length about the Company's efforts to serve the community, which included working to extend service to nearby communities where there was a strong need for public water,[343] acquiring the former-EDTMA,[344] reducing its power consumption to benefit ratepayers and the environment,[345] focusing on water conservation by, *inter alia*, installing water meters to monitor for water leaks and record hourly usage, deploying leak detection pods, and installing a riparian buffer zone on Company property to improve the water quality of a nearby creek,[346] and establishing an e-billing program for its customers.[347] The Company has also completed numerous projects on its facilities and plant to undertake several

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340 CWC St. 1 at 8:11-12.
341 CWC St. 1 at 8:20.
342 CWC St. 1 at 9:12-15.
343 CWC St. 1 at 10:10-18.
344 CWC St. 1 at 10:19 – 11:3.
345 CWC St. 1 at 11:4-11.
346 CWC St. 1 at 11:12-22.
347 CWC St. 1 at 12:1-15.

additional projects during the FTY to both address aging infrastructure and reliability of its facilities.[348] For these reasons, the Company has demonstrated exemplary performance over the past several years in improving its service, responding to its customer's needs and providing outstanding, quality service to its customers at just and reasonable rates.

The OCA, however, has made several recommendations regarding the Company's managerial discretion in operating its systems and practices in this proceeding. The OCA, by way of its expert witness, Terry Fought, has recommended that the Company: (1) (a) exercise critical valves on a one- to three-year schedule; (b) exercise non-critical valves on a seven to ten-year schedule and (c) maintain useful records of when each valve was exercised; (2) provide more detailed information when compiling a complaint log; and (3) contact a customer regarding an informal complaint and provide certain information.[349] The Company will address each recommendation below.

1. Isolation Valves

In the Company's last base rate proceeding, the Company agreed to do annual reporting regarding the Company's present isolation valve exercising[350] which includes critical valve exercising per the Commission's 2014 Management Audit at Docket No. D-2014-2405415.[351] The Company has complied with these requirements as Mr. Lewis discussed:

> Columbia took prompt steps to comply and has routinely exercised system isolation valves, including critical valves, exercising 136 valves (135 critical valves) in 2018, 342 valves (126 critical valves) in 2019, 456 valves (131 critical valves) in 2020, 356 valves (135 critical valves) in 2021, and 497 valves (150 critical valves) in 2022.

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348 CWC St. 1 at 14:19 – 18:8.

349 OCA St. 4 at 6:161-19, 8:3-13.

350 "Isolation valves are installed on water mains so that the water can be shut off in sections of the distribution system in case of a water main break or for main repairs and replacements. Isolation valves are also used to isolate unsafe water and to separate different pressure zones." OCA St. 4 at 2:18 – 3:2.

351 CWC St. 1 at 9:1-3; *see also Pa. Pub. Util. Comm'n v. Columbia Water Company*, Docket No. R-2017-2598203 (Opinion and Order entered Mar. 1, 2018), at 13, available at https://www.puc.pa.gov/pcdocs/1555997.docx.

See Annual Reports filed at Docket No. R-2017-2598203. (https://www.puc.pa.gov/pcdocs/1769777.pdf)[352]

Consistent with the Commission's order in the last rate case proceeding, the Company has filed its annual reports at Docket No. R-2017-2598203. The Company also confirmed in discovery that it has exercised all critical valves during the five-year period and provided its ArcGIS data in the form of a Google Earth file that is accessible to the OCA, which includes the location and number of all non-critical valves that were exercised since the last base rate proceeding.[353]

In his direct testimony, OCA witness Fought testified that an isolation valve should be exercised to prevent the valves from seizing up and getting stuck from corrosion or other deposits adjacent to the valve.[354] Mr. Fought also testified that an "isolation valve that cannot be fully closed will increase the water loss during a water main break and increase the number of customers affected while the utility finds working valves to isolate a main break." Additionally, Mr. Fought attempted to identify the number of non-critical isolation valves that were not exercised over the past five years by the Company and complained that the Company's Google Earth file was not a convenient way to keep track of and count the number of non-critical valves exercised. Thus, Mr. Fought could not calculate the number of non-critical valves that were not exercised over the past five years.[355] Nevertheless, the Company provided OCA witness Fought with the number of non-critical isolation valves that were not exercised over the past five years, which is 1,425.[356]

Based on this, Mr. Fought recommended that the Company should continue to: (1) exercise critical valves on a one- to three-year schedule; (2) exercise non-critical valves on a seven- to ten-year schedule and (3) maintain useful records of when each valve was exercised.[357] He also

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352 CWC St. 1 at 9:3-8.
353 OCA St. 4 at 5:5-17; *see also* CWC St.1-R at 9:1-3.
354 OCA St. 4 at 3:14-18.
355 OCA St. 4 at 5:12-14.
356 OCA St. 4SR at 6:7-8.
357 OCA St. 4SR at 6:9-13.

recommended that all those unexercised non-critical valves should be exercised within the next five years on a parallel schedule until all the valves have been exercised and are operable.[358]

The Company has several concerns with OCA witness Fought's recommendation. First, contrary to Mr. Fought's claims, it is "**required practice** to not fully close a valve during a main repair" as "[v]alves are left partially open during a main break to maintain a positive pressure," thus, preventing contaminants from getting into the water.[359] Both of Mr. Fought's recommendations are wrong and it is clear the Company, which knows its system better than Mr. Fought, has used managerial discretion and there is no basis from Mr. Fought to establish any abuse of discretion. Additionally, the Company has serious concerns with the frequency of exercising proposed by Mr. Fought. As Mr. Lewis testified:

> Regarding the cost of exercising valves, exercising one valve requires employees, traffic control devices, road closing permits, etc. Columbia Water's system has 3,481 valves. Two to four employees or contractors are needed just to flag and control the traffic, depending on road configurations. Another two employees or contractors are required to open the valve box and exercise the valve. A twelve-inch valve requires 38 turns to open and 38 to close. A large tee-handled wrench is used to operate the valve requiring two people to turn the wrench. Once the valve is operated it must be inspected to assure the valve packing is not leaking. To repair any packing found to be leaking, the valve needs to be excavated. To exercise every valve in a five-year period would mean dedicating three full time employees, at a minimum (two to flag traffic and one at minimum to turn the valve), to turn 3,481 valves. (More employees are needed for traffic control in four way intersections.) That equates to 696 valves a year or 58 valves a month. Thus, to exercise all of the isolation valves in a 5 year period, the Company would need to, at a minimum, hire three full time employees. In addition, the Company would need to purchase two vehicles and traffic control equipment for each vehicle. The Company estimates that the annual cost to exercise all its valves on the five-year

358 OCA St. 4SR at 3:19 – 3:1.
359 CWC St. 1-R at 4:10-19 (emphasis in original); *see also* Exhibit DTL-2R.

> schedule Mr. Fought proposes, would be $500,000 per year and plus $100,000 in capital for vehicles, tools and traffic control devices.[360]

In other words, increasing its valve exercising frequency to the levels recommended by the OCA would be costly to the Company. The OCA, however, has made no expense adjustment to recognize these increased costs. In other words, it would amount to an unfunded mandate.

Moreover, the Company cautions, again in its managerial discretion, that Mr. Fought's aggressive isolation valve exercise schedule for valves designed to be open would result in more detriments than marginal benefits, if any, as Mr. Lewis discussed:

> Valves are designed and manufactured to stay open for decades and still be able to close when needed; by design, frequent valve exercising is not necessary. The valves in Columbia Water's system are gate valves, robust pieces of equipment specifically designed to remain open for long periods of time. 99.9% of all gate valves remain open and are designed to do so. The normal operating condition of a gate valve is the open position. Manufacturers know that gate valves will remain open for decades at a time and thus gate valves are designed with resilient seats. Of all the valves that the Company has exercised, it is very rare to find a gate valve that does not operate at all. In fact, we have found less than five valves with such issue in the past 10 years of exercising thousands of valves.[361]

Furthermore, contrary to Mr. Fought's claims, there are some valves in the Company's system that should not be exercised for it could have a detrimental effect on the Company's system, such as in-line valves which are to remain closed to keep the Company's pressure zones separate.[362] In other words, there will always be a number of valves that show up as "not exercised" since they cannot, indeed should not, be exercised by the Company, for the reasons discussed above. The Company's superior knowledge of its system and its managerial discretion should not be disturbed here.

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[360] CWC St. 1-R at 5:3-20.

[361] CWC St. 1-R at 6:11-19.

[362] CWC St. 1-R at 6:20 – 7:19.

Lastly, the Company disagrees with Mr. Fought's belief that its records for maintaining the locational data and the dates of exercising its valves are inconvenient. Contrary to OCA witness Fought's claims, this ArcGIS data contains detailed information on each one of its valves, such as the specific date it was inspected and their location.[363] The information was provided to the OCA in a Google Earth file following the standard protocol for providing ArcGIS information to an entity that does not have access to ArcGIS. The Company also provided instructions to the OCA regarding how to count the number of non-critical isolation valves that were not exercised over the past five years in the Google Earth file.[364] Thus, Mr. Fought's 'belief' is no substitute for actual fact and the OCA's criticism of our industry-standard records of isolation valves has no merit.

The Company also notes that the OCA's isolation valve recommendation is unclear. If Mr. Fought is recommending that the Company exercise over the next five years the valves it was already intending to exercise plus the additional 1,425 non-critical valves that it has not exercised in the past 5 years, the cost concerns remain, as this will be a significant unfunded expense for the coming years.[365]

However, if the OCA's recommendation is that, setting aside the critical isolation valves, the Company must exercise solely the 1,425 non-critical valves that were not exercised in the past 5 years over the next five years and then begin the cycle again, the Company is on par to substantially comply with that recommendation.[366] More specifically, the Company has been complying with its isolation valve exercising requirements from the Commission's Order in the 2017 proceeding, starting that process approximately 6 years ago and is on pace to exercise the

[363] CWC St. 1-R at 8:16 – 9:8.
[364] CWC St. 1-R at 8:16 – 9:1.
[365] CWC St. 1-RJ at 6:4-11.
[366] CWC St. 1-RJ at 6:12-15.

remaining non-critical exercise valves over the next four years.[367] However, any such requirement must not be given priority over other maintenance and operation work given its limited number of employees and system needs.[368] Thus, while the Company will endeavor to exercise the remaining 1,425 valves over the next 5 years, and can agree to report on its efforts, the Company does not agree to a strict standard of exercising all its non-critical valves on a ten-year cycle without provision of additional funding to hire additional employees and obtain additional equipment – neither of which the OCA provided for in their recommended imposition of these new and unnecessary undertakings.[369]

For these reasons, the OCA's recommendation should be rejected. The Company has demonstrated compliance with its requirements set forth in the previous settlement, has already exercised all critical isolation valves over the past five years and is on pace to exercise the remaining 1,425 non-critical isolation valves over the next five years and will report on such efforts. However, any requirement to strictly adhere to a schedule that exceeds the Company's current pace or would require strict compliance within a certain time period amounts to an unfunded mandate and should not be approved by the Commission. Moreover, the Company's existing records for its isolation valves provide the necessary data and are appropriate for the Company's purposes.

2. Complaint Log

In his direct testimony, Mr. Fought stated that the Company provided a one-page complaint log that, although it was not submitted in an Excel format, was adequate for reviewing because of the small number of recorded complaints.[370] Mr. Fought then recommend that to "comply with

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[367] *CWC 2017*, at 13; *see also* CWC St. 1-RJ at 6:12-15.
[368] CWC St. 1-RJ at 6:15-19.
[369] CWC St. 1-RJ at 6:19-23.
[370] OCA St. 4 at 7:21-22.

the requirements of 52 Pa. Code § 65.3, the Company should provide future complaint logs in an Excel format with more details about the character and final disposition of the complaints and if the complainant was satisfied."[371]

Mr. Fought's recommendation should not be adopted. Section 65.3(b) of the Commission's regulations states:

> (b) *Records of complaints.* A public utility shall preserve for a period of at least 5 years, written service complaints showing the name and address of the complainant, the date and character of the complaint and the final disposition of the complaint.[372]

The Company complied with this regulation as it supplied the information in writing to the OCA as part of discovery. The regulation does not specify a format or require that it be Excel.[373] Moreover, contrary to the claims of OCA witness Fought, the regulation does not require the Company to provide "other details" or state whether the complaint was "satisfied" - nor is it clear what Mr. Fought means by "satisfied." Mr. Fought also acknowledged that the log was adequate for reviewing.[374] For these reasons, the OCA's recommendation should be denied.

3. Customer Complaint

In his direct testimony, OCA witness Fought, with very minimal detail or notice, stated that "the OCA is aware that a customer on Blue Bell Drive, Mountville, PA is concerned about the water taste and says that high chlorine content eats away house piping" and that the Company "should contact the customer to offer to test the water and investigate the complaint" and "should report on its actions and disposition of the complaint."[375]

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[371] OCA St. 4 at 8:3-5.
[372] 52 Pa. Code § 65.3(b).
[373] CWC St. 1-R at 9:14-17.
[374] OCA St. 4 at 7:21-22.
[375] OCA St. 4 at 8:6-13.

The Company was initially concerned with the manner in which the OCA raised the issue in this proceeding as the customer did not actually complain to the Company, but raised this issue in an e-mail to the Presiding Officers that was forwarded to the parties.[376] Nevertheless, Company witness Lewis explained the Company's process for preserving the quality of its water:

> Columbia Water is required to maintain specific minimum and maximum chlorination levels in its water. The Company tests for and reports these values weekly. The data the Company provided to OCA concerning testing shows the Company has not violated those limits. The Company must abide by regulatory chlorine requirements, not adjust chlorination levels to any one specific customer's tastes thereby putting other customers in danger from water that is not properly chlorinated. Moreover, as I'm certain Mr. Fought knows, chlorine does not "corrode pipes." Much like chlorine monitoring and reporting, the Company must and does test for corrosiveness and comply with related water quality standards. The records the Company provided to OCA shows it has not violated any water quality standards related to corrosion.[377]

Moreover, the Company was ultimately able to reach out to the customer and resolved the complaint, as Company witness Lewis testified:

> Yes. Columbia Water contacted this customer on August 23, 2023 and left a message. The customer returned the Company's call and the Company arranged to meet with the customer at his home today, August 25, 2023.
>
> At the meeting, the Company discussed with the customer his concerns. The customer was specifically concerned that the smell of chlorine seemed strong in his opinion. The Company took water samples at his home and the results are all within acceptable and required levels. These sampling results were sent to the customer today. While the customer did not complain at the meeting about corrosivity allegations, the Company tested his water for these issues, which also came back within allowable and required limits. The Company also explained to the customer that based on his statement that he had a sensitive sense of smell, that was likely why he could smell the chlorine. The Company now considers this

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[376] CWC St. 1-R at 7-8; *see also* OCA St. 4SR at 8:6-19.

[377] CWC St. 1-R at 10:18 – 11:5; *see also* Exhibit DTL 4-R.

> customer's complaint resolved, and will follow up with the customer if he has any additional questions concerning the testing results.[378]

For these reasons, the Company has addressed the concerns of OCA witness Fought in a reasonable manner.

4. Conclusion as to Quality of Service

The Company has demonstrated that it has offered excellent quality of service in this proceeding. As Mr. Lewis testified, the Company provided the OCA with its customer complaint log, access to its facilities for a site visit, and confirmed that it has not had any formal consumer complaints since its last base rate proceeding.[379] Moreover, no customer testified or complained at the Public Input Hearings and the Company has reasonably addressed the concern of a consumer in this proceeding. Thus, the OCA's concerns regarding quality of service are unfounded.

IX. RATE STRUCTURE

A. COST OF SERVICE

The purpose of the COSS performed for the Company is to allocate the total water cost of service to the several customer classifications.[380] Columbia Water prepared a COSS to allocate Company costs to the various customer classifications in accordance with generally accepted cost of service principles and procedures. The COSS results indicate the relative cost responsibilities of each class of customer. This information is then used to determine how the proposed rate increase should be allocated among the customer classes.[381] As explained below, other factors may be considered in revenue allocation, such as the amount of the rate increase and gradualism.

Although class cost of service studies may appear to have great precision, the Commission has repeatedly recognized that the COSS is only a guide to designing rates and is only one factor,

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378 CWC St. 1-RJ at 7:8-20.
379 CWC St. 1-R at 11:7-18.
380 CWC St. 3 at 8:4-5.
381 CWC St. 3 at 8:5-7.

albeit an important one, to be considered in the rate setting process.[382] Cost allocation studies require a considerable amount of judgment and are described as more of an accounting/engineering art rather than science.[383]

The Commonwealth Court has, however, concluded that the class cost of service is the "polestar" of utility ratemaking.[384] Despite its heightened importance in the ratemaking process, cost allocation remains an inexact science, and there is no single "correct" cost allocation methodology. There are, however, two fundamental principles—cost causation and consistency. Cost causation means that costs should be allocated based on what causes a cost to be incurred or what causes a cost to vary. Consistency means that once a reasonable cost allocation methodology is established, it should not be changed without a compelling reason.

The Company's COSS uses the Base-Extra Capacity Method, as described in the water rates manual published by the American Water Works Association entitled "M1 Principles of Water Rates, Fees, and Charges," to allocate pro forma costs. In support of this method, Company witness Fox testified as follows:

> The Base-Extra Capacity method is built upon the allocation of both the utility's investment in plant and its proposed revenue requirements to the various functional cost categories of the utility. These functional cost categories include base, extra capacity, customer and direct fire protection. Base or average day capacity costs reflect items that vary based upon the amount of water used under average usage conditions. Extra capacity costs are usually divided between maximum day and maximum hour and include those costs that are designed to meet demands in excess of the average day and maximum day respectively. As the name implies, customer costs generally vary based upon the number of customers connected to the system and are usually divided between meter costs

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[382] See*, e.g., Pa. Pub. Util. Comm'n v. West Penn Power Co.*, Docket Nos. R-901609, et al., 1990 WL 488813, (Opinion and Order dated Dec. 14, 1990); *Pa. Pub. Util. Comm'n v. Pennsylvania Power & Light Co*., Docket Nos. R-822169, *et al*., 1983 WL 913509 (Opinion and Order dated Aug. 19, 1983) (*Pa. Power & Light*).

[383] *Application of Metropolitan Edison Co*., Docket No. R-00974008 (Order dated June 30, 1998); *Pa. Power & Light*, 1983 WL 913509.

[384] *See Lloyd v. Pa. Pub. Util. Comm'n*, 904 A.2d 1010, 1020 (Pa. Cmwlth. 2006), appeal denied, 916 A.2d 1104 (Pa. 2007) (*Lloyd*).

> and billing costs. Finally direct fire protection includes those costs that are incurred in order to not only maintain fire hydrants within the system but also to provide for a portion of the cost recovery of the system oversizing that is required to provide sufficient flows and pressures in order to adequately address a fire event. Once the costs have been allocated to the functional categories, they are assigned to the various customer classes based upon each customer class' usage characteristics and their associated responsibility for those costs. After the cost responsibility for each customer class has been determined a rate structure can then be designed that appropriately recovers those costs.[385]

Thus, the Company has utilized a generally accepted COSS method to determine the cost to serve its customers. No parties challenge the Companies use of the Base-Extra Capacity Method, but do challenge the way costs were allocated. The Company will address those issues in the following section. For these reasons, the Company has fully supported the use of the Base-Extra Capacity Method used in its COSS.

B. REVENUE ALLOCATION

1. Company's Position

The Company's proposed allocation of revenue is primarily driven by the cost to serve. The Company also considered the principle of gradualism and attempted to avoid significant rate increases to certain classifications under its proposed revenue allocation. As indicated by the Commonwealth Court in *Lloyd*, cost of service is the "polestar" of utility rates.[386] Other factors, such as gradualism, may be considered so long as they do not "trump" cost of service as the primary basis for allocating the revenue increase.[387]

Consistent with the Commonwealth Court's directive in *Lloyd*, a proposed revenue allocation will be found to be reasonable where it moves distribution rates for each class closer to

[385] CWC St. 3 at 8:14 – 9:4.
[386] 904 A.2d at 1020.
[387] *Id.*, at 1020-21.

the full cost of providing service.[388] However, the Commission has a great deal of discretion in determining the allocation of costs in a base rate proceeding. It is well settled that the establishment of a rate structure is an administrative function within the expertise of the Commission.[389] Further, the courts have continually recognized that the findings of the Commission, if supported by competent evidence, will not be disturbed.[390] In *Peoples Natural Gas Co. v. Pa. Pub. Util. Comm'n*, the Commonwealth Court held, "there is no set formula for determining proper ratios among the rates of different customer classes.[391] What is reasonable under the circumstances is… an administrative question for the commission to decide."[392]

Under the Company's current tariff, the Company's Columbia and Marietta Rate Districts rely upon a single general metered service ("GMS") rate schedule that is applicable to all residential, commercial, industrial and public authority customers. In other words, the Company's customer and consumption charges do not vary by customer class. Thus, the Company's allocation of its revenue requirement will inform the eventual rate design of its fixed customer charges and consumption charges to ensure that the Customer classes receive the appropriate increases.

To develop his allocation, Company witness Fox first used the COSS to first allocate costs to the Company's proposed fire protection rates. As explained by Mr. Fox:

> Since costs associated with public fire hydrants should not be charged to private fire services, I first removed the costs directly related to hydrants from the total fire service allocation. Based on the relative potential demands presented on Exhibit DF-2 (Revised), I split the remaining fire service demand costs (net of hydrant expenses) to public and private fire service. In the case of the public fire service charges, I added the allocated public fire service costs to the direct hydrant expenses and divided by the total number of

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388 *Pa. Pub. Util. Comm'n, et al. v. PPL Electric Utilities Corp.*, Docket Nos. R-00049255, et al., 2007 *Pa. Pub. Util Comm'n* LEXIS 55 (Order on Remand entered July 25, 2007).

389 *Pittsburgh v. Pa. Pub. Util. Comm'n*, 78 A.2d 35 (Pa. Super. 1951).

390 *United States Steel Corp. v. Pa. Pub. Util. Comm'n*, 390 A.2d 865 (Pa. Cmwlth. 1978); *Philadelphia Suburban Transportation Co. v. Pa. Pub. Util. Comm'n*, 281 A.2d 179, 185 (Pa. Cmwlth.1971).

391 409 A.2d 446, 456 (Pa. Cmwlth. 1979).

392 *Id*. (internal citation omitted).

> public fire hydrants, net of the 104 "grandfathered" hydrants, in CWC's system to arrive at an annual per hydrant charge.
> For public fire service charges, I also allocated only 25% of these overall costs to public fire protection customers to comply with Section 1328 of the Public Utility Code. The remaining 75% was redistributed to the fixed charges, utilizing the readiness-to-serve component.
>
> To derive the private fire service charges, I simply determined the number of private fire service equivalents using the fire demand factors described earlier in my testimony. This cost per equivalent was then applied to the equivalency factors for each private fire service size to derive the fire service charge for each size private fire service.[393]

Exhibit DF – 4RJ presents the Company's updated derivation of fire protection charges and Exhibit DF-7RJ presents a comparison of the Company's COS-based, and proposed fire protection charges.

Company witness Fox then allocated revenue requirements to the Company's customer charges. The costs were split into two components (a) those costs related to meters and service pipes (vary by the size of the meter and service) and (b) those costs related to billing, meter reading, and collections (vary by the number of billings).[394] To develop the customer charges, Company witness Fox stated that:

> For the metering components of the service charge, I calculated a cost per equivalent meter, and then scaled this cost up by meter size based on the aforementioned meter equivalents. I then calculated a per-bill charge for the billing component (same for all meter sizes) and added that to each meter component.[395]

Exhibit DF – 5RJ presents the Company's updated allocation of customer related charges and Exhibit DF-7J presents a comparison of the Company's COS-based, and proposed fire protection charges.

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[393] CWC St. 3 at 11:3-17 (footnotes omitted).

[394] CWC St. 3 at 12:5-8.

[395] CWC St. 3 at 12:10-14.

Lastly, Company witness Fox calculated consumption-based charges by allocating revenue requirements to base (average use), maximum day, and peak hour demands. Once the costs were allocated to these components, they were distributed to each consumption block's proportionate share of each component.[396] Specifically, consumption falling into consumption blocks which produce more peak hour demands, were distributed a greater percentage of the peak hour costs.[397] Consumption based rates were then calculated based on the distributed costs and relative demand per consumption block.[398] Exhibit DF – 6RJ presents the Company's updated allocation of volumetric related revenue requirements and Exhibit DF-7J presents a comparison of the Company's COS-based, and proposed consumption charges.

Based on the Company's allocation of the revenue requirements as set forth in the Company's Rejoinder Testimony and Exhibits DF-8RJ and DF-11RJ, the Company produced the following relative increases for each customer classification:

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396 CWC St. 3 at 12:17-24.

397 CWC St. 3 at 12:20-22.

398 CWC St. 3 at 12:22-23.

Classification (Columbia and Marietta)	Present Revenue[399]	Amount	Percent
Residential	$4,258,850	$677,053[400]	15.90[401]
Commercial	$810,916	$155,252[402]	19.15[403]
Industrial	$331,059	$139,106[404]	42.02[405]
Public	$81,494	$18,575[406]	22.79[407]
Private Fire Protection	$120,884	$3,459[408]	2.86[409]
Public Fire Protection	$288,708	$6,924[410]	2.40[411]

2. Alternative Recommendations

In response, the opposing parties recommended several adjustments to the Company's proposed allocations. The OCA identified several concerns with the Company's allocation to the proposed customer charges. Specifically, the OCA raised concerns regarding (1) the allocation of bad debt expense, (2) allocation of indirect costs such as general and administrative expenses, regulatory commission expenses, and general plant investment costs, (3) allocation of the remaining 75% of the public fire protection cost of service, and (4) allocation of volumetric usage costs of $114,935, through the monthly customer charges.[412] I&E similarly recommends removing several revenue requirement items from the customer charge including plant in service and corresponding depreciation expenses for several items such as buildings and land, transportation,

399 Exhibit GDS No. 1-R at 1-1; *see also* OSBA St. 1S, Sch. BK-1S, Pg. 1.
400 Exhibit DF-8RJ, Pg. 2-3. $4,142,493 + $793,410 = $4,935,903 - $4,258,850 = $677,053.
401 $677,053 / $4,258,850 = 15.90%.
402 Exhibit DF-8RJ, Pg. 4-5. $876,047 + $90,121 = $966,168 - $810,916 = $155,252.
403 $155,252 / $810,916 = 19.15%.
404 Exhibit DF-8RJ, Pg. 6-7. $290,392 + $179,773 = $470,165 - $331,059 = $139,106.
405 $331,059 / $470,165 = 40.02%.
406 Exhibit DF-8RJ, Pg. 8-9. $78,438 + $21,631 = $100,069 - $81,494 = $18,575.
407 $18,575 / $81,494 = 22.79%.
408 Exhibit DF-8RJ, Pg. 10-11. $90,907 + $33,436 = $124,343 - $120,884 = $3,460.
409 $3,460 / $120,884 = 2.86%
410 Exhibit DF-8RJ, Pg. 10-11. $230,056 + $20,800 + $44,776 = $295,632 - $288,708 = $6,924.
411 $6,924 / $288,708 = 2.40%
412 OCA St. 3 at 7:13 – 8:4.

laboratory equipment, communications equipment, general and field equipment, etc, and reallocating them to the volumetric charges.[413]

OSBA also recommends that the Company classify 15.7% of Transmission and Distribution ("T&D") O&M Expense as customer related rather than 30%, which is what the Company has classified as customer related.[414] OSBA believes that 15.7% is more appropriate because it represents the ratio of Columbia Water's total meters and services plant investments to the Company's total T&D plant in service.[415] For its part, I&E recommends that there be no classification of T&E O&M Expense as customer related.[416]

While the Company ultimately agrees to and has removed the $114,935 in volumetric charges from the fixed customer charge, which is reflected in Company witness Fox's rejoinder exhibits, the Company disagrees with the OCA's other adjustments to the re-allocation of costs from the customer charge to the volumetric charge. As explained by Company witness Fox:

> The indirect costs, as described by Mr. Mierzwa, are essential for providing service to customers, especially with regard to maintaining facilities, services, and meters, and should not be limited to only "direct" costs associated with connecting and maintaining a customer's account. Mr. Mierzwa took exception with the allocation of several operation and maintenance expenses, such as indirect general and administrative expenses, building rental expenses, bad debt expense, and office furniture and equipment costs. These functions are critical to providing safe and reliable service. Meters and services would not be maintained and repaired without them. Customer service functions would not exist. Bad debt expenses are a function of customer service and billing. These expenses have a direct correlation with providing customer, billing, meter, and service to customers, and it is more than reasonable to include these functions within the customer charges.[417]

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413 I&E St. 1 at 11:9-17.

414 OSBA St. 1 at 8:19 – 9:2. The OCA also agreed with the OSBA's proposed percentage classification of T&D O&M Expense as customer-related. CWC St. 3-R at 2:3-4.

415 *Id*.

416 I&E St. 2 at 11:8-11.

417 CWC St. 3-R at 8:17 – 9:2.

This is also consistent with Commission decisions approving the allowance of these costs within the customer charges.[418] The Company likewise disagrees with I&E's proposal because these functions are critical to providing safe and reliable service to the customer and, as such, it is reasonable to include these costs within the customer function.[419]

Moreover, regarding the allocation of T&D O&M Expense, as explained by Company witness Fox, allocation of a portion of these costs as customer related is appropriate:

> Transmission and distribution expenses are not just for maintaining the transmission and distribution pipes. These costs are also incurred, in part, for the maintenance and repair of meters and services. A 30% allocation of the transmission and distribution expenses to customer functions is more than reasonable. This is a direct expense associated with meters and service and which should be recovered through the customer charge.[420]

Furthermore, classifying 30% as customer-related is more than reasonable because the Company would not have the ability to serve customers without these expenses.[421] OSBA's 15.7% allocation is not persuasive because OSBA "simply calculated the ratio of plant in service values between the Company's total meters and services plant investment and its total transmission and distribution plant investment. The value of assets between these two categories has no bearing on the annual operating expenses incurred by the Company to provide customer and transmission and distribution services."[422]

3. Conclusion as to Revenue Allocation

For these reasons, the Company has fully supported its revenue allocation in this proceeding.

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418 *Aqua 2021,* 2022 WL 1732770, at *157.
419 CWC St. 3-R at 6:19-24.
420 CWC St. 3 at 7:1-5.
421 CWC St, 3 at 7:11-13.
422 CWC St. 3 at 10:5-9.

C. TARIFF STRUCTURE

1. Company's Position

As stated above, the Company's rates are uniformly applied to all customers regardless of customer classification. Thus, the ultimately approved rate design must set rates sufficient to collect the allocated costs of service from each customer class. The Company's proposed rate design is set forth in Exhibit DF-7RJ, with the resulting proof of revenues at proposed rates in Exhibit DF-8RJ.

The proposed rates consolidate the Columbia and Marietta Rate Districts and moves each consumption block closer toward its cost to serve.[423] As Company witness Fox testified, it is reasonable to consolidate the rates of the Columbia and Marietta Rate Districts to stop the cross-subsidization that Columbia Rate District Customers provide to Marietta Rate District customers:

> Yes. In my opinion, consolidated rates appear reasonable for the Columbia and Marietta rate districts. Marietta customers have been paying less for the same service as provided to the Columbia customers for over 10 years. In my opinion, the proposed rate design is fair, just and equitable to all customers and will end the Columbia customers' subsidization of the service provided to the Marietta customers. Accordingly, the consolidated rates more closely mirror the overall ownership and operation of the Company and more closely match the allocation of costs to the service areas.[424]

A comparison of the Company's existing and proposed rates is set forth on Exhibit DF-9RJ.

With respect to fire protection charges, although cost-based rates for private fire protection were lower than existing rates, the Company proposed modest increases to those charges.[425] The Company's decision is appropriate because no class should receive a rate decrease at a time when rates are increasing, and such allocation will mitigate the increases to the other customer classes.[426]

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423 CWC St. 3 at 13:4-00.
424 CWC St. 3 at 13:13-19.
425 Exhibit DF-7RJ at 5.
426 CWC St. 3 at 11:23 – 12:2.

The Company has also proposed customer charges that move each fixed charge closer to its cost to serve. For example, the Company proposes to increase the 5/8" meter customer charge to $14.79, which is consistent with the Company's COS-based allocation.[427] With respect to the consumption charges, the Company has proposed corresponding increases to each of its three consumption blocks, with the first tier receiving the smallest increase, and the second and third declining blocks receiving larger increases.[428]

2. Alternative Recommendations

OSBA's proposed rate design differs from the Company in two ways. First, OSBA's proposed customer charges differ from the Company's largely because of the different allocation percentage that OSBA uses for T&D O&M Expense. The Company has already addressed why this is incorrect. However, with respect to the consumption charges, OSBA proposes a more uniform increase to the consumption rate blocks, rather than the Company's proposal, which allocates larger increases to the Tier 2 and 3 rate blocks.[429] Mr. Kalcic states that adequate data has not been provided or available to responsibly assign revenue requirements to the three volumetric rates, and as such the Company's proposal is arbitrary.[430] He in turn recommends uniform class increases, except for a slightly lower increase assigned to the Public Authority class.[431]

The Company, however, disagrees with OSBA's proposal. Although the Company's COSS takes into account estimates for max-day and peak-hour peaking factors by rate tier, in the absence of granular and more detailed data, these estimates are reasonable and more accurately

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427 Exhibit DF-7RJ at 5.
428 Exhibit DF-7RJ at 5.
429 OSBA St. 1-SR, Sch. BK-3S at 1.
430 OSBA St. 1 at 12:9-12.
431 OSBA St. 1 at 12:17-19; *see also* OSBA St. 1S, Sch. BK-2S, Pg. 1.

reflect the true cost of providing volumetric service to each rate tier.[432] In addition, by increasing the higher volume tiers at a larger percentage increase, the Company is sending a stronger pricing signal to customers for conservation purposes.[433] The Company's proposed consumption block differentials were also supported by the OCA.[434]

Lastly, OCA and I&E propose different customers charges based upon their adjustments to reallocate certain revenue requirement items to the customer function. For the reasons the Company disagrees with the OCA and I&E regarding the re-allocation of certain expenses from the customer function to the volumetric function, the Company likewise disagrees with the Company's proposed customer charges.

D. SUMMARY AND ALTERNATIVES

The Company's proposed COSS, revenue allocation, and rate design are guided by the current cost to serve each customer class and incorporates principles of gradualism and equity. Thus, for the reasons stated above, the result of the Company's proposed rate design is just and reasonable and appropriately recovers the requested rate increase.

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432 CWC St. 3-R at 11:6-13.

433 *Id*.

434 OCA St. 3SR at 9:11-16. Such support was subject to the proposed changes to the customer charges that OCA proposes, with a proportional scale back for a smaller than requested increase. OCA St. 3SR at 7:15-22.

X. **CONCLUSION**

Columbia Water Company has justified an annual increase in revenues of $999,900 in this proceeding. Accordingly, the Commission should grant the Company's request for the reasons set forth above.

Respectfully submitted,

/s/Phillip D. Demanchick Jr.

Whitney E. Snyder, Attorney I.D. 316625
Thomas J. Sniscak, Attorney I.D. 33891
Phillip D. Demanchick Jr., Attorney I.D. 324761
Hawke McKeon & Sniscak LLP
100 North Tenth Street
P. O. Box 1778
Harrisburg, PA 17105-1778
(717) 236-1300
wesnyder@hmslegal.com
tjsniscak@hmslegal.com
pddemanchick@hmslegal.com

Counsel for
Columbia Water Company

DATED: September 12, 2023

APPENDIX A

RATE CASE TABLES

TABLE I
Company Name
INCOME SUMMARY
R-2023-3040258

	Pro Forma Present Rates (1)	Company Adjustments (1)	Pro Forma Present Rates (Revised) (1)	ALJ Adjustments	ALJ Pro Forma Present Rates	ALJ Revenue Increase	Total Allowable Revenues
	$	$	$	$	$	$	$
Operating Revenue	7,244,926	0	7,244,926	0	7,244,926	1,294,828	8,539,754
Expenses:							
O & M Expense	4,079,604	0	4,079,604	0	4,079,604	1,813	4,081,417
Depreciation	1,174,375	0	1,174,375	0	1,174,375	0	1,174,375
Taxes, Other	240,832	0	240,832	0	240,832	8,511	249,343
Income Taxes:							
State	58,409	0	58,409	0	58,409	115,477	173,886
Federal	0	0	0	0	0	0	0
Pennvest Revenue	1,308,122	0	1,308,122	0	1,308,122	0	1,308,122
Total Expenses	6,861,342	0	6,861,342	0	6,861,342	125,801	5,679,021
Net Inc. Available for Return	383,584	0	383,584	0	383,584	1,169,026	1,552,610
Rate Base	18,750,106	0	18,750,106	0	18,750,106		18,750,106
Rate of Return	2.05%		2.05%				8.28054000%

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TABLE I(A)
Company Name
RATE OF RETURN
R-2023-3040258

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			1.15479000%		
Long-term Debt	36.66%	3.15%	1.15479000%		1.15%
Short-term Debt	0.00%	0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.910100	0.00%
Common Equity	63.34%	11.25%	7.12575000%	0.910100	7.83%
	100.00%		8.28054000%		8.98%

Pre-Tax Interest Coverage	7.78
After-Tax Interest Coverage	7.17

TABLE I(B)
Company Name
REVENUE FACTOR
R-2023-3040258

100%	1.00000000
Less:	
Uncollectible Accounts Factor (*)	0.00140045
PUC, OCA, OSBA Assessment Factors (*)	0.00657336
Gross Receipts Tax	0.00000000
Other Tax Factors	0.00000000
	0.99202619
State Income Tax Rate (*)	0.08990000
Effective State Income Tax Rate	0.08918315
Factor After Local and State Taxes	0.90284304
Federal Income Tax Rate (*)	0.00000000
Effective Federal Income Tax Rate	0.00000000
Revenue Factor (100% - Effective Tax Rates)	0.90284304

(*) Company Main Brief

TABLE II
Company Name
SUMMARY OF ADJUSTMENTS
R-2023-3040258

Adjustments		Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
		$	$	$	$	$	$	$
RATE BASE:								
CWC:								
Int. & Div. (Table IV)	(IV!B38)							
Taxes (Table V)	(V!P34)							
O & M (Table VI)	(VI!B42)							
REVENUES:								
			0				0	0
EXPENSES:								
				0			0	0
				0			0	0
				0			0	0
				0			0	0
				0			0	0
				0			0	0
				0			0	0
				0			0	0
				0			0	0
				0			0	0
				0			0	0
				0			0	0
TAXES:								
Interest Synchronization (Table III)							0	0
TOTALS		0	0	0	0	0	0	0

TABLE III
Company Name
INTEREST SYNCHRONIZATION
R-2023-3040258

	Amount $
Company Rate Base Claim	18,750,106
ALJ Rate Base Adjustments	0
ALJ Rate Base	18,750,106
Weighted Cost of Debt	1.15479000%
ALJ Interest Expense	688,965
Company Claim (1)	688,965
Total ALJ Adjustment	(0)
Company Adjustment	0
Net ALJ Interest Adjustment	(0)
State Income Tax Rate	8.99%
State Income Tax Adjustment	0
Net ALJ Interest Adjustment	(0)
State Income Tax Adjustment	0
Net ALJ Adjustment for F.I.T.	(0)
Federal Income Tax Rate	0.00%
Federal Income Tax Adjustment	0

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TABLE IV
Company Name
CASH WORKING CAPITAL - Interest and Dividends
R-2023-3040258

Accrued Interest			Preferred Stock Dividends	
	Long-Term Debt	Short-Term Debt		
Company Rate Base Claim	$18,750,106	$18,750,106	Company Rate Base Claim	$18,750,106
ALJ Rate Base Adjustments	$0	$0	ALJ Rate Base Adjustments	$0
ALJ Rate Base	$18,750,106	$18,750,106	ALJ Rate Base	$18,750,106
Weighted Cost of Debt	1.15479000%	0.00%	Weighted Cost Pref. Stock	0.00000000%
ALJ Annual Interest Exp.	$216,524	$0	ALJ Preferred Dividends	$0
Average Revenue Lag Days	0.0	0.0	Average Revenue Lag Days	0.0
Average Expense Lag Days	45.0	0.0	Average Expense Lag Days	0.0
Net Lag Days	-45.0	0.0	Net Lag Days	0.0
Working Capital Adjustment				
ALJ Daily Interest Exp.	$593	$0	ALJ Daily Dividends	$0
Net Lag Days	-45.0	0.0	Net Lag Days	0.0
ALJ Working Capital	($26,685)	$0		$0
Company Claim (1)	$0	$0	Company Claim (1)	$0
ALJ Adjustment	($26,685)	$0		$0
Total Interest & Dividend Adj.	($26,685)			

(1) Company Main Brief.

TABLE V
Company Name
CASH WORKING CAPITAL -TAXES
R-2023-3040258

Description	Company Proforma Tax Expense Present Rates	ALJ Adjustments	ALJ Pro forma Tax Expense Present Rates	ALJ Allowance	ALJ Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
PUC Assessment	$47,624	$0	$47,624	$8,511	$56,135	$153.79	0.00	$0
Public Utility Realty	$73,910	$0	$73,910		$73,910	$202.49	0.00	$0
Capital Stock Tax	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
State Income Tax	$58,409	$0	$58,409	$115,477	$173,886	$476.40	0.00	$0
Federal Income Tax	$0	$0	$0	$0	$0	$0.00	0.00	$0
	$179,943	$0	$179,943	$123,988	$303,931			

ALJ Allowance	0
Company Claim (1)	0
ALJ Adjustment	0

(1) Company Main Brief

TABLE VI
Company Name
CASH WORKING CAPITAL -- O & M EXPENSE
R-2023-3040258

Description	Company Pro forma F.T.Y. Expense	ALJ	ALJ Pro forma Expenses	Lag Days	Lag Dollars
O&M	$4,079,604	$0	$4,079,604	45.00	$183,582,180
Less: Uncollectibles	($11,800)	$0	($11,800)	45.00	($531,000)
Group Insurance	$0	$0	$0	45.00	$0
Insurance, Other	$0	$0	$0	45.00	$0
Labor	$0	$0	$0	45.00	$0
Leased Equip./Rent	$0	$0	$0	45.00	$0
Leased Vehicles	$0	$0	$0	45.00	$0
Miscellaneous	$0	$0	$0	45.00	$0
Natural Gas	$0	$0	$0	45.00	$0
Power	$0	$0	$0	45.00	$0
Purchased Water	$0	$0	$0	45.00	$0
Telephone	$0	$0	$0	45.00	$0
Waste Disposal	$0	$0	$0	45.00	$0
Post Retirement Benefits	$0	$0	$0	45.00	$0
Pensions	$0	$0	$0	45.00	$0
	$4,067,804	$0	$4,067,804	45.00	$183,051,180

ALJ Average Revenue Lag	0.0	
Less: ALJ Avg. Expense Lag	45.0	
Net Difference	-45.0	Days
ALJ Pro forma O & M Expense per Day	$11,145	
ALJ CWC for O & M	($501,525)	
Less: Company Claim (1)	($501,510)	
ALJ Adjustment	($15)	

(1) Company Main Brief

APPENDIX B

RATE IMPACT ANALYSIS

Columbia Water Company
Average Monthly Bill Comparison
Docket No. R-2023-3040258

Division	Customer Class	Meter Size	Avg. Consumption	Present Rates	Proposed Rates	$ Change	% Change
Columbia	Residential	5/8"	3,800	$ 37.67	$ 42.23	$ 4.56	12.11%
Columbia	Commercial	1"	28,500	$ 149.07	$ 166.46	$ 17.40	11.67%
Columbia	Industrial	4"	165,000	$ 598.10	$ 786.58	$ 188.48	31.51%
Columbia	Public Authority	5/8"	1,600	$ 21.83	$ 26.34	$ 4.51	20.68%
Marietta	Residential	5/8"	3,800	$ 32.57	$ 42.23	$ 9.66	29.66%
Marietta	Commercial	1"	28,500	$ 100.87	$ 166.46	$ 65.59	65.03%
Marietta	Industrial	4"	165,000	$ 544.42	$ 786.58	$ 242.16	44.48%
Marietta	Public Authority	5/8"	1,600	$ 20.38	$ 26.34	$ 5.96	29.24%

Columbia Water Company
Present and Proposed Rates - Columbia Division
Docket No. R-2023-3040258

Rate Component	Present Rates	Proposed Rates	$ Change	% Change
Customer Charges				
5/8"	$ 10.31	$ 14.79	$ 4.48	43.45%
3/4"	$ 15.49	$ 21.00	$ 5.51	35.57%
1"	$ 25.82	$ 33.42	$ 7.60	29.43%
1 1/2"	$ 51.64	$ 64.46	$ 12.82	24.83%
2"	$ 82.62	$ 101.72	$ 19.10	23.12%
3"	$ 154.89	$ 201.07	$ 46.18	29.81%
4"	$ 268.15	$ 312.83	$ 44.68	16.66%
6"	$ 516.32	$ 623.30	$ 106.98	20.72%
8"	$ 826.10	$ 995.86	$ 169.76	20.55%
10"	NA	$ 1,430.51	NA	NA
12"	$ 2,219.74	$ 2,672.37	$ 452.63	20.39%
Volumetric Charges				
First 10 Kgal	$ 7.20	$ 7.22	$ 0.02	0.30%
Next 240 Kgal	$ 2.77	$ 3.29	$ 0.52	18.70%
Over 250 Kgal	$ 1.95	$ 2.84	$ 0.89	45.86%

Note: Customer and Volumetric Charges do not differ based on customer class.

Columbia Water Company
Present and Proposed Rates - Marietta Division
Docket No. R-2023-3040258

Rate Component	Present Rates	Proposed Rates	$ Change	% Change
Customer Charges				
5/8"	$ 8.20	$ 14.79	$ 6.59	80.37%
3/4"	$ 12.30	$ 21.00	$ 8.70	70.73%
1"	$ 20.50	$ 33.42	$ 12.92	63.02%
1 1/2"	$ 41.00	$ 64.46	$ 23.46	57.22%
2"	$ 65.60	$ 101.72	$ 36.12	55.06%
3"	$ 123.00	$ 201.07	$ 78.07	63.47%
4"	$ 205.00	$ 312.83	$ 107.83	52.60%
6"	$ 410.00	$ 623.30	$ 213.30	52.02%
8"	$ 738.00	$ 995.86	$ 257.86	34.94%
10"	$ 943.00	$ 1,430.51	$ 487.51	51.70%
12"	NA	$ 2,672.37	NA	NA
Volumetric Charges				
First 1 Kgal	$ 8.86	$ 7.22	$ (1.64)	-18.49%
Next 4 Kgal	$ 5.54	$ 7.22	$ 1.68	30.35%
Next 5 Kgal	$ 2.10	$ 7.22	$ 5.12	243.89%
Next 40 Kgal	$ 2.10	$ 3.29	$ 1.19	56.57%
Over 50 Kgal	$ 1.86	$ 2.84	$ 0.98	52.92%

Note: Customer and Volumetric Charges do not differ based on customer class.

APPENDIX C

PROPOSED FINDINGS OF FACT

APPENDIX C

PROPOSED FINDINGS OF FACT

1. On April 28, 2023, Columbia Water Company ("Columbia Water" or the "Company") filed Supplement No 121 to Tariff Water – Pa. P.U.C. No. 7 ("Supplement No. 121"), which contained proposed changes in rates, rules, and regulations calculated to recover an estimated annual increase in base rate revenues of $999,900 from customers of its Columbia and Marietta Rate Districts. Supplement No. 121 is based upon a Future Test Year ("FTY") ending December 31, 2023.

2. Columbia Water has three water rate districts. The Marietta Rate District applies to water service provided in Marietta Borough and portions of East Donegal Township in Lancaster County and portions of Hellam Township in York County. The Columbia Rate District applies to water service provided in Columbia and Mountville Boroughs and in West Hempfield, portions of East Donegal and Manor Townships, all located in Lancaster County. The East Donegal Township Municipal Authority ("EDTMA") Rate District, which was established after Columbia acquired EDTMA pursuant to Commission Order at Docket No. A-2021-3027134, applies to water service provided in portions of East Donegal Township, Lancaster County that were previously served by EDTMA. CWC St. 1 at 2:19 – 3:4.

3. The Company's proposed rate base represents the Company's claimed measures of value at the end of the FTY and equals $18,750,106. Exhibit GDS No. 1-R at 1-9. This is composed of water utility plant in service of $45,156,565 for the Columbia Rate District and $6,100,848 for the Marietta Rate District (Exhibit GDS No. 1 at 1-19 (Revised) **minus** **t**he Company's total level of accumulated depreciation in its rate case filing of $20,935,229 (Exhibit GDS No. 1 at 1-19 (Revised)), **plus** the Company's revised cash working capital claim of $501,510 (Exhibit GDS No. 1-R at 1-9) and $68,174 for materials and supplies (Exhibit GDS No. 1 at 1-7 (Revised)), **minus** $6,859,359 to reflect contributions in aid of construction (CWC St. No. 2 at 13:16-18) and $5,282,403 in deferred income taxes (CWC St. No. 2 at 14:6-7).

4. The Company's claim for rate base was modified to exclude the plant assets associated with the former-East Donegal Township Municipal Authority ("EDTMA") system that was acquired by the Company in March 2022. CWC St. 2 at 14:9-16.

5. The Company's depreciation reserve accounts are in accordance with the National Association of Regulatory Utility Commissioners ("NARUC") Uniform System of Accounts. CWC St. 2-R at 8:8-14.

6. The Company's claim for pro forma revenues at present rates for the FTY is $7,244,926. Exhibit GDS No. 1-R at 1-1. This is composed of per books revenue for the year ended December 31, 2022 of $7,473,205 (Exhibit GDS No. 1-R at 1-1) **minus** revenues of approximately $390,243 associated with CWC's EDTMA Rate District (Exhibit GDS No. 1 at 1-12 (Revised)), **plus** $19,165, which represents the aggregate gain and loss of customers annualized to reflect anticipated revenues for the customer changes over an

entire year and additional revenue of $7,795 to reflect an additional 52 new customers by December 31, 2023 (CWC St. No. 3 at 7:2-13), **plus** $17,877 to reflect an annualized level of late fees and turn on fees (Exhibit GDS No. 1 at 1-12 (Revised)), **minus** $105,428 in revenue associated with the Distribution System Improvement Charge ("DSIC") (Exhibit GDS No. 1 at 1-12 (Revised)), **plus** $222,555 in additional PENNVEST Revenue for the FTY (CWC St. 2-R at 5:8-13).

7. The Company's claim for operations and maintenance expense ("O&M Expense"), as modified in the Company's rebuttal testimony, is approximately $4,079,604. Exhibit GDS No. 1-R at 1-5

8. The Company acquired the EDTMA system on March 31, 2022, three months into the HTY of this proceeding. CWC St. 2-R at 11:6-8.

9. The Company has separately tracked and identified all specific expenses associated with the EDTMA Rate District, including expenses that increased in the FTY because of providing service to the EDTMA Rate District, and removed them from the Company's filing. CWC St. 2 at 10:16-22; *see also* Exhibit GDS No. 1-R at 1-5.

10. The EDTMA system is being run by the same part-time operators that ran the system prior to the Company's acquisition of EDTMA. Their salaries, future wage increases, and employment taxes were all removed from the Company's rate filing. Moreover, the EDTMA system is automated with level controls to obviate the need for full-time oversight of the system. CWC St. 2-R at 11:13 – 12: 2.

11. The Company's claim for O&M Expense included a claim for employee benefits and pension expense of $397,801. Exhibit GDS No. 1 at 1-15 (Revised).

12. The part-time employees that operate the EDTMA rate district do not receive any pension or benefits. CWC St. 2-R at 14:4-6.

13. The Company's claim for O&M Expense included a claim for materials and supplies of $432,400 for the year ended December 31, 2023. Exhibit GDS No. 1 at 1-15 (Revised).

14. Consumer Price Index ("CPI") represents a basket of goods and services consumed by the average urban consumer, not the goods and services that Columbia Water will need to purchase in the ordinary course of its operations. CWC St. 2-RJ at 7:12-15.

15. The CPI, while declining year over year, was still historically high compared to the previous ten years. CWC St. 2-RJ at 7:10 – 8:3.

16. The Company's FTY claim for materials and supplies expense is on pace to be met and exceeded this year by over 13%. CWC St. 2-R at 15:14-21.

17. 2020 data is no longer representative of the current costs to operate the Company. CWC St. 2-RJ at 9:12-15.

18. The nature of the materials and supplies expense account is to reflect and recover costs related to a variety of projects and Company operations that are similar in scope and effort from year to year. CWC St. 2-R at 16:2-3.

19. The Company undertakes roadway restoration projects every year to maintain adequate, efficient, safe, and reasonable service. CWC St. 1-R at 2:3-5.

20. In 2023, the Company incurred separate and additional costs of $29,000 for a different pavement restoration project than the one reflected in the Company's claim for materials and supplies expense for 2023. CWC St. 1-R at 2:9-11.

21. The Company's claimed level of materials and supplies expense is a conservative estimate. CWC St. 2-R at 15:14-21.

22. The Company's claim for O&M Expense included a claim for other-maintenance expense of $288,451 for the year ended December 31, 2023. Exhibit GDS No. 1-R at 1-5.

23. The Company is on pace to expend the full amount of projected rate case expense. Exhibit GDS No. 1 at 1-16 (Revised).

24. The Company projects it will need to file another rate case in three years. CWC St. 2-R at 17:7-8.

25. The Company has an agreement to maintain rates for its EDTMA customers and that agreement expires on March 31, 2025, or less than three years from the time of this filing. The Company will need to address the rates associated with its EDTMA rate district at the expiration of that agreement. CWC St. 2-RJ at 12:9 – 13:1.

26. The Company is currently implementing its second Long-term Infrastructure Improvement Plan with the Company committing to expend $840,000 over the next three years to replace aging infrastructure. CWC St. No. 2-R at 17:14-17.

27. The Company's Lead Service Line Replacement Program is also pending before the Commission, which, if approved, will result in additional expenditures not incorporated into this rate case. CWC St. No. 2-R at 17:18 – 18:1.

28. The Company has experienced significant price increases over the past few years. CWC St. 2-R at 18:5-7.

29. The Company's initial claim for O&M Expense includes a claim for office expense of $92,156, which included a going-level adjustment of $35,995 due to an upgrade to the Company's billing software and increased support costs. Exhibit GDS No. 1 at 1-15 (Revised), 1-18 (Revised).

30. The costs to upgrade the Company's billing software is a one-time expense. CWC St. 2-R at 19:4-5.

31. The Company's initial claim for O&M Expense included a claim for membership dues of $19,100 for the FTY, which included a going-level adjustment of $4,067 to reflect a $5,134 increase in membership dues to the National Association of Water Companies ("NAWC") and a deduction of $1,067 to remove lobbying fees. CWC St. 2 at 9:12-15; Exhibit GDS No. 1 at 1-15 (Revised).

32. The Company's going-level adjustment to membership dues was in error and was removed from the filing and replaced with an upward adjustment of $791 to reflect the Company's anticipated FTY membership. CWC St. No. 2-R at 19:13-16; *see also* Exhibit GDS No. 4-R.

33. The lobbying expense associated with its NAWC and American Water Works Association fees that were previously included in the Company's claim for membership dues and totaled $2,039 were removed. CWC St. No. 2-R at 19:18 – 20:2.

34. The Company's initial claim for O&M Expense included a claim for mailing expense of $6,400 for the FTY, which included a going-level adjustment of $998. Exhibit GDS No. 1 at 1-15 (Revised).

35. The going-level adjustment of $998 was related to increased costs due to adding EDTMA customers. OCA St. 1 at 12:14-20.

36. Company witness Shambaugh removed the going-level adjustment of $998 from the Company's mailing expense. CWC St. 2-R at 20:7-10.

37. The Company's initial claim for O&M Expense included a per books claim for directors fees and expenses of $100,428 for the HTY, with a going-level adjustment of $10,372 to reflect the addition of a board member that was added on December 31, 2022, for a pro form claim of $110,800. CWC St. 2 at 9:18-19; *see also* Exhibit GDS No. 1 at 1-15 (Revised).

38. Company witness Shambaugh made a similar adjustment to the Company's per books value for directors fees and expenses removing costs related to the Lancaster Trophy House and the Hamilton Club that were inadvertently included in the Company's rate filing reducing the Company's pro forma claim to $109,372. CWC St. 2-R at 20:13-16; *see also* Exhibit GDS No. 1-R at 1-5.

39. The Company's claimed annual accrual for depreciation expense is $1,174,375 based upon the utility plant in service as of December 31, 2023. CWC St. 2 at 11:16-17. This amount excludes the annual depreciation expense associated with CIAC. CWC St. 2 at 11:17-19. This also excludes the annual depreciation expense of $192,875 associated with the

EDTMA plant assets, which are not included in rate base as part of this filing. CWC St. 2 at 11:19-21.

40. The Company's regulatory assessments claim was calculated based upon the proposed revenues under proposed rates of approximately $8,244,826 and applying the appropriate assessment factors. Exhibit GDS No. 1-R at 2-4.

41. The Company's FTY claim for payroll taxes is approximately $115,087. Exhibit GDS No. 1-R at 1-4.

42. The Company's FTY claim for Public Utility Realty Tax is approximately $73,910. Exhibit GDS No. 1-R at 1-4.

43. The Company's FTY claim for Pennsylvania property tax is approximately $4,211. Exhibit GDS No. 1-R at 1-4.

44. Revenue from the Company's PENNVEST surcharge to pay the debt service associated with the PENNVEST loans is taxable income, just like any other revenue received by the Company. CWC St. 2-R at 5-9.

45. To the extent the Company receives a tax deduction related to these PENNVEST loans to recognize the payment of interest, such costs have been reflected in the Company's interest expense deduction for state income tax purposes. CWC St. No. 2-R at 22:10-19.

46. The Company's claim for state income tax expense is based, in part, upon an interest expense deduction of $688,965. Exhibit GDS No. 1-R at 2-3. This interest expense deduction includes the interest expense associated with the Company's weighted cost of debt included in this rate case plus the interest expense associated with its PENNVEST loans. CWC St. No. 2-R at 23:13-17.

47. The state income tax rate of 8.99% because that is the rate currently in effect throughout the duration of the FTY in this proceeding. CWC St. 2-R at 23:6-10.

48. The Company's actual capital structure is composed of 36.66% long-term debt and 63.34% common equity. CWC St. 4 at 16:4-5.

49. Safe and reliable service cannot be maintained at a reasonable cost if utilities do not have the financial flexibility and strength to access the competitive markets on reasonable terms. CWC St. 4 at 17:10-23.

50. I&E recommends a hypothetical capital structure of 50% long-term debt and 50% common equity. I&E St. 1 at 28:6-14.

51. The OCA recommends a hypothetical capital structure of 49.40% long-term debt and 50.60% common equity, which is the average capital structure of OCA witness Garrett's proxy group. OCA St. 2 at 7:5-7, 66:3-4.

52. The Company’s capital structure in this proceeding is less equity-rich than the previous two Commission decisions where the Commission held that the Company’s capital structure was not heavily weighted on the equity side. CWC St. 4-R at 4:3-30.

53. Adopting a hypothetical capital structure would jeopardize the Company’s ability to attract investors, forcing the Company to obtain additional debt financing at the risk of exceeding its cash flow to debt service coverage ratio limitations, potentially defaulting on its loans, and incurring higher interest rates and greater financial risk. CWC St. 1-RJ at 4:1 – 5:11; *see also* CWC St. 4-RJ at 6:5-21.

54. The Company’s long-term debt cost rate is 3.15%. CWC Exhibit DWD-1 at 1.

55. Reasonable investors use a variety of tools and do not rely exclusively on a single source of information or single model. CWC St. 4 at 19:11-12.

56. The use of multiple generally accepted common equity cost rate models also adds reliability and accuracy when arriving at a recommended common equity cost rate. CWC St. 4 at 19:21-23.

57. Mr. D’Ascendis calculated the indicated cost of equity using three separate, well-established cost of equity methods: the DCF methodology, the Risk Premium approach, the CAPM. Mr. D’Ascendis then applies these same models to a group of non-regulated companies of comparable risk as a comparison to the broader market. CWC St. 4 at 4:7-8.

58. Mr. D’Ascendis concluded that the base cost of equity should be 11.25% for the Company. CWC St. 4 at 55:16-19.

59. Company witness D’Ascendis used a proxy group of six water companies, including American States Water Company, American Water Works Company, Inc., California Water Service Group, Essential Utilities Inc., Middlesex Water Company, and SJW Group. CWC St. 4 at 15:7-9.

60. I&E excluded Essential Utilities, Inc. (“Essential”) from their proxy group. CWC St. 4 at 7:14-15. Essential did not pass I&E’s selection criterion that required at least 50% of revenues be attributable to regulated water operations. CWC St. 4 at 7:15-16.

61. Measures of income are far more likely to be considered by the financial community in making credit assessments and investment decisions than are measures of revenue. CWC St. 4-R at 85:3-11.

62. Essential’s net operating income attributable to regulated water operations is 63.12%. CWC St. 4 at 9:3-6.

63. The Discounted Cash Flow ("DCF") model seeks to explain the value of an asset as the present value of future cash flows, discounted at the appropriate rate. CWC St. 4 at 20:3-6.

64. Based on his DCF analysis, Mr. D'Ascendis concluded that the indicated return on equity ("ROE") was 9.13 percent which is an average of the mean result and the median result for the Utility Proxy Group. CWC St. 4 at 22:18-23

65. The CAPM analysis is similar in concept to the risk premium analysis in that it determines a "risk-free" interest rate based on U.S. Treasury obligations and an equity risk premium that is proportional to the beta measure of systematic risk of a stock, which are summed to produce the cost rate of equity. CWC St. 4 at 36:13 – 37:1.

66. The standard Capital Asset Pricing Model ("CAPM") underestimates the return required from low-beta securities, such as those of the Utility Proxy Group as confirmed by numerous tests. CWC St. 4 at 37:9-16.

67. The Empirical CAPM ("ECAPM") is used to account for the fact that the CAPM routinely underestimates the return required from low-beta stocks. CWC St. 4 at 37:10-14.

68. Mr. D'Ascendis applied both the traditional CAPM and the ECAPM to the companies in the Utility Proxy Group and averaged the results for an indicated ROE of 11.76, which is an average of the median and mean result for his Utility Proxy Group. CWC St. 4 at 42:5-9.

69. The Risk Premium Model ("RPM") is based upon the fundamental principle that an equity investor in a given company has a greater investment risk than a bond holder in the same company. CWC St. 4 at 23:5-11.

70. Company witness D'Ascendis relies on the Predictive Risk Premium Model ("PRPM"). The PRPM is not based on an estimate of investor behavior, but rather on the evaluation of the results of that behavior (*i.e.*, the variance of historical equity risk premiums). CWC St. 4 at 24:12-14.

71. Mr. D'Ascendis used the 30-year U.S. Treasury Bond yield of 3.85%, which is a consensus forecast derived from the *Blue Chip Financial Forecasts ("Blue Chip")*, as his risk-free rate. CWC St. 4 at 25:3-5.

72. Mr. D'Ascendis relied on the average of the mean and median results of the PRPM as applied to the Utility Proxy Group to calculate a cost of common equity rate of 12.52%. CWC St. 4 at 26:7-9.

73. Mr. D'Ascendis also utilized the total market approach RPM, which adds a prospective public utility bond yield to an average of: 1) an equity risk premium that is derived from a beta-adjusted total market equity risk premium; and 2) an equity risk premium based on the S&P Utilities Index. CWC St. 4 at 26:12-15.

74. Using the total market approach, Mr. D'Ascendis calculated a common equity cost rate of 11.57% for the Utility Proxy Group. CWC St. 4 at 35:11-13.

75. Mr. D'Ascendis derives an overall common equity cost rate of 12.05% from his RPM, which gives equal weight to the PRPM (12.52%) and the adjusted market approach results (11.57%). CWC St. 4 at 36:4-6.

76. The PRPM is based on the research of Robert F. Engle, dating back to the early 1980s, the PRPM is also in the public domain, having been published six times in academically peer-reviewed journals, none of which have been rebutted, and been accepted by other regulatory commissions. CWC St. 4-R at 39:9 - 43:2.

77. D'Ascendis also selected a group of twenty domestic, non-price regulated companies, hereinafter "Non-Utility Proxy Group," that are comparable in total risk to his Utility Proxy Group and applied the same three market-based costs of equity models to determine an appropriate cost of equity for Columbia Water in this case. CWC St. 4 at 43:16-21.

78. The following criteria were used in the selection of the domestic, non-price regulated firms: (i) they must be covered by *Value Line*; (ii) they must be domestic, non-price regulated companies, *i.e.*, non-utilities; (iii) their beta must lie within plus or minus two standard deviations of the average unadjusted beta of the Utility Proxy Group; and (iv) the residual standard errors of the *Value Line* regressions which gave rise to the unadjusted betas must lie within plus or minus two standard deviations of the average residual standard error of the Utility Proxy Group. CWC St. 4 at 43:22 – 44:6.

79. The results of the DCF, RPM, and CAPM applied to the Non-Price Regulated Proxy Group comparable in total risk to the Utility Proxy Group are 9.26%, 12.69%, and 11.89%, respectively. CWC St. 4 at 45:18-20.

80. Mr. D'Ascendis' indicated ROE based on the analysis of the non-utility proxy group was 11.59%, which is an average of the mean and median of these models. CWC St. 4 at 45:20 – 46:2.

81. The role of regulation when setting rates for a utility company is to simulate a competitive market and the returns that the regulator approves should be commensurate with the rates of return earned by firms with comparable risk. CWC St-4-R at 45:5-10.

82. The ranges of the indicated ROEs produced by the common equity models applied to the Utility Proxy Group and Non-Price Regulated Proxy Group in my ROE analysis do mostly overlap. CWC St-4-R at 45:5-10.

83. Mr. D'Ascendis included an upward adjustment of 1.00% to the indicated range of common equity cost rates to reflect the increased business risk due to the small size of the Company relative to the Utility Proxy Group. CWC St. 4 at 50:28 – 51:2.

84. One way to reflect that business risk is to award the utility a cost of common equity which is one standard deviation above the average of the mean and median proxy group ROE from the Company's DCF analysis. CWC St. 4 at 50:8-22.

85. As Mr. D'Ascendis testified, the standard deviation of the median and mean results of his DCF analysis is 2.47%. CWC St. 4 at 50:24-26.

86. The Proxy Group had a market capitalization 97.1x greater than the Company. CWC St. 4 at 49:10-12.

87. Mr. D'Ascendis determined that the size premium spread between the two warranted an upward adjustment of 3.91%. CWC St. 4 at 50:1-5.

88. Relative company size is a significant element of business risk for which investors expect to be compensated through greater returns. Smaller companies are simply less able to cope with significant events which affect sales, revenues and earnings. For example, smaller companies face more exposure to business cycles and economic conditions, both nationally and locally. Additionally, the loss of revenues from a few large customers would have a far greater effect on a small company than on a larger company with a more diverse customer base. Finally, smaller companies are generally less diverse in their operations and have less financial flexibility. CWC St. 4-R at 34:4-15.

89. I&E places exclusive weight on a single study by Dr. Annie Wong concluding that there is "no need to adjust for the firm size in utility rate regulation." I&E St. 1 at 58:21. A more recent article by Thomas M. Zepp presented an authoritative analysis disputing Dr. Wong's findings and was not rebutted in the financial literature by Dr. Wong or her advocates. CWC St. 4-R at 35:20 – 36:2.

90. Mr. D'Ascendis conducted a study as to whether the size effect is applicable to utilities and concluded that there is a statistically significant link between size and risk for utilities. CWC St. 4-R at 36:4-13.

91. Mr. D'Ascendis also makes a downward adjustment of eleven basis points to the indicated range of ROEs to reflect the Company's financial risk relative to the proxy group. CWC St. 4 at 54:7-11.

92. Mr. D'Ascendis applies two models: the Modigliani-Miller Method ("M&M Method) and the Hamada Equation to determine his financial risk adjustment.

93. I&E applies a DCF model and uses the CAPM as a "comparison" to the DCF results but not as a check. I&E St. 1 at 32:21-22.

94. The results of I&E's DCF and CAPM are 325 basis points apart. I&E St. 1 at 48:10-13.

95. The CAPM analysis can better capture forward-looking changes in the market that are occurring currently than the DCF. CWC St. 4 at 10:15 – 11:6.

96. I&E's CAPM analysis relies on the projected 10-Year Treasury bond yield. CWC St. 4-R at 27:11-14. I&E's use of a medium-term Treasury bond does not match the life of the assets being valued. CWC St. 4-R at 28:7-26.

97. 30-Year Treasury Bonds are the longest-maturity securities available to match that perpetual claim of equity securities. CWC St. 4-R at 29:1-3.

98. The Efficient Market Hypothesis ("EMH") stands for the proposition that all information (including long-term forecasts of interest rates) is available to the investor. CWC St. 4-R at 30:2-19.

99. The Commission's most recent quarterly earnings report suggests an ROE of 9.65% for the water company barometer group. *Bureau of Technical Utility Services Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended March 31, 2023*, Docket No. M-2023-3041106 (issued Jul. 13, 2023), at 27.

100. Mr. Garrett derives his MRP estimate based upon an average of the following: (1) a survey of expected returns from IESE Business School (5.7%); (2) an expected return reported by Kroll (Duff & Phelps) (6.0%); (3) an implied MRP from Damodaran (4.9%); and (4) an "Implied Equity Risk Premium" calculation (5.4%). CWC St. 4-R at 48:16-20.

101. With respect to the survey of expected returns by the IESE Business School and Kroll, Mr. D'Ascendis testified, these sources are unpredictable and not transparent in their estimates. CWC St. 4-R at 48:22 – 49:9.

102. Domodaran, a source heavily cited by OCA witness Garrett, concludes that the surveys of expected returns are not widely used. CWC St. 4-R at 50:1-38.

103. Mr. Garrett's implied MRP, Mr. Garrett relies on a two-stage form of the DCF model that relies on the following assumptions: (1) over the coming five years, the S&P 500 Index (the "Index") will appreciate at a rate equal to the compound growth rate in "Operating Earnings" from 2012 through 2022; (2) cash flows associated with owning the Index will be equal to the historical average earnings, dividends, and buyback yields, applied to the projected Index value each year; and (3) beginning in the terminal year, the Index will appreciate, in perpetuity, at a rate equal to the 30-day average yield on 30-year Treasury securities, as of July 18, 2023. CWC St. 4-R at 51:9-21.

104. Even the slightest changes to those assumptions have a considerable effect on Mr. Garrett's calculated market return, such as changing the terminal rate used for Mr. Garrett's two-stage DCF. CWC St. 4-R at 53:18 – 54:5.

105. The Company implemented a BlackBox Customer Discount Adjustment to reduce the Company's revenue requirement to $999,900. CWC St. 1 at 20:13 – 21:4.

106. The Company meets or exceeds all Federal and State water quality standards and requirements. CWC St. 1 at 8:11-12.

107. The Company's water pressure throughout its system meets all standards. CWC St. 1 at 8:20.

108. There have been no formal or informal service complaints since January 2018, and only one informal complaint in 2020 and one in 2021, both of which were evaluated by the Commission's Bureau of Consumer Services and were not found to be justified complaints. CWC St. 1 at 9:12-15.

109. The Company's efforts to serve its community includes, but is not limited to, working to extend service to nearby communities where there was a strong need for public water (CWC St. 1 at 10:10-18), acquiring the former-EDTMA (CWC St. 1 at 10:19 – 11:3), reducing its power consumption to benefit ratepayers and the environment (CWC St. 1 at 11:4-11), focusing on water conservation by, *inter alia*, installing water meters to monitor for water leaks and record hourly usage, deploying leak detection pods, and installing a riparian buffer zone on Company property to improve the water quality of a nearby creek (CWC St. 1 at 11:12-22), and establishing an e-billing program for its customers (CWC St. 1 at 12:1-15).

110. The Company has also completed numerous projects on its facilities and plant to undertake several additional projects during the FTY to both address aging infrastructure and reliability of its facilities. CWC St. 1 at 14:19 – 18:8.

111. The Company has routinely exercised system isolation valves, including critical valves, exercising 136 valves (135 critical valves) in 2018, 342 valves (126 critical valves) in 2019, 456 valves (131 critical valves) in 2020, 356 valves (135 critical valves) in 2021, and 497 valves (150 critical valves) in 2022. CWC St. 1 at 9:3-8.

112. It is required practice to not fully close a valve during a main repair as valves are left partially open during a main break to maintain a positive pressure, thus, preventing contaminants from getting into the water. CWC St. 1-R at 4:10-19.

113. The Company estimates that the annual cost to exercise all its valves on the five-year schedule Mr. Fought proposes, would be $500,000 per year and plus $100,000 in capital for vehicles, tools and traffic control devices. CWC St. 1-R at 5:3-20.

114. Valves are designed and manufactured to stay open for decades and still be able to close when needed; by design, frequent valve exercising is not necessary. The valves in Columbia Water's system are gate valves, robust pieces of equipment specifically designed to remain open for long periods of time. 99.9% of all gate valves remain open and are designed to do so. The normal operating condition of a gate valve is the open position. Manufacturers know that gate valves will remain open for decades at a time and thus gate valves are designed with resilient seats. CWC St. 1-R at 6:11-19.

115. The Company has found less than five valves that have had trouble operating in the past 10 years of exercising thousands of valves. CWC St. 1-R at 6:17-19.

116. Some valves in the Company's system should not be exercised for it could have a detrimental effect on the Company's system, such as in-line valves which are to remain closed to keep the Company's pressure zones separate. CWC St. 1-R at 6:20 – 7:19.

117. The Company's ArcGIS data for its isolation valves contains detailed information on each one of its valves, such as the specific date it was inspected and their location. CWC St. 1-R at 8:16 – 9:8.

118. The Company provided its ArcGIS data to the OCA in a Google Earth file. The Company also provided instructions to the OCA regarding how to count the number of non-critical isolation valves that were not exercised over the past five years in the Google Earth file. CWC St. 1-R at 8:16 – 9:1.

119. The Company provided a one-page complaint log that was adequate for reviewing by OCA witness Fought because of the small number of recorded complaints. OCA St. 4 at 7:21-22.

120. Columbia Water is required to maintain specific minimum and maximum chlorination levels in its water. The Company tests for and reports these values weekly. The data the Company provided to OCA concerning testing shows the Company has not violated those limits. CWC St. 1-R at 10:18 – 11:5.

121. Chlorine does not "corrode pipes. CWC St. 1-R at 10:18 – 11:5.

122. The Company contacted and discussed with a customer his concerns that the smell of chlorine in his water seemed strong in his opinion. The Company took water samples at his home and the results are all within acceptable and required levels. These sampling results were sent to the customer today. While the customer did not complain at the meeting about corrosivity allegations, the Company tested his water for these issues, which also came back within allowable and required limits. The Company also explained to the customer that based on his statement that he had a sensitive sense of smell, that was likely why he could smell the chlorine. CWC St. 1-RJ at 7:8-20.

123. No customers testified or complained at the Public Input Hearings. OCA St. 4 at 8:14-16.

124. The Company's COSS uses the Base-Extra Capacity Method, as described in water rates manuals published by the American Water Works Association, to allocate pro forma costs. CWC St. 3 at 8:14 – 9:4.

125. The Company's Columbia and Marietta Rate Districts rely upon a single general metered service ("GMS") rate schedule that is applicable to all residential, commercial, industrial and public authority customers. OSBA St. 1 at 3:14-19.

126. The Company allocated bad debt expense, indirect costs such as general and administrative expenses, regulatory commission expenses, and general plant investment costs, allocation

of the remaining 75% of the public fire protection cost of service to the monthly customer charges. I&E St. 1 at 11:9-17.

127. The indirect costs are essential for providing service to customers, especially with regard to maintaining facilities, services, and meters, and should not be limited to only "direct" costs associated with connecting and maintaining a customer's account. CWC St. 3-R at 8:17 – 9:2.

128. The Company classified 30% of Transmission and Distribution ("T&D") O&M Expense as customer related. CWC St. 3 at 7:1-5.

129. Transmission and distribution expenses are not just for maintaining the transmission and distribution pipes. These costs are also incurred, in part, for the maintenance and repair of meters and services. A 30% allocation of the transmission and distribution expenses to customer functions is more than reasonable. This is a direct expense associated with meters and service and which should be recovered through the customer charge. CWC St. 3 at 7:1-5.

130. The proposed rates consolidate the Columbia and Marietta Rate Districts and moves each consumption block closer toward its cost to serve. CWC St. 3 at 13:4-10.

131. Marietta customers have been paying less for the same service as provided to the Columbia customers for over 10 years. CWC St. 3 at 13:13-19.

132. Consolidation of rates for the Columbia and Marietta Rate Districts will end the Columbia customers' subsidization of the service provided to the Marietta customers. CWC St. 3 at 13:13-19.

133. The Company has also proposed customer charges that move each fixed charge closer to its cost to serve. Exhibit DF-7RJ at 5.

134. the Company has proposed corresponding increases to each of its three consumption blocks, with the first tier receiving the smallest increase, and the second and third declining blocks receiving larger increases. Exhibit DF-7RJ at 5.

135. The Company's COSS takes into account estimates for max-day and peak-hour peaking factors by rate tier, in the absence of granular and more detailed data. OCA St. 3SR at 9:11-16.

136. Increasing the higher volume tier blocks at a larger percentage increase, the Company is sending a stronger pricing signal to customers for conservation purposes. CWC St. 3-R at 11:6-13.

APPENDIX D

PROPOSED CONCLUSIONS OF LAW

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1. The Pennsylvania Public Utility Commission ("Commission") has jurisdiction over the Parties and subject matter of this proceeding. 66 Pa.C.S. § 101, *et seq.*

2. A Public Utility seeking a rate increase has the burden of proof to establish the justness and reasonableness of each element of its request. 66 Pa.C.S. § 315(a).

3. While it is axiomatic that a utility has the burden of proving the justness and reasonableness of its proposed rates, it cannot be called upon to account for every action absent prior notice that such action is to be challenged. *Allegheny Center Assocs. v. Pa. Pub. Util. Comm'n,* 570 A.2d 149 (Pa. Cmwlth. 1989); see also, *Pa. Pub. Util. Comm'n v. Equitable Gas Co.,* 73 Pa. PUC 301, 359-360 (1990).

4. The burden of proof must be on a party to a general rate increase case who proposes an adjustment to a rate sought by the utility. *Pa. Pub. Util. Comm'n v. Columbia Water Company*, Docket No. R-2008-2045157, *et al*., 2009 WL 1708836 (Opinion and Order entered Jun. 10, 2009).

5. A Public Utility is entitled to rates that will allow it to recover its costs for expenses that are reasonably necessary to provide service to its customers. *Western Pa. Water Co. v. Pa. Public Utility Commission,* 422 A.2d 906 (Pa. Cmwlth. 1980) and *Butler Township Water Co. v. Pa. Pub. Util. Comm'n*, 473 A.2d 219, 221 (Pa. Cmwlth. 1984).

6. The surcharge established to pay the debt service associated with loans issued by the Pennsylvania Infrastructure Investment Authority ("PENNVEST") is limited solely to the recovery of PENNVEST principal and interest obligations. 52 Pa. Code § 69.361.

7. If an expense or investment is allowed to be included in a public utility's rates for ratemaking purposes, the related income tax deductions and credits shall also be included in the computation of current or deferred income tax expense to reduce rates. 66 Pa. C.S. § 1301.1.

8. Columbia has demonstrated that the costs associated with its various expense claims are just and reasonable.

9. The Commission must authorize a sufficient, or fair, rate of return to public utilities to ensure adequate revenues to cover operating expenses, debt serviced expenses and common and preferred (if necessary) dividends, as well as to maintain the financial integrity of the utility and enable the public utility attract needed debt in equity capital in the marketplace or on reasonable terms, in competition with firms of similar risk. *Federal Power Commission v. Hope Natural Gas Co.,* 320 U.S. 591 (1944) and *Bluefield Water Works Improvement Co. v. Public Service Commission,* 262 U.S. 679 (1923).

10. It is important that there be enough revenues not only for operating expenses, but also for the capital costs of the business. These include service in the debt and dividends on the stock. By that standard, the return to the equity owner should be commensurate with returns on investment and other enterprises having corresponding risk. That return, moreover, should be sufficient to ensure confidence in the financial integrity of the enterprise, so as to maintain credit and to attract capital. *Federal Power Commission v. Hope Natural Gas Co.,* 320 U.S. 591, 603 (1944).

11. Rates which are not sufficient to yield a reasonable return on the value of the property used at the time it is being used to render the service are unjust, unreasonable and confiscatory, and that their enforcement deprives the public utility company of its property, in violation of the Fourteenth Amendment. *Bluefield Water Works Improvement Co. v. Public Service Commission,* 262 U.S. 679, 690 (1923).

12. Pennsylvania Courts and the Pennsylvania Public Utility Commission have adopted the U.S. Supreme Court legal standards regarding the rate of return in *Hope* noting this case requires the Commission to balance utility company and ratepayer interests in setting rates. *Pennsylvania Electric Co. v. Pa. Public Utility Commission,* 509 Pa. 324, 502 A.2d 130 (1985).

13. The actual capital structure represents the utility's decision, in which it has full discretion, on how to capitalize its rate base, which forms the basis upon which utilities attract capital. *Pa. Pub. Util. Comm'n v. PPL Electric Utilities Corp.*, Docket No. R-2012-2290597, *et al*., 2012 WL 6758304 (Opinion and Order entered Dec. 28, 2012).

14. Absent a finding by the Commission that a utility's actual capital structure is atypical or too heavily weighted on either the debt or equity side, the Commission would not normally exercise its discretion with regard to implementing a hypothetical capital structure. *See Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385, *et al*., 2022 WL 1732770 (Opinion and Order entered May 16, 2022).

15. Columbia's capital structure is not unreasonable or uneconomical under the rationale of the *Carnegie* decision. *Carnegie National Gas Co. v. Pa. PUC*, 433 A.2d 938, 940 (Pa. Cmwlth. 1981), *Pa. Pub. Util. Comm'n v. Columbia Water Company*, Docket No. R-2008-2045157, *et al*., 2009 WL 1708836 (Opinion and Order entered Jun. 10, 2009), and *Pa. Pub. Util. Comm'n v. Columbia Water Company*, Docket Nos. R-2013-2630798, 2014 WL 316891, at *25 (Opinion and Order entered Jan. 23, 2014).

16. Sole reliance on one methodology without checking the validity of the results of that methodology with other cost of equity analyses does not always lend itself to responsible ratemaking. *Pa. Pub. Util. Comm'n v. PPL Electric Utilities Corp.*, Docket No. R-2012-2290597, *et al*., 2012 WL 6758304 (Opinion and Order entered Dec. 28, 2012).

17. There is a general inverse relationship between size and risk, such that smaller companies like Columbia Water face greater risk. *Pa. Pub. Util. Comm'n v. Citizens' Electric Company of Lewisburg, PA*, Docket No. R-2019-3008212, 2020 WL 2487407 (Opinion and Order entered Apr. 27, 2020).

18. The CAPM has the ability to reflect changing market conditions better than the DCF. *See Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385, *et al*., 2022 WL 1732770 (Opinion and Order entered May 16, 2022).

19. The Company has provided substantial evidence demonstrating that a return on equity of 11.25% is commensurate with returns on investment and other enterprises having corresponding risk and is sufficient to ensure confidence in the financial integrity of Columbia Water, so as to maintain credit and to attract capital.

20. Although class cost of service studies may appear to have great precision, the Commission has repeatedly recognized that the COSS is only a guide to designing rates and is

only one factor, albeit an important one, to be considered in the rate setting process. See*, e.g., Pa. Pub. Util. Comm'n v. West Penn Power Co.*, Docket Nos. R-901609, et al., 1990 WL 488813, (Opinion and Order dated Dec. 14, 1990); *Pa. Pub. Util. Comm'n v. Pennsylvania Power & Light Co*., Docket No. R-822169, *et* al., 1983 WL 913509 (Opinion and Order dated Aug. 19, 1983).

21. As indicated by the Commonwealth Court in *Lloyd*, cost of service is the "polestar" of utility rates. Other factors, such as gradualism, may be considered so long as they do not "trump" cost of service as the primary basis for allocating the revenue increase. *See Lloyd v. Pa. Pub. Util. Comm'n*, 904 A.2d 1010, 1020 (Pa. Cmwlth. 2006), appeal denied, 916 A.2d 1104 (Pa. 2007).

22. Other customer-related costs are properly included in a customer cost analysis. *See Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385, *et al*., 2022 WL 1732770 (Opinion and Order entered May 16, 2022).

23. Columbia Water has fully supported its justified revenue increase of $1,294,828 which entitles it to implement rates designed to produce its as-filed increase in annual operating revenues of $999,900.

APPENDIX E

PROPOSED ORDERING PARAGRAPHS

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PROPOSED ORDERING PARAGRAPHS

IT IS ORDERED THAT:

1. Columbia Water Company ("Columbia Water" or the "Company) is authorized to implement rates designed to produce increased annual operating revenues of $999,900.

2. That the Tariff or Tariff Supplement may be filed on less than statutory notice and, pursuant to the provisions of 52 Pa. Code §§ 53.31 and 53.101, may be filed to be effective for service rendered on or after the date of entry of the Commission's Opinion and Order.

3. That Columbia Water shall file detailed calculations with this Tariff filing, which shall demonstrate that the filed rates comply with the proof of revenue, in the form and manner customarily filed in support of compliance tariffs.

4. That Columbia Water shall allocate the authorized increase to operating revenues to each customer class and a rate schedule in manner prescribed in the Commission's Opinion and Order.

5. That Columbia Water shall comply with all directives, inclusions and recommendations contained in the instant Opinion and Order, whether or not the subject of individual ordering paragraphs as fully as if they were the subject of specific ordering paragraphs.

6. That the complaints filed against the proposed rate increase by the Office of Consumer Advocate (at Docket No. C-2023-3040746), the Office of Small Business Advocate (at Docket No. C-2023-3040567), Mr. Vincent Collier III (at Docket No. C-2023-3041198), and by Ms. Sandra Shaub (at Docket No. C-2023-3041197) be terminated and marked Closed.

7. That the inquiry and investigation of the Pennsylvania Public Utility Commission at Docket No. R-2023-3040258 be terminated and marked Closed.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true copy of the foregoing document upon the parties, listed below, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a party).

BY ELECTRONIC MAIL ONLY:

Barrett C. Sheridan, Esquire
Erin L. Gannon, Esquire
Office of Consumer Advocate
555 Walnut Street
5th Floor Forum Place
Harrisburg, PA 17101
OCAColumbiaWater2023@paoca.org

Carrie B. Wright, Esquire
Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120
carwright@pa.gov

Steven C. Gray, Esquire
Small Business Advocate
Pennsylvania Office of Small Business Advocate
555 Walnut Street
1st Floor Forum Place
Harrisburg, PA 17101
sgray@pa.gov

Sandra E. Shaub
3282 Horizon Drive
Lancaster, PA 17601
sandishaub@comcast.net

Vincent E. Collier III
3287 Horizon Drive
Lancaster, PA 17601
vecollierIII@gmail.com

/s/ Phillip D. Demanchick Jr.
Whitney E. Snyder
Thomas J. Sniscak
Phillip D. Demanchick Jr.

Dated this 12th day of September, 2023