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

BUREAU OF
INVESTIGATION
&
ENFORCEMENT

January 8, 2020

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

Re: Pennsylvania Public Utility Commission v.
Valley Energy, Inc. –
Supplement No. 49 to Tariff Electric – Pa. PUC No. 2
Docket No. R-2019-3008209
I&E Main Brief

Dear Secretary Chiavetta,

Enclosed please find the Bureau of Investigation and Enforcement's (I&E) **Main Brief** in the above-captioned proceeding.

Copies are being served on active parties of record as evidenced in the attached Certificate of Service. Should you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

John M. Coogan
Prosecutor
Bureau of Investigation & Enforcement
PA Attorney ID No. 313920
(717) 783-6151
jcoogan@pa.gov

JMC/ac
Enclosure

cc: Honorable Steven K. Haas (*ALJ, PUC Harrisburg*)
Honorable Benjamin J. Myers (*ALJ, PUC Harrisburg*)
Per Certificate of Service

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission		
	:	
v.	:	Docket No. R-2019-3008209
	:	
Valley Energy, Inc.	:	

MAIN BRIEF
OF THE
BUREAU OF INVESTIGATION AND ENFORCEMENT

John M. Coogan
Prosecutor
PA Attorney ID No. 313920

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

Dated: January 8, 2020

TABLE OF CONTENTS

I. INTRODUCTION 1

A. History of the Proceeding 1
B. Burden of Proof 3

II. SUMMARY OF ARGUMENT 3

A. Statement of the Questions Involved 3
B. Summary 4
1. Rate Base 4
2. Revenues 4
3. Expenses 5
4. Fair Rate of Return 5
5. Taxes 7
6. Customer Rate Structure 7
7. Miscellaneous Issues 7

III. ISSUES RESOLVED AMONG THE PARTIES 8

IV. RATE BASE 8

A. Deductions from Rate Base – Construction Work in Progress 8
B. Deductions from Rate Base – Cash Working Capital 9
C. Conclusion 10

V. REVENUES 11

VI. EXPENSES 11

A. Total O&M Expenses 11
B. Regulatory Commission Expenses 14
C. Miscellaneous General Expense 15
D. Uncollectible Accounts Expense 17
E. C&T Allocation 18
F. Rate Case Expense 20

VII. FAIR RATE OF RETURN 22

A. Introduction 22
B. Capital Structure 25
C. Cost of Long-Term Debt 25
D. Return on Common Equity 26
1. Introduction 26
2. Proxy Group 26
3. I&E's Discounted Cash Flow Analysis 28
4. Valley's Proposed Return on Common Equity 31
E. Overall Rate of Return 49
F. Conclusion 49

VIII. TAXES 50
IX. CUSTOMER RATE STRUCTURE 50
A. Allocated Cost of Service Study 50
B. Revenue Allocation 50
C. Rate Design 51
D. Scale Back of Rates 51
E. Summary 52
X. MISCELLANEOUS ISSUES 52
A. Reporting Requirements 52
XI. CONCLUSION 55

APPENDIX A - TABLE I (INCOME SUMMARY)
TABLE II (SUMMARY OF I&E ADJUSTMENTS), AND
TABLE III (RATE OF RETURN)
APPENDIX B - PROPOSED FINDINGS OF FACT
APPENDIX C - PROPOSED CONCLUSIONS OF LAW
APPENDIX D - PROPOSED ORDERING PARAGRAPHS

TABLE OF AUTHORITIES

Cases

Bluefield Water Works & Improvements Co. v. Public Service Comm. of West Virginia, 292 U.S. 679 (1923) 22, 23, 38, 39
Brockaway Glass v. Pa. P.U.C., 437 A.2d 1067 (Pa. Cmwlth. 1981) 3
Butler Township Water Company v. Pa. P.U.C., 473 A.2d 219 (Pa. Cmwlth. 1984) 11
Dutchland Tours, Inc. v. Pa. P.U.C., 337 A.2d 922 (Pa. Cmwlth. 1975) 3
Federal Power Commission v. Hope Natural Gas Co. 320 U.S. 591 (1944) 22, 23, 38, 39
Lower Frederick Township v. Pa. P.U.C., 409 A.2d 505 (Pa. Cmwlth. 1980) 3
Pa. P.U.C. v. Apollo Gas Co., 54 Pa. PUC 358 (Pa. P.U.C. 1980)..................................20
Pa. P.U.C. v. Aqua Pennsylvania, Inc., 2004 WL 2314523 (Pa. P.U.C. 2004) 3
Pa. P.U.C. v. Borough of Media Water Works, 1990 WL 10702673 (Pa. P.U.C. 1990) 20
Pa. P.U.C. v. City of Bethlehem, 84 Pa. PUC 275 (Pa. P.U.C. 1995)..............................28
Pa. P.U.C. v. City of Lancaster – Sewer Fund, 2007 WL 517134 (Pa. P.U.C. 2007) 12
Pa. P.U.C. v. Columbia Gas of Pennsylvania, Inc., Docket No. R-2012-2321748 (Order entered May 23, 2013) 54
Pa. P.U.C. v. Consumers Pennsylvania Water Company – Roaring Creek Division, 87 Pa. PUC 826 (Pa. P.U.C. 1997) 28
Pa. P.U.C. v. Duquesne Light Company, Docket No. R-2018-3000124 (Order entered December 20, 2018)..........................54
Pa. P.U.C. v. Emporium Water Company, Docket No. R-2014-2402324 (Order entered January 28, 2015) 20, 37
Pa. P.U.C. v. Media Borough, 77 Pa. PUC 446 (Pa. P.U.C. 1992) 28
Pa. P.U.C. v. PECO Energy Co., 87 Pa. PUC 184 (Pa. P.U.C. 1997)..............................28
Pa. P.U.C. v. Pennsylvania-American Water Company, Docket No. R-2013-2355276 (Order entered December 19, 2013) 54
Pa. P.U.C. v. Philadelphia Electric Co., 33 PUR 4th 319 (Pa. P.U.C. 1980)..................39
Pa. P.U.C. v. Philadelphia Suburban Water Co., 71 Pa. PUC 593 (Pa. P.U.C. 1989) 28
Pa. P.U.C. v. PPL Electric Utilities Corporation, 2012 WL 6758304 (Pa. P.U.C. 2012) 3, 20
Pa. P.U.C. v. PPL Electric Utilities Corporation, Docket No. R-2015-2469275 (Order entered November 15, 2015)..........................54
Pa. P.U.C. v. The Columbia Water Company, Docket No. R-2013-2360798 (Order entered January 23, 2014) 37
Pa. P.U.C. v. UGI Penn Natural Gas, Inc., Docket No. R-2016-2580030 (Order entered August 31, 2017)..........................54
Pa. P.U.C. v. UGI Utilities, Inc. – Electric Division, Docket No. R-2017-2640058 (Order Entered October 25, 2018) .... passim

Pa. P.U.C. v. Western Pennsylvania Water Co., 67 Pa. PUC 529 (Pa. P.U.C. 1988) 28
Pa. P.U.C., et. al v. City of Dubois-Bureau of Water, Docket No. R-2016-2554150, *et. al* (Order entered March 28, 2017) 20, 28, 35
Pennsylvania Gas & Water Company v. Pa. P.U.C., 341 A.2d 239 (Pa. Cmwlth. 1975) 24
Peoples Natural Gas Company v. Pa. P.U.C., 409 A.2d 446 (Pa. Cmwlth 1979) 50
Philadelphia Suburban Water Company v. Pa. P.U.C., 808 A.2d 1044 (Pa. Cmwlth. 2002) 50
Popowsky v. Pa. P.U.C., 674 A.2d 1149 (Pa. Cmwlth. 1996) 3, 20
Samuel J. Lansberry, Inc. v. Pa. P.U.C., 578 A.2d 600 (Pa. Cmwlth. 1990) 3
Se-Ling Hosiery v. Margulies, 70 A.2d 854 (Pa. 1950) 3
UGI Corp. v. Pa. P.U.C., 410 A.2d 923 (Pa. Cmwlth. 1980) 11
Western Pennsylvania Water Company v. Pa. P.U.C., 422 A.2d 906 (Pa. Cmwlth. 1980) 11

STATUTES

66 Pa. C.S. § 1304 50
66 Pa. C.S. § 1308(d) 1
66 Pa. C.S. § 1501 49
66 Pa. C.S. § 315(a) 3
66 Pa. C.S. § 505 54
66 Pa. C.S. § 523 48
66 Pa. C.S. § 523(a) 48

REGULATIONS

52 Pa. Code § 53.53 .... 1, 50
52 Pa. Code §§ 5.243(e)(2)-(3) 13

OTHER AUTHORITIES

Brealey, Richard A., et al. *Principles of Corporate Finance*, Concise Edition, McGraw-Hill/Irwin, 2011 36
Duff & Phelps 2019 Valuation Handbook guide to Cost of Capital – Market Results Through 2018 45
Fama and French, *The Capital Asset Pricing Model: Theory & Evidence* 45
Ibbotson *Stocks, Bonds, Bills & Inflation: 2015 Yearbook* 46
Wong, Annie, "Utility Stocks and the Size Effect: An Empirical Analysis" *Journal of the Midwest Finance Association* (1993) 47
Zepp, Thomas M. "Utility Stocks and the Size Effect --- Revisited", *The Quarterly Review of Economics and Finance*, 43 (2003) 47

I. INTRODUCTION

A. History of the Proceeding

On July 1, 2019, Valley Energy, Inc. ("Valley" or "Company"), filed Supplement No. 49 to Tariff Electric Pa. P.U.C. No. 2 which proposed an annual distribution revenue increase of $1,034,186 (20.6%), to become effective August 30, 2019. Valley used the Fully Projected Future Test Year ("FPFTY") as the basis for its rate increase request.[1] Also on July 1, 2019, Valley filed a Petition for Waiver of Filing Requirements Under 52 Pa. Code § 53.53, requesting waiver of the informational requirements for general rate increase requests in excess of $1,000,000 as set forth in 52 Pa. Code § 53.53 of the Commission's regulations. The Commission's Bureau of Investigation and Enforcement ("I&E"), the Pennsylvania Office of Consumer Advocate ("OCA"), and the Pennsylvania Office of Small Business Advocate ("OSBA") filed both a Joint Answer in opposition to Valley's Petition, as well as a Motion of the Joint Statutory Advocates to Reject the Base Rate Filing ("Joint Motion to Reject") on July 22, 2019.[2] On July 29, 2019, Valley withdrew its Petition for Waiver of Filing Requirements Under 52 Pa. Code § 53.53. On July 29, 2019, Valley also filed replacement schedules and tariff pages that updated the annual distribution revenue increase to $834,546 (16.6%).

On August 29, 2019, pursuant to 66 Pa. C.S. § 1308(d), the Commission ordered suspension of the proposed tariff changes until March 30, 2020, unless permitted by Commission Order to become effective at an earlier date. The Commission directed that

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[1] The FPFTY ends December 31, 2020, the future test year ("FTY") ended December 31, 2019, and the historic test year ("HTY") ended December 31, 2018. Valley Statement No. 1, p. 2.

[2] I&E and OSBA entered their appearances in this proceeding on July 19, 2019 and July 22, 2019, respectively. OCA filed a Formal Complaint on August 5, 2019.

the case be assigned to the Office of Administrative Law Judge for Alternative Dispute Resolution, if possible, and scheduling of hearings as may be necessary for the Administrative Law Judge to render a Recommended Decision. On September 9, 2019, the Company filed a tariff suspension, voluntarily suspending its proposed tariff to April 29, 2020. A Prehearing Conference was held on September 13, 2019 at 10:00 a.m., before Administrative Law Judges Steven K. Haas and Benjamin J. Myers ("ALJs").

A "Smart Hearing" was held at 1:00 p.m., November 4, 2019, in Harrisburg during which two witnesses provided testimony about the proposed rate increase. Pursuant to the procedural schedule agreed to at the Prehearing Conference, the parties exchanged direct, rebuttal, and surrebuttal testimony, as well as oral rejoinder outlines. I&E served the following testimony and exhibits:

- I&E Statement No. 1, I&E Exhibit No. 1, I&E Statement No. 1-SR – Errata Version, and I&E Exhibit No. 1-SR, the prepared direct and surrebuttal testimony and exhibits of I&E witness Brenton Grab, who addressed the Company's operating and maintenance expenses, and overall revenue requirement;

- I&E Statement No. 2, I&E Exhibit No. 2, I&E Statement No. 2-SR, and I&E Exhibit No. 2-SR, the prepared direct and surrebuttal testimony and exhibits of I&E witness Christopher Henkel, who addressed the Company's rate of return request;

- I&E Statement No. 3, I&E Exhibit No. 3, and I&E Statement No. 3-SR, the prepared direct and surrebuttal testimony and exhibit of I&E witness Ethan Cline, who addressed the Company's rate base and rate structure requests.

Full evidentiary hearings were held December 16 and 17, 2019, in Harrisburg. I&E files this Main Brief pursuant to the procedural schedule established in this case.

B. Burden of Proof

The Company carries the burden of proof to show its rate proposal is just and reasonable.[3] Valley must satisfy its burden of proof by presenting a preponderance of evidence.[4] A preponderance of the evidence is evidence that is more convincing, by even the smallest amount, than that presented by another party.[5] In base rate cases, the Commission has affirmed the utility's burden to establish the justness and reasonableness of every component of its rate request.[6] The burden of proof does not shift to parties challenging a requested rate increase.[7] Additionally, the Company must produce substantial evidence to satisfy its burden.[8] Substantial evidence is "such relevant and competent evidence having a rational probative force which a reasonable mind might accept as adequate to support a conclusion."[9] Thus, Valley must affirmatively prove the justness and reasonableness of each element of each of its claims.

II. SUMMARY OF ARGUMENT

A. Statement of the Questions Involved

Question: Has Valley met its obligation to present a preponderance of substantial evidence to demonstrate each element of each of its claims in its base rate increase proposal is just and reasonable?

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[3] *See* 66 Pa. C.S. § 315(a); *Irwin A. Popowsky v. Pa. P.U.C.*, 674 A.2d 1149 (Pa. Cmwlth. 1996).
[4] *Samuel J. Lansberry, Inc. v. Pa. P.U.C.*, 578 A.2d 600 (Pa. Cmwlth. 1990).
[5] *Se-Ling Hosiery v. Margulies*, 70 A.2d 854 (Pa. 1950).
[6] *See, e.g., Pa. P.U.C. v. PPL Electric Utilities Corporation*, 2012 WL 6758304 (Pa. P.U.C. 2012); *Pa. P.U.C. v. Aqua Pennsylvania, Inc.*, 2004 WL 2314523 (Pa. P.U.C. 2004).
[7] Id.
[8] *See Brockaway Glass v. Pa. P.U.C.*, 437 A.2d 1067 (Pa. Cmwlth. 1981); *Lower Frederick Township v. Pa. P.U.C.*, 409 A.2d 505 (Pa. Cmwlth. 1980).
[9] *Dutchland Tours, Inc. v. Pa. P.U.C.*, 337 A.2d 922, 925 (Pa. Cmwlth. 1975).

Suggested Answer: No. I&E expert witnesses have provided testimony demonstrating certain claims are not just and reasonable. Therefore, Valley's proposal should only be approved to the extent consistent with and as modified by I&E's analyses and recommendations presented below.

B. Summary

I&E avers Valley has failed to fully carry its burden of proof with respect to its proposed revenue increase of $834,546. To the contrary, I&E's presentation of expert witness testimony at a full evidentiary hearing demonstrates that Valley should receive a revenue increase of no more than $345,049. I&E's recommendation is based upon specific adjustments offered by I&E witnesses, as set forth herein and summarized in Table I (Income Summary), Table II (Summary of I&E Adjustments), and Table III (Rate of Return).[10]

1. Rate Base

I&E witness Ethan Cline's provided testimony regarding two issues related to rate base: Construction Work in Progress ("CWIP") and Cash Working Capital ("CWC"). I&E and the Company agree that CWIP should be removed from the FPFTY rate base as originally filed. However, I&E recommends the Commission adjust the Company's CWC allowance downwards to reflect I&E's recommendations regarding expenses.

2. Revenues

I&E recommends a $489,497 reduction to Valley's revenue increase request for the FPFTY as a result of its various adjustments. However, I&E has no

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[10] Tables I, II, and III are attached at Appendix A.

recommendations regarding Valley's specific revenue claims for the FPFTY that support its overall revenue increase request.

3. Expenses

I&E witness Brenton Grab recommends downward adjustments to Valley's as-filed expense claims for Regulatory Commission Expenses, Miscellaneous General Expense, Uncollectible Accounts Expense, C&T Allocation, and Rate Case Expense. As demonstrated by I&E witness Grab, Valley did not provide an adequate basis to prove these particular expense claims are just and reasonable. Additionally, I&E strongly opposes Valley's attempt to wholesale undermine I&E's individual expenses analyses by claiming updated expense figures for <u>all</u> accounts in Company rebuttal testimony cancel out I&E's recommendations. Although I&E did consider updates to expenses it recommended adjustments to in direct testimony, Company rebuttal testimony updating other expenses not subject of non-company direct testimony should be disregarded. An attempt to introduce late-filed claims in rebuttal testimony is a violation of due process principles and Commission regulations.

4. Fair Rate of Return

I&E witness Christopher Henkel calculates a fair rate of return for Valley is 6.60%. I&E witness Henkel adopted Valley witness Dylan D'Ascendis's capital structure, and, in rebuttal testimony, Valley witness D'Ascendis adopted I&E witness Henkel's recommended cost of long-term debt. Therefore, the sole issue in dispute is a fair return on common equity. I&E witness Henkel calculated a 8.46% return on equity. As endorsed by the Commission, I&E witness Henkel's analysis primarily relies on his

Discount Cash Flow ("DCF") analysis, with use of the Capital Asset Pricing Model ("CAPM") as a comparison.

I&E witness Henkel submits Valley witness D'Ascendis significantly overstates a just and reasonable return for the Company, reflecting a 10.60% return on equity. First, Valley witness D'Ascendis uses a flawed proxy group. Second, Valley witness D'Ascendis improperly gives other methods equal weighting to his DCF analysis. The Commission has clearly stated the DCF method should be the primary method to determine cost of common equity. Additionally, as part of his flawed used of various methods, Valley witness D'Ascendis inappropriately (1) relies upon proprietary software to perform a flawed predictive risk premium ("PRPM") analysis;[11] (2) compares Valley to competitive, non-regulated companies;[12] (3) estimates a risk-free rate based on 30-year U.S. Treasury Bonds as part of his CAPM analysis; (4) uses an empirical capital asset pricing model to adjust his CAPM results upward; and (5) claims a market-to-book ratio above 1.0 should discount the DCF method. Finally, Valley witness D'Ascendis unjustly claims the Company's return on equity should be adjusted upwards by 1.25% - 100 basis points for a size adjustment, and 25 basis points as a performance factor adjustment. I&E witness Henkel submits evidence demonstrating a size adjustment for Valley and the utility industry generally is inappropriate. Regarding a performance factor adjustment, I&E witness Henkel opines, for any company, true management effectiveness is earning a higher return through its efficient use of resources and cost cutting measures. Further,

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[11] As explained by I&E witness Henkel, PRPM is a type of risk premium ("RP") analysis.

[12] As explained by I&E witness Henkel, such analysis is a blend of the Comparable Earnings ("CE") approach into the DCF, RP, and CAPM methods.

I&E witness Henkel states Valley should not be granted additional basis points for doing what it is required to do in order to provide adequate, efficient, safe, and reasonable service.

5. Taxes

I&E's various recommendations have a flow-through impact on the Company's taxes for the FPFTY as depicted in the attached Table I.

6. Customer Rate Structure

I&E witness Cline accepted Valley's across-the-board rate increase for residential, commercial, interruptible, small industrial and transportation customers (excluding Firm-Contract) between 21.52% and 21.85% with most classes receiving an increase of approximately 21.6% (excluding the cost of gas). I&E witness Cline opines Valley was not required to prepare a cost of service study and an across-the-board increase is simplest to implement and probably the fairest in this particular case, since the Company's sales base has been stable over time. I&E witness Cline also recommends that if the Commission grants less than Valley's full rate increase proposal, that rates should be scaled back so each class still receives the same percent increase.

7. Miscellaneous Issues

I&E witness Cline recommends the Company provide the Commission's Bureaus of Technical Utility Services and I&E an update to certain schedules no later than April 1, 2020 and April 1, 2021, reflecting capital expenditures, plant additions, and retirements by month for the FTY and FPFTY, respectively. I&E witness Cline explained, while the FPFTY allows projections, there should be verification of the

projections. Although Valley stated such information can be verified in the next base rate filing, in addition to I&E, the Commission has expressed interest to verify this information, and has broad authority to require such informational filings on a more frequent basis. Additionally, other utilities have consistently agreed to, and the Commission has approved, settlement terms regarding submission of similar reporting requirements

III. ISSUES RESOLVED AMONG THE PARTIES

I&E and the Company agree that CWIP should be removed from the FPFTY rate base as originally filed. I&E and Valley also agree on the Company's capital structure and cost of long-term debt used in the rate of return analysis. Regarding revenue allocation, I&E witness Cline accepted Valley's across-the-board rate increase for residential, commercial, interruptible, small industrial and transportation customers (excluding Firm-Contract).

IV. RATE BASE

A. Deductions from Rate Base – Construction Work in Progress

The Company's rate base claim includes $114,497 of Construction Work in Progress ("CWIP") based on the December 31, 2018 financial statements and estimated to be the same in the FTY and FPFTY.[13] I&E witness Ethan Cline recommended that the $114,497 CWIP claim be rejected.[14] CWIP allows a utility to recover costs for plant additions that will be completed and in service within six months of the end of the test

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[13] Valley Exhibit_(HSG-1), Schedule C1-6(R), line 5

[14] I&E Statement No. 3, pp. 7-8.

year. The Company elected to use a FPFTY ending December 31, 2020, which includes projections of plant in service and depreciation that will be recovered in rates during that twelve-month period. Accordingly, there is no reason to include a CWIP claim given that the plant should be included in the Company's FPFTY plant claim. Additionally, the Company indicated that all of its CWIP projects were estimated to be completed in 2019.[15] I&E argued that these projects should be included in the Company's FPFTY claim for depreciated original plant in service, not CWIP. To that end, I&E witness Cline stated that if the Company did not accurately reflect the projects included in its CWIP claim in either the FTY and FPFTY, the Company should revise its claim for original cost plant in service, accumulated depreciation, and annual depreciation expense in rebuttal testimony to properly reflect the completed and pending projects during the appropriate test year.[16] The Company accepted I&E's recommended adjustment in rebuttal testimony "because it is using an end-of-year rate base for the FPFTY, and because it did not include specific projects in CWIP"; therefore, the $114,497 CWIP claim should be removed from the FPFTY rate base as originally filed.[17]

B. Deductions from Rate Base – Cash Working Capital

The Company claimed $402,100 for Cash Working Capital ("CWC"), which was later revised to $399,027.[18] For ratemaking purposes, CWC is the capital needed to operate a utility between the rendition of service and the receipt of revenues in payment

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[15] I&E Statement No. 3, pp. 7-8.
[16] I&E Statement No. 3, p. 8.
[17] Valley Errata Statement No. 1-R, p. 7. To be clear, because the Company accepted I&E's CWIP adjustment in rebuttal, the total rate base figures reflected in I&E's tables at the attached Appendix A do not reflect further downward adjustments for I&E's CWIP recommendation.
[18] I&E Exhibit No. 1-SR, Schedule 4, p. 3.

for services rendered.[19] In short, CWC covers the lag between the payment of operating expenses and the receipt of revenues from ratepayers. In testimony, I&E witness Grab argued that all non-cash items, such as uncollectible accounts expense and taxes, must be removed from the Company's CWC claim.[20] The Company agreed with this recommendation in rebuttal testimony and updated its CWC claim to $399,027 to reflect the removal of the non-cash items identified in I&E's testimony.[21] Additionally, because all cash-based expenses are included in the Company's overall CWC claim, any adjustments to the Company's O&M expense claims impact the CWC allowance. I&E recommended that the Company's O&M expense claims be reduced by $103,405, which reduces the Company's CWC allowance by $12,925.[22] Because I&E's recommended expense adjustments are prudent for the reasons discussed herein, the CWC allowance of $386,102 ($399,027- $12,925) is reasonable.

C. Conclusion

Based upon the foregoing, I&E recommends a total $127,422 deduction from Valley's claimed rate base in its original filing. This deduction to rate base reflects I&E's recommended disallowance of CWIP and a reduction to CWC allowance. To be clear, the tables attached to I&E's Appendix A only reflect a recommended reduction to rate base of $12,295 for CWC because Valley's rebuttal position accepted I&E's CWIP recommendation.[23]

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[19] I&E Statement No. 1, p. 23.
[20] I&E Statement No. 1, p. 24.
[21] I&E Statement No. 1-SR (Errata Version), p. 31.
[22] I&E Statement No. 1-SR (Errata Version), p. 31.
[23] Valley Errata Statement No. 1-R, p. 7.

V. REVENUES

I&E recommends a $489,497 reduction to Valley's revenue increase request for the FPFTY as a result of its various adjustments. However, I&E has no recommendations regarding Valley's specific revenue claims for the FPFTY that support its overall revenue increase request.

VI. EXPENSES

A public utility is entitled to recover all of its reasonably incurred expenses necessary to provide service to customers.[24] Accordingly, Operating and Maintenance ("O&M") expenses, if properly incurred, may justly inform a rate increase proposal. However, if expenses are unreasonable, e.g., overstated, abnormal, unnecessary, or simply have not been incurred for the test year, they should not be relied upon. As explained above, the Company has the burden of proof regarding the justness and reasonableness of each expense.

A. Total O&M Expenses

In a typical rate case proceeding, a non-company party may, and typically does, challenge specifically identified O&M expenses and recommend an adjustment. However, Valley seeks to fundamentally change the manner in which the parties, and by extension, the Commission, reviews and approves companies' operating and maintenance expense claims. Simply put, Valley believes it is appropriate to update each and every O&M expense throughout the course of proceedings, including those expenses parties

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

have not addressed in direct testimony. In this proceeding, Valley introduced updates to essentially <u>all</u> of its O&M expenses in rebuttal testimony.[25] Valley then points to the updates as a basis to invalidate non-company parties' O&M recommendations.[26] This position renders non-company parties' review of O&M expenses in a rate case essentially meaningless. Following Valley's practice to its logical conclusion, the Company would simply be allowed to update all of its O&M expenses at hearings and any non-company position to the contrary would be summarily repudiated.

Valley cites no authority for its position other than appeals to "fairness" and "appropriateness".[27] To the contrary, there is clear legal authority to reject Valley's claimed rationale. First, introducing new claims after non-company parties have addressed the companies' direct position is a violation of due process principles.[28] The concern is simple: parties have not and will not have the opportunity to evaluate late-brought claims. To be clear, I&E's position as explained in the sections below did take into account Valley's rebuttal testimony <u>as it relates to specific claims I&E evaluated in direct testimony</u>. But to voluminously and constantly change the Company's O&M position leaves non-company parties in a hopeless position as to issues not addressed in non-company direct testimony. Second, and relatedly, there are clear Commission

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25 Valley Errata Statement No. 1-R, p. 5.

26 Valley's witnesses Howard S. Gorman, Edward Rogers, and Jamie Levering objected to I&E's recommended O&M adjustments generally. I&E Statement No. 1-SR (Errata Version), p. 4 (citing Valley Errata Statement No. 1-R, pp. 4-6; Valley Statement No. 4-R, p. 4; Valley Statement No. 5-R, pp. 2-3). I&E witness Grab addressed each of their specific objections in surrebuttal testimony. I&E Statement No. 2-SR (Errata), pp. 4-9. I&E specific recommended adjustments to O&M expenses immediately follow this section. In rejoinder testimony, Valley witnesses Gorman and Rogers confirmed the Company's continuing general objection to individual O&M adjustment recommendations. Tr., pp. 74-76 (Gorman), 199 (Rogers).

27 *See, e.g.*, Valley Errata Statement No. 1, p. 4.

28 *See, e.g.*, *Pa. P.U.C. v. City of Lancaster – Sewer Fund*, 2007 WL 517134 (Pa. P.U.C. 2007) (Commission agreed with ALJ "new claims brought in on rebuttal are improper, unfair and a violation of due process").

regulations that a party cannot introduce evidence in rebuttal phase that should have been included in the party's case-in-chief or substantially varies from the party's case-in-chief.[29] I&E avers Valley's attempt to wholesale revise its O&M position in rebuttal testimony, rather than specifically respond to non-company parties' specific O&M adjustment recommendations, is a prohibited attempt to introduce evidence that should have been introduced in direct testimony.

In addition to being procedurally improper, Valley's position creates factual inaccuracies. In rejoinder testimony, Valley witness Howard Gorman confirms presentation of FPFTY O&M costs is based on an escalation of FTY expenses, and does not remove non-recurring costs and plant activities.[30] But, as Valley witness Gorman also correctly states, "the Company must support each claim made in its rate application."[31] In direct testimony, I&E recommended adjustments for expenses that were not properly supported by the Company, properly calculated based on information provided by the Company, or were not consistent with sound ratemaking principles on an individual claim basis in the same manner in which the Company states that it is required to support each claim.[32] As I&E witness Grab appropriately opines, an overall adjustment to O&M expenses is not a more accurate method of determining a Company's allowable O&M expenses. [33] Instead, the proper way to analyze a Company's overall O&M expenses is by analyzing individual expense claims. Accordingly, I&E witness

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[29] 52 Pa. Code §§ 5.243(e)(2)-(3).
[30] Tr., pp. 104-106.
[31] Valley Errata Statement No. 1-R, p. 4.
[32] I&E Statement No. 1-SR (Errata Version), p. 6.
[33] I&E Statement No. 1-SR (Errata Version), pp. 6-7.

Grab recommended disallowance of the total change made to Administrative and General Expense of $30,096 made by Valley witness Gorman between direct and rebuttal testimony,[34] and instead continues to offer the below individual expense adjustments.

It is also important to realize Valley's argument would not be limited to this proceeding only. To the contrary, O&M expenses are a common point of dispute in rate cases. If the Commission allowed this practice here, it will set a very dangerous precedent that would likely be cited by any other utility company where O&M expenses are scrutinized. This will fatally handicap non-company parties' ability to evaluate individual expense accounts. Therefore, the Commission should reject Valley's attempt to wholesale revise its O&M expenses in rebuttal testimony, and should instead evaluate the merits of the non-company parties' O&M positions.

B. Regulatory Commission Expenses

I&E recommends that the entire $38,524 claim for Regulatory Commission Expenses be denied because Valley failed to provide an adequate explanation or support for its claim.[35] In discovery, I&E witness Grab asked the Company to provide a breakdown of the specific categories of expenses and their dollar amounts included in Regulatory Commission Expenses with supporting documentation for 2016, 2017, the historic test year ("HTY") ended December 31, 2018, the future test year ending ("FTY") December 31, 2019, and the FPFTY ending December 31, 2020.[36] In response, the Company provided a chart stating that Regulatory Commission Expenses are comprised

[34] I&E Statement No. 1-SR (Errata Version), p. 9 (citing Valley Errata Statement No. 1-R, p. 5).
[35] I&E Statement No. 1-SR (Errata Version), pp. 14.
[36] I&E Exhibit No. 1, Schedule 4, p. 1.

of "other" expenses.[37] Further clarification later provided by the Company indicated that Regulatory Commission Expenses are comprised of accrued taxes.[38] However, it was not until rebuttal testimony that Valley clearly identified regulatory commission expenses as consisting of the PUC assessment and Public Utility Realty Tax ("PURTA").[39]

Although Valley finally specifically identified this claim in rebuttal testimony, it should still be denied. The Company already claimed PURTA of $10,000 and PUC assessment expense of $24,296 on Valley Exhibit No. HSG-1, Schedule C1-3(R) as taxes other than income taxes.[40] Valley should not be allowed to double count for the same expenses. Therefore, as evidenced in the record, Valley's entire claim for Regulatory Commission Expenses should be denied.

C. Miscellaneous General Expense

I&E recommends that Valley's Miscellaneous General Expense claim be reduced by $14,415.[41] I&E's recommendation comprises two separate components. The first component of I&E's recommended $14,415 downward adjustment reflects the $7,351 downward adjustment ($73,373 – $66,022) Valley made to Miscellaneous General Expense in rebuttal testimony.[42] The second component of $7,064 comprises $6,603 for volunteer labor and $461 for volunteer expense.[43] The Company claims these expenses are appropriate for two reasons. First, for salaried employees, volunteer labor is a fixed

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[37] I&E Exhibit No. 1, Schedule 4, p. 1.
[38] I&E Exhibit No. 1, Schedule 4, p. 2.
[39] I&E Statement No. 1-SR (Errata Version), p. 15 (citing Valley Errata Statement No. 1-R, pp. 3-4 and Valley Statement No. 4-R, p. 6).
[40] I&E Statement No. 1-SR (Errata Version), p. 15.
[41] I&E Statement No. 1-SR (Errata Version), p. 21.
[42] I&E Statement No. 1-SR (Errata Version), p. 20.
[43] I&E Exhibit No. 1-SR, Schedule 1, p. 1.

cost and does not change the Company's costs.[44] Second, encouraging employees to participate in the community benefits ratepayers by reducing employee turnover and improving efficiency.[45]

I&E disagrees with both rationales. First, as explained by I&E witness Grab, volunteer labor does affect the Company's cost, since the Company is claiming volunteer labor, account 930.21, in its breakdown of Miscellaneous General Expenses,[46] which is part of the Company's claimed O&M expenses in its revenue requirement.[47] Second, I&E disagrees with Valley's assertion that volunteer labor benefits ratepayers by reducing employee turnover and improving efficiency. The Company has not provided adequate analysis, support, or documentation that volunteer labor provides direct benefits to ratepayers and is an operational cost necessary to provide safe and reliable natural gas service. Also, the Company did not provide a response to negate I&E's position that ratepayers should not be required to finance the Company's decision to pay its employees to provide volunteer labor as some of this volunteer labor may be for organizations that ratepayers would choose not to support.[48]

For the above reasons, I&E recommends Valley's claim for Miscellaneous General Expense should be reduced by $14,415.

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[44] Valley Errata Statement No. 1-R. p. 4
[45] Valley Errata Statement No. 1-R. p. 4
[46] I&E Exhibit No. 1, Schedule 6, p. 2.
[47] I&E Statement No. 1-SR (Errata Version), p. 18.
[48] I&E Statement No. 1-SR (Errata Version), p. 19.

D. Uncollectible Accounts Expense

I&E recommends a $24,201 reduction to the Company's claim of Uncollectible Accounts Expense based on three years of historic gross revenues and net write offs.[49] I&E also recommends that the Commission use the write-off ratio of 0.62% to determine the additional Uncollectible Accounts Expense attributable to any final base rate increase to be determined in this proceeding.[50] I&E's recommendation and the 0.62% write-off ratio is based on three years of historic gross revenues and net write-offs.[51]

Valley opposes I&E's recommendation and states the Company's calculation for Uncollectible Accounts Expense is based on the most recent Company experience and is more appropriate than I&E's recommendation, which uses three years of data.[52] However, as explained by I&E witness Grab, the flaw in Valley's analysis is that use of the most recent information to determine its Uncollectible Accounts Expense ignores the fact that this expense fluctuates from year to year.[53] The Company's three-year net write-off history is 0.49% for 2016, 0.52% for 2017, and 0.84% for the HTY.[54] The history shows a larger change in net write-offs from 2017 to 2018 of 0.32% (0.52% - 0.84%) and a smaller change between 2016 and 2017 of 0.03% (0.49% - 0.52%).[55] Since the HTY indicates a much larger net-write off ratio than the previous two years, the Company would be overstating its claim by using only the most recent experience.

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49 I&E Statement No. 1, p. 15.
50 I&E Statement No. 1, p. 16.
51 I&E Statement No. 1, pp. 15-16.
52 Valley Errata Statement No. 1-R, p. 4.
53 I&E Statement No. 1-SR (Errata Version), p. 22.
54 I&E Statement No. 1, p. 16.
55 I&E Statement No. 1-SR (Errata Version), p. 22.

Additionally, Valley witness Gorman did not respond to I&E's argument that the Company did not properly support or explain its large increase of $43,852 in Uncollectible Accounts Expense for the FTY. Without an explanation for this, the Company's direct testimony claim is unsupported.[56] Therefore, the Company's claim for Uncollectible Accounts Expense should be limited to $31,229, and the Commission should use the write-off ratio of 0.62% to determine the additional Uncollectible Accounts Expense attributable to any final base rate increase to be determined in this proceeding.

E. C&T Allocation

I&E recommends an allowance of $189,179 or a reduction of $44,429 ($233,608 - $189,179) to the Company's claim based on the Company's average annual percentage increase of the C&T Allocation to Valley from 2016 to the HTY.[57] Valley objects to I&E's recommended adjustment for two reasons. First, Valley asserts I&E's C&T Allocation recommendation was based on six months of costs.[58] Second, Valley states C&T Allocation recommendation should be rejected because it is unfair and inappropriate to adjust only accounts that produce unfavorable results for the Company.[59]

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56 I&E Statement No. 1-SR (Errata Version), p. 23.
57 I&E Statement No. 1, pp. 19-20
58 Valley Errata Statement No. 1-R, p. 3.
59 Valley Errata Statement No. 1-R, p. 3.

I&E disagrees with Valley. First, I&E's recommendation was not based on six months of costs, but was based on the Company's average annual percentage increase of the C&T Allocation to Valley from 2016 to the HTY.[60] Second, although I&E's recommendation will cause reductions to the Company's claim, this does not make it inappropriate or unfair. I&E's recommendation is based on the average annual increase of the C&T Allocation to Valley from 2016 to the HTY due to the Company's three-year history not supporting its 26% increase to the C&T Allocation from the HTY to the FTY. I&E's recommendation of $189,179 is in line with the Company's annualized FTY C&T Allocation of $172,261 increased by the Company's 1% inflation adjustment, which computes to $174,261 ($172,536 x 1.01).[61] The Company did not provide any new information to negate the rationale I&E presented in direct testimony for C&T Allocation.[62]

In oral rejoinder, Company witness Jamie Levering further corrected Valley's annualized FTY C&T Allocation expense to $171,254.97.[63] I&E's recommendation of $189,179 is still in line with this most recent annualized FTY C&T Allocation claim of $171,254.97.[64] Therefore, I&E continues to recommend Valley's C&T Allocation expense claim be reduced by $44,429.

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60 I&E Statement No. 1-SR (Errata Version), p. 26

61 I&E Statement No. 1, pp. 19-21

62 I&E Statement No. 1-SR (Errata Version), p. 26.

63 Tr., pp. 217-218.

64 If escalated by 1%, C&T Allocation expense would be $172,967.52 ($171,254.97 x 1.01 = $172,967.52).

F. Rate Case Expense

The nature and types of individual expenditures that comprise a utility's allowable claim for Rate Case Expense are those directly incurred to compile, present, and defend a utility's request for a base rate increase before the Commission. The actual expenditures and estimated costs typically found in an allowable rate case expense claim include legal fees for outside counsel, fees to outside consultants, and the cost of printing, document assembly, and postage.[65] In this proceeding, Valley claims $90,333 for rate case expense.[66]

The Commission characterizes rate case expense as a normal operating expense that should be accorded the same rate-making treatment as any other normalized expense.[67] To determine the length of normalization,[68] the Commission has looked to the average number of months between a company's rate case filings.[69]

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65 I&E Statement No. 1, p. 4.

66 I&E Statement No. 1, p. 5 (citing Valley Exhibit HSG-1, Schedule C1-3(R)).

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

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

69 I&E Statement No. 1, p. 4; *See, e.g., Pa. P.U.C. v. City of DuBois-Bureau of Water*, Docket No. R-2016-2554150, pp. 65-66 (Order entered March 28, 2017) (reconsideration of Rate Case Expense claim denied by Order entered May 18, 2017); *Pa. P.U.C. v. Emporium Water Company*, Docket No. R-2014-2402324, p. 50 (Order entered January 28, 2015); *Popowsky v. Pa. P.U.C.*, 674 A.2d 1149, 1154 (Pa. Cmwlth. 1996); *Pa. P.U.C. v. Borough of Media Water Works*, 1990 WL 10702673 (Pa. P.U.C. 1990). It should be noted, in 2012, the Commission granted PPL Electric Utilities Corporation ("PPL") permission to normalize its rate case expense over a 24-month period based on the expected timing of future base rate case filings. *Pa. P.U.C. v. PPL Electric Utilities Corporation*, 2012 WL 6758304 (Pa. P.U.C. 2012), pp. 47-48.. That particular base rate case was filed on March 30, 2012; however, PPL did not file its next base rate case until March 31, 2015, which was 36 months after the 2012 rate case filing. The 12-month discrepancy between PPL's projection in 2012 when it would next file and its actual filing date of the subsequent rate case shows that future projections are unreliable when determining an appropriate normalization period for the rate case expense. I&E's recommended normalization period in 2012 PPL proceeding was a 32-month interval based on the Company's historic filing frequency. I&E Statement No. 2, pp. 13-14 at Docket No. R-2012-2290597. The I&E recommendation in that instance produced a much more accurate result than the Company's stated future intention to file a rate case.

Valley's claimed 36-month normalization period is not supported by the Company's historic filing frequency.[70] Based upon Valley's actual filing history, I&E witness Grab calculated a 60-month average as follows:[71]

DOCKET NO.	DATE FILED	TIME ELAPSED
R-00049345	July 30, 2004	➢ 33 mos.
R-00072349	April 30, 2007	➢ 36 mos.
R-2010-2174470	April 30, 2010	➢ 110 mos.
R-2019-3008209	July 1, 2019	

Valley witnesses Gorman and Edward Rogers disagree with I&E's reliance on historical filing frequency. The witnesses argue Valley is being penalized for foregoing a rate case filing for nine years and cite to general concern of a rapidly changing industry.[72] Valley witness Rogers specifically cites Valley was able to avoid filing a base rate case since 2010 due to gaining a very large customer shortly after the 2010 rate case.[73]

I&E submits these factors do not merit deviation from the Commission's endorsed practice of reviewing historical filing frequency. I&E is not attempting to penalize the Company for managing its revenues effectively and avoiding filing a rate case for 110 months. Instead, I&E witness Grab is simply using the most accurate way to determine

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70 I&E Statement No. 1, p. 7.

71 $(33 + 36 + 110) \div 3$.

72 Valley Errata Statement No. 1-R, p. 7; Valley Statement No. 4-R, p. 5. In oral rejoinder testimony, Valley witness Gorman generally referred to the companies' subject of his consolidated testimony at hearings (i.e., Valley Gas, Inc., Wellsboro Electric Company, and Citizens' Electric Company of Lewisburg) when he stated "some of them talk about coming in [for the next base rate filing] a year or two". However, besides being contrary to Valley's position regarding Rate Case Expenses, he provides no basis to verify his statement, and offered no clarification when questioned. Tr., pp. 86, 122.

73 Valley Statement No. 4-R, p. 5.

the Rate Case Expense normalization period.[74] The Commission has clearly stated a utility's history is to be looked at in determining the normalized level of rate case expense for ratemaking purposes. Additionally, Valley's claim of change in industry generally will lead to accelerated rate case filings is a conclusory statement that lacks support.

In summary, Valley's concerns are unfounded and speculative, and Valley's claimed three year normalization period would result in an unreasonable increase to rates. Therefore, the Commission should adopt I&E's recommended disallowance of $36,133 for Rate Case Expense.

VII. FAIR RATE OF RETURN

A. Introduction

A rate of return allows payment to a utility's debt holders with interest and fair compensation for its equity shareholders. Rate of return is expressed as the amount of revenue an investment generates in the form of net income and is usually expressed as a percentage of the amount of capital invested over a given period of time. Rate of return is one of the components of the revenue requirement formula.[75] In *Bluefield Water Works & Improvements Co. v. Public Service Comm. of West Virginia*[76] and *Federal Power Commission v. Hope Natural Gas Co.*[77] the U.S. Supreme Court expressed the

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[74] I&E Statement No. 1-SR, p. 11.

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

[76] 292 U.S. 679 (1923) ("*Bluefield*") .

[77] 320 U.S. 591 (1944) ("*Hope Natural Gas*").

legal standards for determining rates of return. In *Bluefield,* the U.S. Supreme Court stated:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.[78]

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

> From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.[79]

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78 *Bluefield*, 262 U.S. 679, 692-93.

79 *Hope Natural Gas*, 320 U.S. 591.

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

- A utility is entitled to a return similar to that being earned by other enterprises with corresponding risks and uncertainties, but not as high as those earned by highly profitable or speculative ventures;
- A utility is entitled to a return level reasonably sufficient to assure financial soundness;
- A utility is entitled to a return sufficient to maintain and support its credit and raise necessary capital;
- A fair return can change (increase or decrease) along with economic conditions and capital markets.[80]

In accordance with these principles, I&E witness Christopher Henkel recommends the following rate of return for Valley:

Type of Capital	Ratios	Cost Rate	Weighted Cost Rate
Long-Term Debt	47.45 %	4.54 %	2.15 %
Common Equity	52.55 %	8.46 %	4.45 %
Total	100.00 %		6.60 %[81]

I&E witness Henkel accepts the Company's claimed capital structure. He did not accept the Company's original claimed cost of long-term debt of 4.98%; however, the Company later adjusted its 4.98%[82] long-term debt cost to I&E's recommended cost of 4.54%.[83] Additionally, he rejected the Company's originally claimed 11.35% return on common equity, and calculates his recommended return on equity pursuant to the

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

[81] I&E Statement No. 2, p. 7; I&E Exhibit No. 2, Schedule 1.

[82] Valley Statement No. 2, p. 3, line 7.

[83] Valley Statement No. 2-R, p. 5, lines 1-4.

Discounted Cash Flow ("DCF") methodology frequently used by the Commission while using the Capital Asset Pricing Model ("CAPM") as an alternate means to verify the reasonableness of his return.

B. Capital Structure

I&E accepts Valley's claimed capital structure. Although the Company's claimed capital structure is hypothetical, I&E witness Henkel opines Valley has not provided a forecasted capital structure for the FPFTY. Further, the hypothetical structure is appropriate for this proceeding because its ratios fall within the range of I&E witness Henkel's proxy group's capital structure ratios. For the past five years, I&E witness Henkel's proxy group's average long-term debt ratio ranged from 37.05% to 53.88% and its average common equity ratio ranged from 35.80% to 58.00%. The average capital structure of I&E witness Henkel's proxy group companies for the past five years was 43.16% long-term debt, 8.55% short-term debt, and 48.29% common equity.[84] However, Valley does not have short-term debt in its capital structure.[85]

C. Cost of Long-Term Debt

I&E did not accept Valley's original claimed debt cost rate of 4.98%.[86] I&E witness Henkel opined the Company's claimed long-term debt cost rate is overstated.[87] Specifically, the Company's claimed cost of long-term debt is based on a forecast as of March 31, 2019 and is not reflective of its projected cost of debt for the FPFTY. I&E witness Henkel pointed to Company-provided information showing that its effective cost

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[84] I&E Exhibit No. 2, Schedule 3.
[85] I&E Statement No. 2, pp. 11-13.
[86] I&E Statement No. 2, p. 9.
[87] I&E Statement No. 2, p. 13.

of long-term debt during the FPFTY is projected to be 44 basis-points lower than Valley witness D'Ascendis's claims.[88] Accordingly, I&E witness Henkel computed and recommended a long-term debt cost rate of 4.54%.[89] I&E witness Henkel's recommendation falls within his proxy group's cost of long-term debt which ranges from 4.26% to 5.25%, and averages 4.87%.[90] Subsequently, Valley witness D'Ascendis adjusted his cost of debt from 4.98%[91] to 4.54%,[92] the same figure recommended by I&E witness Henkel. Therefore, I&E and Valley are in agreement, and the Commission should accept the 4.54% cost of debt claim.

D. Return on Common Equity

1. Introduction

The Company originally requested an equity return of 11.35%, which was later reduced to 10.60% in rebuttal testimony.[93] As recommended by I&E witness Henkel, an 8.46% return on common equity, based upon I&E witness Henkel's use of a similarly-situated proxy group of companies, best balances the interests of the ratepayers and the Company. and should be adopted in lieu of the Company's requested 10.60%.

2. Proxy Group

A proxy (or barometer) group is a group of companies that act as a benchmark for determining the utility's rate of return. A proxy group is also typically used because using data exclusively from one company may be less reliable than using a group of

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[88] I&E Statement No. 2, p. 14; I&E Exhibit No. 2, Schedule 4, pp. 2-3.
[89] I&E Statement No. 2, p. 14; I&E Exhibit No. 2, Schedule 4, pp. 2-3.
[90] I&E Exhibit No. 2, Schedule 5.
[91] Valley Statement No. 2, p. 3, line 7.
[92] Valley Statement No. 2-R, p. 5, lines 1-4.
[93] I&E Statement No. 2-SR, p. 4.

companies because the data for one company may be subject to short-term anomalies that distort its return on equity. Use of a proxy group smooths these potential anomalies. Use of a proxy group also satisfies the long-established principle of utility regulation that seeks to provide the utility the opportunity to earn a return equal to that of similar risk enterprises.[94]

I&E witness Henkel selected his proxy group based on the following criteria:[95]

1. Fifty percent or more of the company's revenue were generated from the regulated natural gas industry;

2. The company's stock was publicly traded;

3. Investment information for the company was available from more than one source, including Value Line;

4. The company must not be involved in an announced merger or the target of an announced acquisition;

5. The company must have five consecutive years of historic earnings data; and

6. The company must be operating in a state that has a deregulated gas utility market.

I&E witness Henkel's proxy group comprises Atmos Energy Corp., NiSource Inc., Northwest Natural Holding Co., ONE Gas, Inc., and Spire, Inc.[96]

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[94] I&E Statement No. 2, p. 6.
[95] I&E Statement No. 2, p. 7.
[96] I&E Statement No. 2, p. 9.

3. I&E's Discounted Cash Flow Analysis

Although there are four methods commonly presented to estimate the cost of common equity.[97] I&E witness Henkel uses the DCF method applied to his proxy group of similar utilities to calculate a fair return on equity. I&E witness Henkel's analysis is in accordance with the Commission's historical use the DCF as the primary methodology to determine a utility's cost of equity.[98]

In sum, the DCF is "the 'dividend discount model' of financial theory, which maintains that the value (price) of any security or commodity is the discounted present value of all future cash flows. The DCF model assumes that investors evaluate stocks in the classical economic framework, which maintains that the value of a financial asset is determined by its earning power, or its ability to generate future cash flows.[99]

The DCF recognizes the time value of money, is forward-looking, and has wide-spread regulatory acceptance. I&E witness Henkel confirms the reasonableness of his DCF calculation with a comparison to the CAPM results because the Commission has expressed an interest in having results from another methodology as a point of

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97 The four include the DCF Model, CAPM, the Risk Premium ("RP") Method, and the Comparable Earnings ("CE") Method. I&E Statement No. 2, p. 15. I&E witness Henkel provided a brief overview of each method. I&E Statement No 2, pp. 15-17.

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

99 I&E Statement No. 2, p. 15.

comparison. While the CAPM is also forward-looking and is based on the concept of risk and return, it and the other methodologies have flaws that should discount their use as primary determinants.[100]

I&E witness Henkel recommends a cost of common equity of 8.46%.[101] I&E witness Henkel's recommendation includes a dividend yield of 2.71% and a recommended growth rate of 5.75%.[102] I&E witness Henkel's analysis uses a spot dividend yield and a 52-week dividend yield, and earnings growth forecasts. I&E witness Henkel employs the standard DCF model formula, $K = D_1/P_0 + g$, where K = the cost of equity, D_1 = the dividend expected during the year; P_0 = the current price of the stock; and g = the expected growth rate. When a forecast of D_1 is not available, D_0 (the current dividend) must be adjusted by ½ the expected growth rate in order to account for changes in the dividend paid in period 1.[103]

a) Dividend yields

A representative yield must be calculated over a time frame sufficient to avoid short-term anomalies and stale data. I&E witness Henkel's dividend yield calculation places equal emphasis on the most recent spot (2.61%) and 52-week average (2.82%) dividend yields resulting in an average dividend yield of 2.71%.[104]

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[100] I&E Statement No. 2, pp. 15-21.
[101] I&E Statement No. 2, p. 22; I&E Exhibit No. 2, Schedule 6.
[102] I&E Statement No. 2, p. 27.
[103] I&E Statement No. 1, p. 23.
[104] I&E Statement No. 2, p. 24.

b) Growth rates

I&E witness Henkel used earnings growth forecasts to calculate his expected growth rate. His earnings forecasts are developed from projected growth rates using 5-year estimates from established forecasting entities for his proxy group of companies, yielding an average 5-year growth forecast of 5.75%.[105]

c) Comparison to CAPM

I&E witness Henkel analysis of a return on equity using the CAPM methodology uses the standard CAPM formula $K = R_f + \beta(R_m - R_f)$, where K = the cost of equity, R_f = the risk-free rate of return; β = beta, which measures the systematic risk of an asset, and R_m = the expected rate of return on the overall stock.[106]

For his CAPM analysis, I&E witness Henkel chose the risk-free rate of return (R_f) from the projected yield on 10-year Treasury Bonds as the most stable risk-free measure. With this choice, I&E witness Henkel balanced out issues related to use of long term bonds and short term T-Bills.[107] For his beta, I&E witness Henkel used the average of the betas from the Value Line Investment Survey.[108] To arrive at a representative expected return on the overall stock market, I&E witness Henkel reviewed Value Line's 1700 stocks and the S&P 500. The result of the overall stock market returns based on I&E witness Henkel's CAPM analysis is 11.49%. This, in turn, yields a cost of equity result of 8.04%.[109]

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105 I&E Statement No. 2, p. 24.
106 I&E Statement No. 2, p. 27.
107 I&E Statement No. 2, pp. 28-29.
108 I&E Statement No. 2, p. 28.
109 I&E Statement No. 2, pp. 29-30.

I&E witness Henkel gave no specific weight to his CAPM results because of his concerns that unlike the DCF, which measures the cost of equity directly by measuring the discounted present value of future cash flows, the CAPM measures the cost of equity indirectly and can be manipulated by the time period used.[110] However, I&E submits that for purposes of providing another point of comparison, the 8.04% CAPM analysis confirms the reasonableness of I&E witness Henkel's 8.46% return under his DCF calculation.[111]

4. Valley's Proposed Return on Common Equity

Valley witness Dylan D'Ascendis relies on the DCF, CAPM, RP, and CE methodologies in presenting his recommended return on equity. Based upon the use of his proxy groups, Valley witness D'Ascendis calculates the following equity returns:[112]

Measure	Gas Proxy Group
DCF	9.02%
RP	9.26%
CAPM	9.22%
CE	10.26%
Indicated Cost of Equity	**9.35%**

[110] I&E Statement No. 2, pp. 34-35. I&E witness Henkel's presentation of a CAPM analysis serves as a check on his DCF analysis. For the reasons set forth in I&E witness Henkel's direct testimony, the DCF model should be used as the primary method in determining a fair return on equity.

[111] In rebuttal testimony, Valley witness D'Ascendis provided analysis disputing various data sources relied upon by I&E witness Henkel in his CAPM analysis. Valley Statement No. 2-R, pp. 26-27. As I&E witness Henkel explains, even if Valley witness D'Ascendis' recommended return on the overall market rate was accepted by I&E, the CAPM result would only adjust from 8.04% to 8.59%, validating I&E's DCF result of 8.46%. I&E Statement No. 2-SR, p. 16.

[112] Valley Exhibit_(DWD-1R), Schedule DWD-1R, Page 2 of 2.

In addition to calculating an average return on equity of 9.35%, Valley witness D'Ascendis's recommended common equity cost rate reflects size and performance factor adjustments. Specifically, Valley witness D'Ascendis recommends both a 100 basis points upwards adjustment to reflect his claim that Valley has higher business risk due to its small size relative to his proxy group, and a 25 basis points upwards adjustment as a performance factor.[113]

I&E witness Henkel opposes Valley witness D'Ascendis's calculated return on equity for several reasons. First, Valley witness D'Ascendis's selected proxy group is flawed in that two of his selections fail to meet I&E witness Henkel's criteria. Second, Valley witness D'Ascendis inappropriately uses and gives undue weight to the CAPM, RP and CE methods. Third, Valley witness D'Ascendis's adjustments for size and performance factor are unsupported and inappropriate.

a) Valley's Flawed Proxy Group

Valley witness Dylan D'Ascendis selected his proxy group based on the following criteria:[114]

1. The company must be included in the Natural Gas Utility Group of *Value Line's Standard Edition* (March 1, 2019);

2. The company must have 60% or greater of fiscal year 2017 total operating income derived from, and 60% or greater of fiscal year 2017 total assets attributable to, regulated gas distribution operations;

3. At the time of preparation of Mr. D'Ascendis' testimony, the company must not have publicly announced that they were involved in any major merger or acquisition activity (i.e., one publicly-traded utility merging with or acquiring another);

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[113] Valley Statement No. 2, pp. 44-45.
[114] Valley Statement No. 2, p. 12.

4. The company must not have cut or omitted their common dividends during the five years ended 2017 or through the time of preparation of Mr. D'Ascendis' testimony;

5. The company must have *Value Line* and Bloomberg Professional Services adjusted betas;

6. The company must have positive *Value Line* five-year dividends per share growth rate projections; and

7. The company must have *Value* Line, Reuters, Zacks, or Yahoo! Finance consensus five-year earnings per share growth rate projections.

Valley witness D'Ascendis's proxy group comprises Atmos Energy Corp.; Northwest Natural Holding Co.; ONE Gas, Inc.; South Jersey Industries, Inc.; Southwest Gas Holdings, Inc.; Spire, Inc.[115]

I&E witness Henkel disputes Valley witness D'Ascendis's proxy group. In direct testimony, I&E witness Henkel excludes two of the companies Valley witness D'Ascendis originally uses and includes one company that Valley witness D'Ascendis does not use.[116] The two excluded companies are New Jersey Resources Corp. and South Jersey Industries, Inc. Both companies did not meet I&E witness Henkel's first criterion that fifty percent or more of the company's revenues must be generated from the regulated gas utility industry. If Valley witness D'Ascendis' second criterion[117] for selecting proxy group companies was based upon fiscal year 2018 data, both New Jersey

[115] Valley Statement No. 2-R, p. 4.

[116] I&E witness Henkel included Nisource, Inc. in his proxy group while Valley witness D'Ascendis did not include Nisource, Inc. in his Gas Utility Proxy Group. I&E Statement No. 2, p. 11.

[117] Valley Statement No. 2, p. 12, lines 12-14.

Resources Corp. and South Jersey Industries, Inc. would not have qualified for his Gas Utility Proxy Group. Stated differently, I&E witness Henkel's proxy group criteria are based upon more current information.[118]

In rebuttal testimony, Valley witness D'Ascendis removed New Jersey Resources Corporation after re-running his selection criteria.[119] However, South Jersey Industries, Inc. remains part of Valley's proxy group. I&E submits that the Commission should disregard comparison to South Jersey Industries, Inc., and use Valley witness Henkel's proxy group as most comparable to Valley in developing an appropriate cost of equity.

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

After forming his proxy group, Valley witness D'Ascendis calculated common equity costs with data inputs specific to these companies using the DCF, RP, and CAPM methods.[120] By contrast, I&E witness Henkel recommended using the DCF method as the primary method to determine the cost of common equity and using the results of the CAPM as a comparison to the DCF results.[121]

As explained above, I&E witness Henkel's analysis is consistent with the methodology commonly endorsed by the Commission in base rate proceedings, and should be approved here. Just recently, the Commission affirmed primary reliance on the

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[118] I&E Statement No. 2, p. 10.
[119] Valley Statement No. 2-R, pp. 3-4.
[120] I&E Statement No. 2, p. 33.
[121] I&E Statement No. 2, p. 22.

DCF and rejected giving equal weight to the other methodologies. In *City of Dubois – Bureau of Water*, the Commission stated:

> [T]he City's cost of equity in this proceeding should be based upon the use of the DCF methodology, with the other methodology results used as a check on the reasonableness of the DCF results. We note that we have primarily relied upon the DCF methodology in arriving at previous determinations of the proper cost of equity and utilized the results of methods other than the DCF, such as the CAPM and RP methods, as a check upon the reasonableness of the DCF derived equity return calculation, tempered by informed judgement. We are not persuaded by the arguments of the City that we should assign equal weight to the multiple methodologies.[122]

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

> The ALJs adopted the positions of I&E and the OCA that the DCF method should be the primary method used to determine the cost of common equity, and that the results of the CAPM should be used as a comparison to the DCF results. The ALJs found no reason to deviate from these preferred methods in this proceeding. Therefore, the ALJs recommended against the use of the RP and CE methods proffered by UGI. Further, the ALJs noted that the companies analyzed under the CE model are too dissimilar to a regulated public utility company. R.D. at 60, 76, 81-82. we shall adopt the positions of I&E and the OCA and shall base our determination of the appropriate cost of equity on the results of the DCF method and shall use the CAPM results as a comparison thereto. As both Parties noted, the use of the DCF model has historically been our preferred methodology. This was recently affirmed in *Pa. P.U.C., et. al v. City of Dubois-Bureau of Water*, Docket No. R-2016-2554150, *et. al.* (Order entered March 28, 2017). Like the ALJs, we find no reason to deviate from the use of this method in the instant case. Accordingly, we shall deny UGI's Exceptions on this issue.[123]

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[122] *City of DuBois – Bureau of Water*, pp. 96-97.
[123] *UGI Utilities, Inc. – Electric Division*, pp. 103-106.

As endorsed by the Commission, I&E witness Henkel did use the CAPM method as a comparison to the DCF results. However, there are weakness associated with the CAPM and it should only be used a secondary method.[124] The CAPM is a less reliable indicator because it provides an indirect measurement of the cost of equity. CAPM uses U.S. Treasury Bonds and, typically, the return of the S&P 500 as proxies for the risk-free rate and overall market return, respectively. However, its result can be manipulated based on the type of debt and equity inputs used; therefore, it introduces a greater amount of subjectivity with respect to determining the cost of equity of a given company.[125] CAPM has also been subject to criticism from academic literature.[126]

I&E witness Henkel excluded the RP method from his analysis because it is a simplified version of the CAPM and, in addition to being subject to the same faults listed above, the RP method does not recognize company-specific risk through beta.[127] Finally, I&E witness Henkel excluded the CE method from his analysis because the choice of which companies are comparable is subjective, and it is debatable whether historic accounting values are representative of the future. Moreover, the Commission has long recognized the problem with this method, and as a result, its historical usage in this regulatory forum has been minimal.[128]

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[124] I&E Statement No. 2, p. 18.

[125] I&E Statement No. 2, pp. 18-19.

[126] I&E Statement No. 2, pp. 19-20. By contrast, I&E witness Henkel cites academic literature supporting use of the DCF. I&E Statement No. 2-SR, p. 8 (citing Brealey, Richard A., et al. *Principles of Corporate Finance*, Concise Edition, McGraw-Hill/Irwin, 2011, p. 82, Using the DCF Model to Set Gas and Electricity Prices ("[B]oth utilities and regulators work hard to estimate the cost of equity accurately. They've noticed that utilities are mature, stable companies that are tailor-made for application of the constant-growth DCF formula")).

[127] I&E Statement No. 2, p. 20.

[128] I&E Statement No. 2, pp. 20-21.

Valley witness D'Ascendis cites two Orders to claim the Commission has considered multiple cost of equity models.[129] I&E avers Valley witness D'Ascendis is incorrect in both counts. First, in *Columbia Water*, the Commission specifically states that it used the DCF method as the foundation in determining the cost of equity.[130] Second, in *Emporium Water*, the Commission simply summarized the recommendations presented by OCA, I&E, and the Company. It did not specifically comment on which model(s) it relied on.[131] Accordingly, the Commission should reject Valley's equal weighting of various models, and endorse use of the DCF method, with CAPM used as a comparison.

(i) Inappropriate Use of PRPM and Proprietary Software

Valley witness D'Ascendis inappropriately relied upon Eviews©[132] statistical software to calculate projected equity risk premiums for each of his proxy group companies while performing a predictive risk premium analysis ("PRPM"). The PRPM is a specialized form of the RP method used to calculate a company's return on equity.[133] A simple internet search performed by I&E witness Henkel reveals that Eviews© software users must pay an expensive license fee to benefit from its use; therefore, its usage is limited solely to investors willing and able to pay the high fee. I&E avers it is inappropriate to require non-company witnesses to purchase this software simply to

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[129] Valley Statement No. 2-R, pp. 9-10 (citing *Pa. P.U.C. v. Emporium Water Company*, Docket No. R-2014-2402324 (Order entered January 28, 2015) ("*Emporium Water*"); *Pa. P.U.C. v. The Columbia Water Company*, Docket No. R-2013-2360798 (Order entered January 23, 2014) ("*Columbia Water*").

[130] *Columbia Water*, p. 43.

[131] *Emporium Water*, pp. 34-35.

[132] Valley Statement No. 2, p. 21.

[133] Valley Statement No. 2, pp. 20-21.

recreate Valley witness D'Ascendis's flawed analysis. Additionally, I&E witness Henkel asserts the PRPM does not solve the problem of the RP method because it is still an indirect measure of the cost of equity and it uses historic data that may not represent the current or future economic conditions. Further, the PRPM is a highly specialized form of the RP method, which, for reasons mentioned previously, I&E does not use.[134] Accordingly, I&E recommends the Commission reject the Company's RP and PRPM approaches.

(ii) Inappropriate Comparison to Non-Regulated Companies

I&E asserts Valley's comparison to non-regulated companies is inappropriate and should be disregarded by the Commission.[135] Valley witness D'Ascendis implies his comparison is appropriate because, in the landmark *Hope* and *Bluefield* cases, the U.S. Supreme Court did not specify that comparable risk companies had to be utilities.[136] Although *Hope* and *Bluefield* did not state a utility may only earn a return similar to other utilities, it is clear a utility may not earn a return as high as those earned by highly profitable or speculative ventures.[137] As explained below, Valley witness D'Ascendis's non-regulated proxy group consistently produces higher returns than the utility proxy

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[134] I&E Statement No. 2, pp. 31-32.

[135] Valley witness D'Ascendis assembled a proxy group consisting of sixteen non-price regulated firms which he asserts are comparable in terms of total risk to the Gas Utility Proxy Group. Valley Statement No. 2, pp. 36-37. After forming his proxy group of sixteen non-price regulated firms, Valley witness D'Ascendis calculated common equity costs with data inputs specific to these companies using the DCF, RP, and CAPM methods. Valley Exhibit DWD-1, Schedule DWD-7, pp. 1, 2, 3, and 6.

[136] Valley Statement No. 2, p. 4; Valley Statement No. 2-SR, p. 44.

[137] *Bluefield*, 262 U.S. 679, at 692-93.

group.[138] Therefore, he has not convincingly demonstrated his analysis shows his non-regulated proxy group is an appropriate comparison.

If the non-price regulated company proxy group is truly similar in total risk to Valley, correspondingly, I&E witness Henkel opined he expected to see similar results in the calculation of the DCF, RP, and CAPM model return on equities between the Gas Utility and Non-Price Regulated Company proxy groups used by Valley witness D'Ascendis. Instead, the Non-Price Regulated Company proxy groups results were higher for all three methods. Most notably, the DCF model, which provides the most direct measurement of return on equity, was 24% higher for the non-price regulated company proxy group.[139]

I&E witness Henkel further opines the process of choosing a proxy group of non-utility companies similar in risk to Valley is highly speculative and subjective.[140] Further, the Commission has ruled on the use of the CE approach, specifically, the use of non-utility companies in comparable groups, and stated:

> The use of nonregulated companies as a comparable group for regulated firms requires numerous unsupportable assumptions which results in a highly speculative finding.[141]

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[138] By contrast, I&E witness Henkel has only relied on comparison to utilities, which clearly satisfies the rules set forth in *Hope* and *Bluefield*.

[139] I&E Statement No. 2, p. 34. OCA witness Habr similarly notes "[Valley witness] D'Ascendis's non-price regulated proxy groups were systematically higher than the average common equity costs for his electric and gas proxy groups." OCA Statement No. 3-SR, pp. 4-5.

[140] I&E Statement No. 2, p. 33. I&E witness Henkel characterizes Valley witness D'Ascendis's analysis of non-regulated companies as a blend of the CE approach into the DCF, RP, and CAPM methods. Id.

[141] *Pa. P.U.C. v. Philadelphia Electric Co.*, 33 PUR 4th 319, 341 (Pa. P.U.C. 1980).

More recently, in *UGI Utilities, Inc. – Electric Division*, the Commission criticized use of the CE approach, stating:

> With respect to the CE method…this cost of equity method utilizes data for non-regulated firms. Thus, by its very nature, determining which companies are comparable is entirely subjective. In addition, the record indicates that the companies UGI utilized in its CE group results in the selection of companies such as Coca-Cola Company, Kellogg Company, and Walmart Stores, Inc.….Each of these companies operate in industries that are very different from a utility company and have significantly more competition, which would require a higher return for the associated additional risk. [142]

In summary, consistent with Commission precedent and established ratemaking principles, I&E recommends rejection of all analyses performed by the Company which used the non-regulated price company proxy group to calculate Valley's return on equity in this proceeding.

(iii) Inappropriate Risk-Free Rate

I&E witness Henkel recommends the Commission reject Valley witness D'Ascendis's method of calculating the risk-free rate[143] used for his CAPM analysis.[144] Valley witness D'Ascendis's claim is based upon the *Blue Chip* consensus forecast of the expected yields on 30-year U.S. Treasury Bonds for the six quarters ending with the third calendar quarter of 2020, and long-term projections for the years 2020 to 2024 and 2025 to 2029.[145]

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142 *UGI Utilities, Inc. – Electric Division*.

143 Valley witness D'Ascendis's original filed risk-free rate was 3.36%. Valley Statement No. 2, p. 33 and Exhibit DWD-1, Schedule DWD-5, p. 1. In rebuttal testimony, Valley witness D'Ascendis updated his risk-free rate to 2.64%. Valley Exhibit DWD-1R, Schedule DWD-1R, p. 42.

144 I&E Statement No. 2, p. 37.

145 Valley Statement No. 2, p. 33, lines 13-17.

I&E witness Henkel has two primary criticisms. First, Valley witness D'Ascendis' calculation of the risk free rate based on the 30-year U.S Treasury bond is no longer representative of U.S. interest rate market conditions.[146] The Federal Reserve stated in its press release of July 31, 2019 that the Federal Open Market Committee (FOMC) decided to lower the target range for the federal funds rate to 2 to 2-1/4 percent. The purpose of the rate cut is to achieve sustained expansion of economic activity, strong labor market conditions, and to hold inflation at about 2 percent.[147] Even before the July 31 press release, interest rates on the U.S. 30-year bond were falling; the July 31 release influenced the U.S. 30-year bond rate dramatically lower.[148] Since the July 31, 2019 press release, the FOMC issued another press release which lowered the target range for the federal funds rate by another 25-basis points to 1-3/4 to 2 percent.[149]

Second, I&E witness Henkel opines a 10-Year U.S. Treasury Note is a better proxy that the 30-year U.S. Treasury Bonds.[150] Long-term Treasury Bonds have substantial maturity risk associated with market risk and the risk of unexpected inflation. Long-term treasuries normally offer higher yields to compensate investors for these risks. The Commission recently agreed with I&E and recognized the 10-year Treasury Note as the superior measure of the risk-free rate of return, and stated:[151]

> We agree with I&E and the ALJs that using the yield on the 10-year Treasury Note provides a better measure of the risk-free rate of return than using the yield on the 30-year

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[146] I&E Statement No. 2, p. 38.
[147] I&E Exhibit No. 2, Schedule 13.
[148] I&E Statement No. 2, p. 38 (Graph showing downward trajectory of U.S. 30 Year Treasury Bond).
[149] I&E Exhibit No. 2, Schedule 14
[150] I&E Statement No. 2, p. 39.
[151] *UGI Utilities, Inc. – Electric Division*, p. 99.

> Treasury Bond, as recommended by UGI. In our view, using the 10-year Treasury Note balances the shortcomings of the short-term T-Bill and the 30-year Treasury Bond. Although long-term Treasury Bonds have less risk of being influenced by federal policies, they have substantial maturity risk associated with the market risk. In addition, long-term Treasury Bonds bear the risk of unexpected inflation.

Accordingly, I&E recommends the Commission reject Valley witness D'Ascendis's use of 30-Year Treasury Bonds for CAPM analysis.

(iv) Inappropriate Use of ECAPM Analysis

I&E witness Henkel objects to Valley witness D'Ascendis's use of an empirical capital asset pricing model ("ECAPM") to adjust his CAPM results upward.[152] Specifically, I&E witness Henkel asserts ECAPM merely adds a measure of subjectivity to the CAPM as an attempt to refine its predicted Security Market Line ("SML") through an additional factor that corrects none of the underlying problems of the model.[153]

I&E witness Henkel explains ECAPM is a modified version of the CAPM which attempts to address the belief that actual risk versus return correlation is flatter than what is predicted by the CAPM. The implication is that the CAPM under-estimates returns with lower levels of risk and over-estimates the returns associated with higher levels of risk. The model entails assigning 25% weight to the market beta and 75% weight to the individual company or proxy group. It is assumed that the resulting flattened SML addresses the claimed inaccuracy of the CAPM.[154]

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[152] I&E Statement No. 2, p. 31.
[153] I&E Statement No. 2, p. 40.
[154] I&E Statement No. 2, pp. 39-40.

Valley witness D'Ascendis claims that numerous tests of the CAPM have confirmed the validity to which security returns and betas are related, and further suggests that the actual SML defined by the CAPM is not as steeply sloped as the predicted SML.[155] I&E witness Henkel rejects this rationale. While some studies indicate that the CAPM inaccurately defines the SML, the degree to which the CAPM requires adjustment is variable. As stated above, the ECAPM merely adds a measure of subjectivity to the CAPM. Additionally, the additional layer of subjectivity introduced by ECAPM only provides a stronger basis to rely on the DCF, as I&E witness Henkel has done, as the primary method to calculate a utility's cost of equity.[156] Therefore, the Commission should reject Valley witness D'Ascendis's reliance on an ECAPM analysis.

(v) Inappropriate Use of Market-to-Book Ratios

I&E witness Henkel rejects Valley witness D'Ascendis criticism that the market based DCF understates the return required by investors[157] Valley witness D'Ascendis claims this understatement exists because the market-to-book ratio for the proxy group

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[155] Valley Statement No. 2, p. 32. Thereby implying beta does not accurately measure systematic risk. I&E Statement No. 2, p. 40.

[156] I&E Statement No. 2, pp. 40-41. In rebuttal testimony, Valley witness D'Ascendis introduces an article claiming to support use of the ECAPM. Valley Statement No. 2-R, pp. 27-29. As I&E witness Henkel explains, this use of the article takes it out of its central context of invalidating the CAPM method, and does not conclude the ECAPM solves any of CAPM's flaws. I&E Statement No. 2-SR, pp. 17-18.

[157] I&E Statement No. 2-SR, p. 9.

companies is above 1.0.[158] I&E witness Henkel explains the flaw in Valley witness D'Ascendis's claim as follows:[159]

> Although, there are differences between the book value and market value of [gas] utilities, Mr. D'Ascendis' assertion that the difference causes the DCF to undervalue the rate of return assumes that investors are unaware of the difference. The forecasted growth rates used in the DCF are set by analysts based on current conditions and what they expect the future could be for the stock. As Mr. D'Ascendis points out, the current market-to-book ratios for the gas utility proxy group are extraordinarily high compared with the ten-year average. In this scenario, no rational investor would invest in a utility stock that has been trading above book value for several years and be surprised that rates continue to be set based on the book value capital structure. A market-to-book ratio of above 1.0 for utility stocks reflects their value in the market and implies that investors expect future cash flows to be more valuable than the historical accounting value of the company. Since the stock market is impacted by regulatory policies, and the economic and financial conditions, a market-to-book ratio could be less than 1.0 when the stock market is in a depression, or a company is experiencing under-performance, so it is inappropriate to evaluate DCF results with the market-to-book ratio.

Simply put, Valley witness D'Ascendis has not demonstrated investors expect utility returns to be set on a different basis than book value. As OCA witness Habr similarly states: [160]

> The regulatory purpose for establishing a new cost of common equity is to assure that customers only pay for the costs incurred to provide the utility service and that company shareholders have the opportunity to earn the current cost of common equity on their investment in the utility company <u>as measured by the book value of common equity</u>. Any

[158] Valley Statement No. 2-R, pp. 10-11.
[159] I&E Statement No. 2-SR, pp. 9-10.
[160] As OCA Statement No. 3-SR, pp. 1-2 (emphasis added). OCA witness Habr similarly rejects Valley witness D'Ascendis's criticism.

> regulatory impact on the utility's [market-to-book] ratio is related to the relationship between the utility's cost of common equity and the return investors' [sic] expect the utility to earn on its book value common equity.

Accordingly, as recommended by I&E witness Henkel, the Commission should reject Valley witness D'Ascendis's criticism of the DCF model through analysis of market-to-book ratios.

c) Valley's Inappropriate Equity Adjustments

Valley witness D'Asecndis's rate of return recommendations are also overstated by his assignment of several inappropriate equity adjustments to Valley.

(i) Unsupported Size Adjustment

In addition to the inflated return on equity resulting from Valley witness D'Ascendis's faulty methods described above, Valley witness D'Ascendis proposes a 100-basis point addition to his indicated common equity cost rate because he opines that smaller companies are less able to cope with significant events affecting sales, revenues or earnings.[161] Additionally, Valley witness D'Ascendis argues that loss of revenue from a few larger customers would have a greater effect on a small company.[162] To support his claim, Valley witness D'Ascendis quotes three sources of technical literature,[163] and attempts to quantify his size adjustment by comparing Valley to companies listed on the

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[161] Valley Statement No. 2, p. 41.

[162] Valley Statement No. 2, pp. 41-42.

[163] *Duff & Phelps 2019 Valuation Handbook guide to Cost of Capital – Market Results Through 2018*, Valley Statement No. 2, p. 42; *The Capital Asset Pricing Model: Theory & Evidence*, Fama and French, Valley Statement No. 2, p. 42; and also quotes Professor Eugene Brigham, Valley Statement No. 2, p. 43.

New York Stock Exchange ("NYSE"), American Stock Exchange ("AMEX"), and NASDAQ. [164]

I&E witness Henkel rebutted Valley witness D'Ascendis's claims by citing the variance year-to-year of returns for large- and small-capitalization stocks listed on the NYSE, AMEX, and NASDAQ.[165] I&E witness Henkel also opines Valley witness D'Ascendis's size adjustment is unnecessary because none of the technical literature he cites supporting investment adjustments related to the size of a company is specific to the utility industry; therefore, such an adjustment is not appropriate.[166] In *UGI Utilities, Inc. – Electric Division*, the Commission rejected use of technical literature not specific to the regulated utility industry to support a size adjustment.[167]

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[164] Valley Statement No. 2, p. 45.

[165] I&E Statement No. 2-SR, pp. 22-23 (citing Ibbotson *Stocks, Bonds, Bills & Inflation: 2015 Yearbook*, pp. 100, 109, 112 ("While the largest stocks actually declined in 2001, the smallest stocks rose more than 30%. A more extreme case occurred in the depression-recovery year of 1933, when the difference between the first and 10th decile returns was far more substantial. The divergence in the performance of small- and large- cap stocks is evident. In 30 of the 89 years since 1926, the difference between the total returns of the largest stocks (decile 1) and the smallest stocks (decile 10) has been greater than 25 percentage points.... In four of the last 10 years, large-capitalization stocks (deciles 1-2 of NYSE/AMEX/NASDAQ) have outperformed small-capitalization stocks (deciles 9-10). This has led some market observers to speculate that there is no size premium. But statistical evidence suggests that periods of underperformance should be expected.... Because investors cannot predict when small-cap returns will be higher than large-cap returns, it has been argued that they do not expect higher rates of return for small stocks."))

[166] I&E Statement No. 2, p. 42.

[167] *UGI Utilities, Inc. – Electric Division*, p. 100. Relatedly, when asked whether he had performed a specific analysis why it would be appropriate for the Company to receive a size adjustment when UGI Electric did not, Valley witness D'Ascendis did not point to any particular analysis he had performed comparing the two companies, but generally stated UGI Electric was a larger company than Valley and referred back to his testimony analysis on the subject. Tr., pp. 59-60, 63-65.

Specific to the utility industry, I&E witness Henkel cites an article stating a size adjustment for risk is not applicable to utility companies.[168] In the article "Utility Stocks and the Size Effect: An Empirical Analysis," Dr. Annie Wong concludes:

> The objective of this study is to examine if the size effect exists in the utility industry. After controlling for equity values, there is some weak evidence that firm size is a missing factor from the CAPM for the industrial but not for utility stocks. This implies that although the size phenomenon has been strongly documented for the industrials, the findings suggest that there is no need to adjust for the firm size in utility rate regulation.[169]

Valley witness D'Ascendis attempts to refute Dr. Wong's study by citing a review of her study authored by Thomas M. Zepp.[170] As explained by I&E witness Henkel, Dr. Zepp's article does not contain credible enough evidence to refute Dr. Wong's findings. First, it simply speculates on other possible reasons for her results and references the results of two other studies. The first study, completed by California Public Utilities Commission Staff in 1991, is not included in the article, and, therefore, Dr. Zepp's opinions cannot be properly evaluated. Dr. Zepp also draws his conclusions about an entire industry based on the second study, which examines the effects of size on only four water utility companies.[171] Additionally, Dr. Zepp admitted the limited relevance of the two studies, stating "*to the extent that water utilities are representative of all utilities*, there is support for smaller utilities being more risky than larger ones".[172]

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168 I&E Statement No. 2, pp. 42-43.

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

170 Valley Statement No. 2-R, pp. 33-34.

171 I&E Statement No. 2-SR, p. 21.

172 Valley Statement No. 2-R, pp. 33-34 (emphasis added, citing Zepp, Thomas M. "Utility Stocks and the Size Effect --- Revisited", *The Quarterly Review of Economics and Finance*, 43 (2003) at 578-582).

Valley witness D'Ascendis could not provide independent verification of the relevance of the studies because he had not read the studies himself.[173] Although Valley witness D'Ascendis performs his own study, he admits it has limited explanatory power.[174] In I&E witness Henkel's opinion, such a weak explanatory power of size with respect to risk does not justify an increase to the Company's return on equity.[175] I&E therefore recommends the Commission deny Valley's claimed size adjustment.

(ii) Valley's Inappropriate and Unsupported Performance Factor Adjustment

Valley witness D'Ascendis recommends an upward adjustment of 25 basis points to his cost of common equity recommendation[176] as a result of testimony presented by Valley witness Rogers.[177] Valley witness D'Ascendis states his recommendation is based on 66 Pa. C.S. § 523. While it is correct 66 Pa C.S. § 523 may be the basis for a performance factor adjustment claim, Section 523 does not mandate Valley receive a performance factor adjustment. Section 523 states the Commission shall *consider* a utility's performance. Additionally, Section 523 contains no mandate to award additional points, only that any adjustments will be to "specific components of the utility's claimed cost of service as [the Commission] may determine to be proper and appropriate".[178]

I&E witness Henkel opines, ultimately, for any company, true management effectiveness is earning a higher return through its efficient use of resources and cost cutting measures. The greater net income resulting from growth, cost savings, and true

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173 Tr., p. 62.
174 Valley Statement No. 2-R, p. 36.
175 I&E Statement No. 2-SR, p. 23.
176 Valley Statement No. 2, p. 5.
177 Valley Statement No. 4, pp. 6-8.
178 66 Pa. C.S. § 523(a).

efficiency in management and operations is available to be passed on to shareholders. Further, I&E witness Henkel states Valley should not be granted additional basis points for doing what it is required to do in order to provide adequate, efficient, safe, and reasonable service,[179] i.e., the requirements of 66 Pa. C.S. § 1501. Therefore, I&E recommends the Commission reject Valley's unwarranted performance factor adjustment.[180]

E. Overall Rate of Return

The Company's proposed overall rate of return is 7.72%.[181] I&E's proposed overall rate of return is 6.60%.[182] I&E submits that the evidence in this proceeding does not support the inputs that went into the development of Valley's proposed return on equity, capital structure, or overall rate of return, and therefore the I&E's proposed overall return of 6.60% should be adopted.

F. Conclusion

Valley's claimed rate of return overstates Valley's need for a revenue increase. Valley's requested rate of return is not supported by a reasonable measure of returns in today's market. The evidence demonstrates that Valley's claim for a return on equity of 10.60% and an overall rate of return of 7.72% overstates what reasonable investors should expect from a regulated public utility and is not necessary for Valley to safely and reliably provide gas distribution service to its ratepayers.

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179 I&E Statement No. 2, pp 44-45.

180 If the Commission disagrees, I&E witness Henkel alternately recommends the Commission award no more than five basis points to the Company on its return on equity for management effectiveness, consistent with its decision in *UGI Utilities, Inc. – Electric Division*.

181 Valley Exhibit_(DWD-1R), Schedule DWD-1R, Page 1 of 51.

182 I&E Statement No. 2-SR, p. 28.

When adjusted by I&E to more reasonable levels that approximate expected returns in today's economy for similarly-situated NGDCs, Valley's evidentiary support for its $834,546 rate increase is substantially reduced. As demonstrated by I&E witness Henkel, the appropriate overall rate of return that will result in just and reasonable rates is 6.60% with an included 8.46% cost rate of common equity.

VIII. TAXES

I&E's various recommendations have a flow-through impact on the Company's taxes for the FPFTY as depicted in the attached Table I.

IX. CUSTOMER RATE STRUCTURE

A utility's rate structure reflects how a proposed revenue increase will be allocated among rate classes. Under Section 1304 of the Public Utility Code, the rate structure cannot either advantage or disadvantage a class, or contain an unreasonable difference in rates.[183] To survive a challenge under Section 1304, a utility must show any difference can be justified by the difference in costs to deliver service to each class.[184]

A. Allocated Cost of Service Study

Valley did not provide a cost of service study.[185]

B. Revenue Allocation

The Company is requesting an across-the-board increase for the residential, commercial, interruptible, small industrial and transportation customers (excluding Firm-

[183] 66 Pa. C.S. § 1304. Accordingly, if there is a reasonable basis for a difference, a utility may charge different rates for different classes of customers. *See Peoples Natural Gas Company v. Pa. P.U.C.*, 409 A.2d 446 (Pa. Cmwlth 1979).

[184] *Philadelphia Suburban Water Company v. Pa. P.U.C.*, 808 A.2d 1044, 1060 (Pa. Cmwlth. 2002).

[185] Only rate filings proposing increases in excess of $1 million must be accompanied by a cost of service study. 52 Pa. Code § 53.53.

Contract) between 21.52% and 21.85% with most classes receiving an increase of approximately 21.6% (excluding the cost of gas).[186] I&E witness Cline accepted the Company's approach.[187]

As I&E witness Cline explained, the Company had a number of reasons for this approach. First, rates are generally established based upon the results of a cost of service study. However, since the proposed increase is below $1 million, a cost of service study is not required and would be expensive to prepare in relationship to that increase. Second, an across-the-board increase is the simplest to implement, and probably the fairest in this particular case, since the Company's sales base has been stable over time. Additionally, Valley believes that this approach would be the most acceptable to the ratepayers.[188]

C. Rate Design

I&E has no tariff structure recommendations.

D. Scale Back of Rates

I&E recommends that, if the Commission grants less that the full increase, the approximately 21.62% increase in rates described above be reduced so that the percentage increase is the same for all rate classes that experienced an increase.[189] I&E witness Cline recommended the percentage increase in each rate class be the same in the event of a scale back because the Company did not provide a cost of service study that

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[186] I&E Statement No. 3, p. 11.
[187] I&E Statement No. 3, p. 12. However, as explained below, I&E witness Cline recommends a proportionate scale back should the Commission approve less than Valley's full rate increase request.
[188] I&E Statement No. 3, pp. 11-12.
[189] I&E Statement No. 3, p. 12.

would guide in the development of proposed rates. Therefore, since the Company requested that all rates described above be increased approximately 21.62%, it is reasonable that these rates also be scaled back so that the percentage increase in these rates is the same regardless of the increase allowed by the Commission. Specifically, the scale back should be achieved by reducing the proposed customer charges and usage rates in a manner that maintains the across-the-board increases described above.[190] The Company did not respond to I&E's recommendation.[191] Therefore, in the event of a scale back of rates, the Commission should adopt I&E's recommendation.

E. Summary

The Company's revenue allocation and I&E's scale back proposals are based on sound Commission ratemaking policies and precedent and should be adopted.

X. MISCELLANEOUS ISSUES

A. Reporting Requirements

I&E recommends that the Company provide the Commission's Bureaus of Technical Utility Services ("TUS") and I&E with an update to Valley Exhibit_(HSG-1), Schedule C3(R) no later than April 1, 2020, under this docket number, which should include actual capital expenditures, plant additions, and retirements by month for the twelve months ending December 31, 2019. An additional update should be provided for actuals through December 31, 2020, no later than April 1, 2021.[192]

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[190] I&E Statement No. 3, pp. 12-13.
[191] I&E Statement No. 3-SR, pp. 7.
[192] I&E Statement No. 3-SR, pp. 4-7.

I&E witness Cline explained the importance of providing these filings as follows:

> [T]here is value in determining how closely Valley projected investments in future facility comport with the actual investments that are made by the end of the FTY and FPFTY. Determining the correlation between Valley's projected and actual results will help inform the Commission and the parties in Valley's future rate cases. The updates are important because, as previously explained, through the use of the FPFTY, Valley is requiring ratepayers to pay a return on its projected investment in future facilities that are not in place and providing service at the time the new rates take effect, but also are not subject to any guarantee of being completed and placed into service. While the FPFTY provides for such projections, there should be verification of the projections. Therefore, requiring the Company to provide updates demonstrating that actual investments comport with projections used in setting rates in the FPFTY provides the Commission with actual data to gauge the accuracy of Valley's projected investments in future proceedings as has become common practice among Pennsylvania utilities as the use of the FPFTY has gained prevalence.[193]

Valley responded to I&E witness Cline's recommendation, stating:

> [t]he Commission has not yet implemented comprehensive regulations concerning the obligations for public utilities utilizing the FPFTY. The company should not be burdened with additional filing requirements unless those requirements are part of regulations applicable to all NGDCs. I&E will have opportunities to review this information when the Company files a subsequent base rate case.[194]

I&E witness Cline acknowledged that the Commission has not yet implemented comprehensive regulations concerning use of the FPFTY.[195] However, I&E has routinely recommended, and the Commission has approved, these same reporting requirements in

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[193] I&E Statement No. 3, pp. 10-11.
[194] Valley Statement No. 4-R, p. 11.
[195] I&E Statement No. 3-SR, p. 4.

multiple other base rate proceedings that used a FPFTY.[196] Additionally, in *UGI Utilities, Inc. – Electric Division*, the Commission indicated the need to ascertain the accuracy of the FPFTY projections. Specifically, the Commission stated "Section 315(e) of the Code… authorizes a Commission audit of the FPFTY results after the fact to determine whether they were accurate…".[197] By adopting I&E's recommendation, TUS and I&E will have the information and opportunity required to review the accuracy of the Company's projections.[198]

Valley identifies no legal impediment to requiring such updates. To the contrary, the Public Utility Code provides the Commission broad power to require informational filings from utilities.[199] Additionally, the fact that there are no current regulations regarding the FPFTY does not preclude the Company from filing the requested updates. If anything, it demonstrates that this type of reporting is needed until such regulations are implemented. Without a reasonable basis to withhold important information many other Pennsylvania utilities have agreed to provide, I&E continues to recommend reporting requirements outlined by I&E witness Cline.

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[196] Use of the FPFTY was signed into law in February 2012 and I&E recommended this reporting requirement in the first rate case that used the FPFTY (Columbia Gas of Pennsylvania, Inc.'s 2012 base rate filing). Since that time, I&E has typically recommended this reporting requirement in rate cases that employed a FPFTY; therefore, it has been recommended and approved in numerous Commission orders in the seven years since Act 11 was passed. I&E Statement No. 3, pp. 9-12; *See, e.g., Pa. P.U.C. v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2012-2321748 (Order entered May 23, 2013) (approving Joint Petition for Settlement including similar reporting requirement terms); *Pa. P.U.C. v. Pennsylvania-American Water Company*, Docket No. R-2013-2355276 (Order entered December 19, 2013) (approving Joint Petition for Settlement including similar reporting requirement terms); *Pa. P.U.C. v. PPL Electric Utilities Corporation*, Docket No. R-2015-2469275 (Order entered November 15, 2015) (approving Joint Petition for Settlement including similar reporting requirement terms); *Pa. P.U.C. v. UGI Penn Natural Gas, Inc.*, Docket No. R-2016-2580030 (Order entered August 31, 2017) (approving Joint Petition for Settlement including similar reporting requirement terms); *Pa. P.U.C. v. Duquesne Light Company*, Docket No. R-2018-3000124 (Order entered December 20, 2018) (approving Joint Petition for Settlement including similar reporting requirement terms).

[197] *UGI Utilities, Inc. – Electric Division*, p. 26.

[198] I&E Statement No. 3-SR, pp. 4-5.

[199] 66 Pa. C.S. § 505.

XI. CONCLUSION

Valley has failed to bear its burden of proof with respect to each and every element of its proposed $834,546 rate increase. The Company's proposal must be amended to reflect the necessary and appropriate adjustments proposed by the Bureau of Investigation & Enforcement fixed utility financial analyst and engineer witnesses. For the reasons stated herein, the Bureau of Investigation & Enforcement respectfully requests the Administrative Law Judges and the Commission to adopt its recommendations in this proceeding, which include adjustments and modifications as supported herein and reflected on the attached I&E tables.

Respectfully submitted,

John M. Coogan
Prosecutor
PA Attorney ID No. 313920

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

Dated: January 8, 2020

APPENDIX A

Valley Energy, Inc.
R-2019-3008209

TABLE I
INCOME SUMMARY

	12/31/20 Proforma Present Rates	INVESTIGATION & ENFORCEMENT Adjustments	Present Rates	Allowances	Proposed
	$	$	$	$	$
Operating Revenue	5,059,370	0	5,059,370	345,049	5,404,419
Deductions:					
O&M Expenses	3,247,647	-127,606	3,120,041	0	3,120,041
Depreciation	971,413	0	971,413		971,413
Taxes, Other	34,296	0	34,296	0	34,296
Income Taxes:					
Current State	-16,477	12,774	-3,703	34,470	30,767
Current Federal	-31,177	24,170	-7,007	65,222	58,215
Deferred Taxes	56,649	0	56,649		56,649
ITC	0	0	0		0
Total Deductions	4,262,351	-90,662	4,171,689	99,692	4,271,381
Income Available	797,019	90,662	887,681	245,357	1,133,038
Measure of Value	17,179,542	-12,295	17,167,247	0	17,167,247
Rate of Return	4.64%		5.17%		6.60%

Valley Energy, Inc.
R-2019-3008209

Table II - Summary of I&E Adjustments

Issues	Rate Base	Revenues	Expenses	Depr.	Taxes Other	Current FIT	Current PACNI	Combined Deferred Inc Taxes	ITC	Revenue Impact of Adjustments
MEASURE OF VALUE:										
CWC rate base adjustment	-12,295									-1,141
Revenues:										
Expenses:										
Rate Case Expense			-36,133			6,830	3,610			-36,132
Regulatory Commission Expense			-38,524			7,282	3,849			-38,523
Misc. General Expense			-14,415			2,725	1,440			-14,415
Uncollectible Accounts Expense			-24,201			4,574	2,418			-24,201
C&T Allocation			-44,429			8,398	4,438			-44,430
Total O&M Expense Adjustment			30,096			-5,689	-3,007			30,095
Company Variance-Rebuttal			21			-4	-2			21
Depreciation:										
Taxes Other:										
Income Taxes:										
Deferred Taxes										
ITC										
Interest Synchronization						50	26			107
Total Additions / Deductions	-12,295	0	-127,585	0	0	24,166	12,772	0	0	-128,619
										-270,590
Company Measure of Value	17,179,542									
										-399,209
I&E Measure of Value	17,167,247									744,258
										345,049

Table III
Rate of Return

Per Company	Structure	Cost	Weighted Cost
Total Debt	47.45	0.0453	2.15
Long Term Debt	47.45	0.0454	2.15
Short Term Debt	0.00	0.0000	0.00
Preferred Stock	0.00	0.0000	0.00
Common Equity	52.55	0.1060	5.57
TOTAL	100.00		7.72

Per Staff	Structure	Cost	Weighted Cost
Total Debt	47.45	0.0453	2.15
Long Term Debt	47.45	0.0454	2.15
Short Term Debt	0.00	0.0000	0.00
Preferred Stock	0.00	0.0000	0.00
Common Equity	52.55	0.0846	4.45
TOTAL	100.00		6.60

APPENDIX B

PROPOSED FINDINGS OF FACT

Rate Base

1. The Company's rate base claim includes $114,497 of Construction Work in Progress ("CWIP") based on the December 31, 2018 financial statements and estimated to be the same in the FTY and FPFTY. Valley Exhibit_(HSG-1), Schedule C1-6(R), line 5.

2. The Company indicated that all of its CWIP projects were estimated to be completed in 2019. I&E Statement No. 3, pp. 7-8.

3. The Company accepted I&E's recommended adjustment that the $114,497 CWIP claim should be removed from the FPFTY rate base as originally filed. Valley Errata Statement No. 1-R, p. 7.

4. The Company claimed $402,100 for Cash Working Capital ("CWC"), which was later revised to $399,027. I&E Exhibit No. 1-SR, Schedule 4, p. 3.

5. For ratemaking purposes, CWC is the capital needed to operate a utility between the rendition of service and the receipt of revenues in payment for services rendered. I&E Statement No. 1, p. 23.

6. A reduction of $103,405 to O&M expense claims reduces the Company's CWC allowance by $12,925. I&E Statement No. 1-SR (Errata Version), p. 31.

Expenses

7. Valley introduced updates to essentially all of its O&M expenses in rebuttal testimony. Valley Errata Statement No. 1-R, p. 5.

8. Valley's presentation of FPFTY O&M costs is based on an escalation of FTY expenses, and does not remove non-recurring costs and plant activities. Tr., pp. 99-101.

9. Valley's FPFTY claim for Regulatory Commission Expense includes duplicate claims for the PUC assessment and Public Utility Realty Tax. I&E Statement No. 1-SR (Errata Version), p. 15.

10. Valley's FPFTY claim for Miscellaneous General Expense would be $58,958 if $7,064 for volunteer labor and expense is removed to Valley's current FPFTY claim of $66,022. I&E Statement No. 1-SR (Errata Version), p. 20; I&E Exhibit No. 1-SR, Schedule 1, p. 1.

11. A 0.62% write-off ratio reflects three years of historic gross revenues and net write-offs. I&E Statement No. 1, pp. 15-16.

12. A 0.62% write-off ratio applied to the Company's FPFTY present rate operating revenues of $5,036,887 results in an uncollectible accounts allowance of $31,229. I&E Statement No. 1, pp. 16.

13. The average annual increase in C&T Allocation from 2016 to the HTY is 2%. I&E Statement No. 1, p. 19.

14. If C&T Allocation is increased by 2% from the HTY to the FTY, and 1% from the FTY to the FPFTY, C&T Allocation would be $189,179. I&E Statement No. 1, p. 19; I&E Statement No. 1-SR (Errata Version), pp. 24-25.

15. Valley's annualized FTY C&T Allocation is $171,254.97. Tr., p. 211.

16. The average time between Valley's last four rate case filings is 60 months. I&E Statement No. 1, p. 7.

17. Valley's claim for Rate Case Expense for the FPFTY would be $54,200 if normalized over a period of 60 months. I&E Statement No. 1, p. 7.

Fair Rate of Return

18. Rate of return is one of the component of the revenue requirement formula, which is RR = E + D + T + (RB x ROR), where RR = Revenue Requirement; E = Operating Expense; D = Depreciation Expense; T = Taxes; RB = Rate Base; and ROR = Overall Rate of Return. I&E Statement No. 2, pp. 2-3.

19. Valley's capital structure includes 47.45% Long-Term Debt and 52.55% Common Equity. I&E Statement No. 2, p. 7; I&E Exhibit No. 2, Schedule 1.

20. Valley's cost of long-term debt is 4.54%. I&E Statement No. 2, p. 8; I&E Exhibit No. 2, Schedule 1; Valley Statement No. 2-R, p. 5, lines 1-4.

21. Using a DCF analysis, Valley's cost of common equity is 8.46%, which includes a dividend yield of 2.71% and a recommended growth rate of 5.75%. I&E Statement No. 2, pp. 7, 27; I&E Exhibit No. 2, Schedule 1.

22. Using a CAPM analysis, Valley's cost of common equity is 8.04%. I&E Statement No. 2, pp. 29-30.

23. Based on the capital structure, cost of long-term debt, and cost of common equity, Valley's rate of return is 6.53%. I&E Statement No. 2-SR, p. 28.

24. Returns for large- and small-capitalization stocks vary from year-to-year. I&E Statement No. 2-SR, pp. 22-23.

25. A size adjustment to return on equity is not applicable to utility companies. I&E Statement No. 2, pp. 42-43.

APPENDIX C

PROPOSED CONCLUSIONS OF LAW

1. The Company carries the burden of proof to show its rate proposal is just and reasonable. 66 Pa.C.S. § 315(a); *Irwin A. Popowsky v. Pa. P.U.C.*, 674 A.2d 1149 (Pa. Cmwlth. 1996).

2. Valley must satisfy its burden of proof by presenting a preponderance of evidence. *Samuel J. Lansberry, Inc. v. Pennsylvania Public Utility Commission*, 578 A.2d 600 (Pa. Cmwlth. 1990).

3. A preponderance of the evidence is evidence that is more convincing, by even the smallest amount, than that presented by another party. *Se-Ling Hosiery v. Margulies*, 70 A.2d 854 (Pa. 1950).

4. In base rate cases, the Commission has affirmed the utility's burden to establish the justness and reasonableness of every component of its rate request. *Pa. P.U.C. v. PPL Electric Utilities Corporation,* 2012 WL 6758304 (Pa. P.U.C. 2012)*; Pa. P.U.C. v. Aqua Pennsylvania, Inc.*, 2004 WL 2314523 (Pa. P.U.C. 2004).

5. The burden of proof does not shift to parties challenging a requested rate increase. *Pa. P.U.C. v. PPL Electric Utilities Corporation,* 2012 WL 6758304 (Pa. P.U.C. 2012)*; Pa. P.U.C. v. Aqua Pennsylvania, Inc.*, 2004 WL 2314523 (Pa. P.U.C. 2004).

6. The Company must produce substantial evidence to satisfy its burden of proof. *Brockaway Glass v. Pa. P.U.C.*, 437 A.2d 1067 (Pa. Cmwlth. 1981); *Lower Frederick Township v. Pa. P.U.C.*, 409 A.2d 505 (Pa. Cmwlth. 1980).

7. Substantial evidence is "such relevant and competent evidence having a rational probative force which a reasonable mind might accept as adequate to support a conclusion." *Dutchland Tours, Inc. v. Pa. P.U.C.*, 337 A.2d 922, 925 (Pa. Cmwlth. 1975).

Expenses

8. A public utility is entitled to recover all of its reasonably incurred expenses necessary to provide service to customers. *Butler Township Water Company v. Pa. P.U.C.*, 473 A.2d 219, 221 (Pa. Cmwlth. 1984); *UGI Corp. v. Pa. P.U.C.*, 410 A.2d 923, 932 (Pa. Cmwlth. 1980); *Western Pennsylvania Water Company v. Pa. P.U.C.*, 422 A.2d 906, 908 (Pa. Cmwlth. 1980).

9. Introducing new claims after non-company parties have addressed the companies' direct position is a violation of due process principles. *Pa. P.U.C. v. City of Lancaster – Sewer Fund*, 2007 WL 517134 (Pa. P.U.C. 2007).

10. A party cannot introduce evidence in rebuttal phase that should have been included in the party's case-in-chief or substantially varies from the party's case-in-chief. 52 Pa. Code §§ 5.243(e)(2)-(3).

11. Valley's attempt to wholesale revise its O&M position in rebuttal testimony, rather than specifically respond to non-company parties' specific O&M adjustment recommendations is a prohibited attempt to introduce evidence that should have been introduced in direct testimony. *Pa. P.U.C. v. City of Lancaster – Sewer Fund*, 2007 WL 517134 (Pa. P.U.C. 2007); 52 Pa. Code §§ 5.243(e)(2)-(3).

12. The Commission characterizes rate case expense as a normal operating expense that should be accorded the same rate-making treatment as any other normalized expense. *Pa. P.U.C. v. Apollo Gas Co.*, 54 Pa. PUC 358, 373 (Pa. P.U.C. 1980).

13. To determine the length of rate case expense normalization, the Commission looks to the average number of months between a company's rate case filings. *Pa. P.U.C. v. City of DuBois - Bureau of Water*, Docket No. R-2016-2554150, pp. 65-66 (Order entered March 28, 2017) (reconsideration of rate case expense claim denied by Order entered May 18, 2017); *Pa. P.U.C. v. Emporium Water Company*, Docket No. R-2014-2402324, p. 50 (Order entered January 28, 2015); *Popowsky v. Pa. P.U.C.* 674 A.2d 1149, 1154 (Pa. Cmwlth. 1996); *Pa. P.U.C. v. Borough of Media Water Works*, 1990 WL 10702673 (Pa. P.U.C. 1990).

Fair Rate of Return

14. A utility is entitled to a return similar to that being earned by other enterprises with corresponding risks and uncertainties, but not as high as those earned by highly profitable or speculative ventures. *Bluefield Water Works & Improvements Co. v. Public Service Comm. of West Virginia*, 292 U.S. 679 (1923); *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944); *Pennsylvania Gas & Water Company v. Pa. P.U.C.*, 341 A.2d 239, 249-252 (Pa. Cmwlth. 1975).

15. A utility is entitled to a return level reasonably sufficient to assure financial soundness. *Bluefield Water Works & Improvements Co. v. Public Service Comm. of West Virginia*, 292 U.S. 679 (1923); *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944); *Pennsylvania Gas & Water Company v. Pa. P.U.C.*, 341 A.2d 239, 249-252 (Pa. Cmwlth. 1975).

16. A utility is entitled to a return sufficient to maintain and support its credit and raise necessary capital. *Bluefield Water Works & Improvements Co. v. Public Service Comm. of West Virginia*, 292 U.S. 679 (1923); *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944); *Pennsylvania Gas & Water Company v. Pa. P.U.C.*, 341 A.2d 239, 249-252 (Pa. Cmwlth. 1975).

17. A fair return can change (increase or decrease) along with economic conditions and capital markets. *Bluefield Water Works & Improvements Co. v. Public Service Comm. of West Virginia*, 292 U.S. 679 (1923); *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944); *Pennsylvania Gas & Water Company v. Pa. P.U.C.*, 341 A.2d 239, 249-252 (Pa. Cmwlth. 1975).

18. The PUC historically uses the DCF as the primary methodology to determine a utility's cost of equity. *Pa. P.U.C. v. UGI Utilities, Inc. – Electric Division,* Docket No. R-2017-2640058 (Order Entered October 25, 2018), pp. 104-106, 121; *Pa. P.U.C. v. City of DuBois – Bureau of Water*; Docket No. R-2016-2554150 (Order Entered March 28, 2017), pp. 96-98; *Pa. P.U.C. v. PECO Energy Co.*, 87 Pa. PUC 184, 212 (Pa. P.U.C. 1997); *Pa. P.U.C. v. Philadelphia Suburban Water Co.*, 71 Pa. PUC 593, 623-32 (Pa. P.U.C. 1989); *Pa. P.U.C. v. Western Pennsylvania Water Co.*, 67 Pa. PUC 529, 559-70 (Pa. P.U.C. 1988); *Pa. P.U.C. v. Consumers Pennsylvania Water Company – Roaring Creek Division*, 87 Pa. PUC 826 (Pa. P.U.C. 1997). *Pa. P.U.C. v. City of Bethlehem)*, 84 Pa. PUC 275, 304-05 (Pa. P.U.C. 1995); *Pa. P.U.C. v. Media Borough*, 77 Pa. PUC 446, 481 (Pa. P.U.C. 1992).

19. The PUC disfavors comparisons to non-utility companies for rate of return analysis. *Pa. P.U.C. v. UGI Utilities, Inc. – Electric Division,* Docket No. R-2017-2640058 (Order Entered October 25, 2018), p. 105; *Pennsylvania Public Utility Commission v. Philadelphia Electric Co.* 33 PUR 4th 319, 341 (Pa PUC 1980).

20. The PUC recognizes the 10-year Treasury Note as the superior measure for the risk-free rate. *Pa. P.U.C. v. UGI Utilities, Inc. – Electric Division,* Docket No. R-2017-2640058 (Order Entered October 25, 2018), p. 99.

21. The PUC does not recognize technical literature not specific to the regulated utility industry to support a size adjustment to return on equity. *Pa. P.U.C. v. UGI Utilities, Inc. – Electric Division,* Docket No. R-2017-2640058 (Order Entered October 25, 2018), p. 100.

22. The Commission shall consider a utility's performance, and does not mandate award of additional points to a utility's return on equity. 66 Pa. C.S. § 523.

23. A utility must provide adequate, efficient, safe, and reasonable service. 66 Pa. C.S. § 1501.

Customer Rate Structure

24. A utility's rate structure cannot either advantage of disadvantage a class, or contain an unreasonable difference in rates. 66 Pa.C.S. §1304.

25. If there is a reasonable basis for a difference, a utility may charge different rates for different classes of customers. *Peoples Natural Gas Company v. Pa. P.U.C.*, 409 A.2d 446 (Pa. Cmwlth 1979).

26. A utility must show any difference in rates can be justified by the difference in costs to deliver service to each class. *Philadelphia Suburban Water Company v. Pa. P.U.C.*, 808 A.2d 1044, 1060 (Pa. Cmwlth. 2002).

Miscellaneous

27. The PUC has routinely approved FTY and FPFTY reporting requirements regarding capital expenditures, plant additions, and retirements by month. *Pa. P.U.C. v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2012-2321748 (Order entered May 23, 2013) (approving Joint Petition for Settlement including similar reporting requirement terms); *Pa. P.U.C. v. Pennsylvania-American Water Company*, Docket No. R-2013-2355276 (Order entered December 19, 2013) (approving Joint Petition for Settlement including similar reporting requirement terms); *Pa. P.U.C. v. PPL Electric Utilities Corporation*, Docket No. R-2015-2469275 (Order entered November 15, 2015) (approving Joint Petition for Settlement including similar reporting requirement terms); *Pa. P.U.C. v. UGI Penn Natural Gas, Inc.*, Docket No. R-2016-2580030 (Order entered August 31, 2017) (approving Joint Petition for Settlement including similar reporting requirement terms); *Pa. P.U.C. v. Duquesne Light Company*, Docket No. R-2018-3000124 (Order entered December 20, 2018) (approving Joint Petition for Settlement including similar reporting requirement terms).

28. 66 Pa. C.S. § 315(e) allows an audit of FPFTY results after the fact to determine whether they were accurate. *Pa. P.U.C. v. UGI Utilities, Inc. – Electric Division,* Docket No. R-2017-2640058 (Order Entered October 25, 2018), p. 26.

29. The PUC has broad authority to require informational filings from utilities. 66 Pa. C.S. § 505.

APPENDIX D

PROPOSED ORDERING PARAGRAPHS

THEREFORE, IT IS RECOMMENDED:

1. Valley Energy, Inc. shall not place into effect the rates contained in Supplement No. 49 to Tariff Electric Pa. P.U.C. No. 2, which have been found to be unjust and unreasonable and therefore, unlawful.

2. That Valley Energy, Inc. shall be permitted to file tariffs, tariff supplements or tariff revisions containing proposed rates, rules and regulations to increase annual revenues in the total amount of not more than $345,049.

3. That Valley Energy, Inc. tariffs, tariff Supplements or tariff revisions may be filed to be effective on at least one day's notice after entry of the Commission's Final Order, for service rendered on and after the date of entry of the Commission's Final Order in this matter.

4. That Valley Energy, Inc. shall, under this docket number, provide to the Commission's Bureaus of Technical Utility Services and Investigation and Enforcement: (1) an update to Valley Exhibit_(HSG-1), Schedule C3(R) no later than April 1, 2020, including actual capital expenditures, plant additions, and retirements by month for the twelve months ending December 31, 2019; and (2) an update to Valley Exhibit_(HSG-1), Schedule C3(R) no later than April 1, 2021, including actual capital expenditures, plant additions, and retirements by month for the twelve months ending December 31, 2020.

5. That Valley Energy, Inc. shall allocate the authorized increase in operating revenues to each customer class and rate schedule within each class in the manner set forth in the Recommended Decision.

6. That Valley Energy, Inc. shall comply with all directives, conclusions and recommendations in this Recommended Decision that are not the subject of individual ordering paragraphs as fully as if they were the subject of specific ordering paragraphs.

7. That, upon acceptance and approval by the Commission of the tariff supplements filed by Valley Energy, Inc., consistent with its Final Order, the investigation at Docket R-2019-3008209 be marked closed.

8. That the complaint filed by the Office of Consumer Advocate in this proceeding at Docket Number C-2019-3011850 be dismissed and marked closed.

9. That the complaint filed by the Office of Small Business Advocate in this proceeding be dismissed and marked closed.

10. That the complaint filed by Larry E. Cole in this proceeding at Docket Number C-2019-3012219 be dismissed and marked closed.

11. That the complaint filed by Athens Borough in this proceeding at Docket Number C-2019-3012397 be dismissed and marked closed.

12. That the complaint filed by South Waverly Borough in this proceeding at Docket Number C-2019-3012396 be dismissed and marked closed.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R-2019-3008209
	:	
Valley Energy, Inc. –	:	
Supplement No. 49 to Tariff Electric – Pa.	:	
PUC No. 2	:	

CERTIFICATE OF SERVICE

I hereby certify that I am serving the foregoing **Main Brief** dated January 8, 2020, in the manner and upon the persons listed below, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a party):

Served via First Class and Electronic Mail

Adeolu A. Bakare, Esq.
Matthew L. Garber, Esq.
Pamela C. Polacek, Esq.
McNees Wallace & Nurick
100 Pine Street
P.O. Box 1166
Harrisburg, PA 17108
abakare@mcneeslaw.com
mgarber@mcneeslaw.com
ppolacek@mcneeslaw.com
Counsel for Wellsboro Electric Company

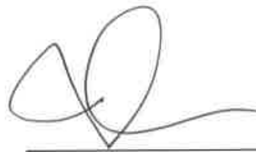
Christy M. Appleby, Esq.
Darryl A. Lawrence, Esq.
Aron J. Beatty, Esq.
Santo G. Spataro, Esq.
Office of Consumer Advocate
Forum Place
555 Walnut Street, 5th Floor
Harrisburg, PA 17101
cwv2019@paoca.org

Jonathan P. Foster, Sr., Esq.
Jonathan P. Foster, Jr., Esq.
Foster Law Office
303 South Keystone Avenue
Sayre, PA 18840
Jonathan.Sr@fosterslawfirm.com
Jonathan.Jr@fosterslawfirm.com
Solicitors for South Waverly Borough
Solicitors for Borough of Athens

Sharon Webb, Esq.
Office of Small Business Advocate
Forum Place
555 Walnut Street, 1st Floor
Harrisburg, PA 17101
swebb@pa.gov

Larry E. Cole
74 E. Laurel Street
Bradford, PA 18832
Larryc41@frontier.com

Brian Kalcic
Excel Consulting
225 South Meramec Avenue, Suite 720
St. Louis, MO 63105
excel.consulting@sbcglobal.net
Consultant for OSBA



John M. Coogan
Prosecutor
Bureau of Investigation and Enforcement
PA Attorney ID No. 313920