


COMMONWEALTH OF PENNSYLVANIA



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January 8, 2020

Rosemary Chiavetta, Secretary
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400 North Street
Harrisburg, PA 17120

Re: Pennsylvania Public Utility Commission
v.
Citizens' Electric Company of Lewisburg, PA
– Supplement No. 132 to Tariff Electric – Pa.
P.U.C. No. 14
Docket No. R-2019-3008212

Dear Secretary Chiavetta:

Attached for electronic filing please find the Office of Consumer Advocate's Main Brief in the above-referenced proceeding.

Copies have been served per the attached Certificate of Service.

Respectfully submitted,

A handwritten signature in blue ink that reads "Christy M. Appleby".

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cc: The Honorable Steve K. Haas, ALJ
The Honorable Benjamin J. Myers, ALJ
Certificate of Service

*282056

CERTIFICATE OF SERVICE

Re: Pennsylvania Public Utility Commission :
v. :
Citizens' Electric Company of Lewisburg, PA : Docket No. R-2019-3008212
- Supplement No. 132 to Tariff Electric – Pa. :
P.U.C. No. 14 :

I hereby certify that I have this day served a true copy of the following document, the Office of Consumer Advocate's Main Brief, upon parties of record in this proceeding in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant), in the manner and upon the persons listed below:

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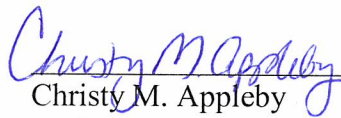
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**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R-2019-3008212
	:	
Citizens' Electric Company	:	
of Lewisburg, PA	:	

**MAIN BRIEF
OF THE
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TABLE OF CONTENTS

I. INTRODUCTION..... 1

 A. Citizens’ Electric of Lewisburg, Pa..... 1

 B. History of the Proceedings 2

 C. Legal Standards 4

II. SUMMARY OF ARGUMENT..... 6

III. ISSUES RESOLVED AMONG THE PARTIES..... 7

 A. Summary 7

 B. Rate Base..... 7

 C. CHP Customer..... 8

IV. RATE BASE 9

 A. Plant in Service..... 10

 1. Fully Projected Future Test Year 10

 B. Deductions from Rate Base..... 15

V. REVENUES 17

 A. Correction to OCA witness Sherwood Direct Testimony 17

 B. Proposed 3 MW Solar Installation Project..... 17

VI. EXPENSES 20

 A. Overview.....20

 B. Inflation Factor 20

 C. Account 593 – Maintenance of Overhead Lines 25

 D. Account 903 – Customer Records and Collection Expense..... 26

 E. Account 923 – Outside Services Employed 28

 F. Account 926 – Employee Pension and Benefits 29

G. Rate Case Expense	30
H. Cash Working Capital	32
I. Depreciation Expense.....	32
VII. RATE OF RETURN	33
A. Introduction	33
B. The Legal Framework for Determining What Rate of Return is Fair to Citizens’ Consumers and the Company.....	36
C. Capital Structure.....	39
D. Cost of Debt.....	39
E. Cost of Common Equity.....	39
1. Introduction	39
2. OCA Witness Habr Has Derived His Common Equity Cost Recommendations From The Commission’s Preferred Method of Setting Common Equity Cost Rates – The Discounted Cash Flow Model	41
3. Dr. Habr’s Analysis of the Cost of Common Equity for Similar Risk Utility Operations Supports a Cost of Equity 8.38%	42
4. The Commission Should Adopt The 8.38% Equity Cost Rate Proposed By The OCA As Appropriate For The Company	45
a. DCF	45
b. OCA Witness Dr. Habr’s Application of the DCF.....	47
7. OCA Witness Habr’s Capital Asset Pricing Model/Risk Premium Method Analysis Provides a Reasonable Check on his Recommendations	51
8. The Commission Should Reject the Company’s Overstated 11.15%, as updated to 10.30%, Equity Cost Rate Which is Based on Multiple Costing Methods with Biased Inputs	54
9. Summary	63
VIII. TAXES.....	63

A. EDIT	63
B. Deferred Regulatory Liability	66
IX. CUSTOMER RATE STRUCTURE	68
A. Allocated Class Cost of Service Study.....	68
1. Introduction	68
2. The Company’s ACCOSS Improperly Classified A Significant Portion Of Upstream Secondary Distribution Plant As Customer-Related.	70
3. Proposed 3 MW Solar Installation Project	77
B. Revenue Allocation	77
C. Rate Design	83
1. Summary of Citizens’ Proposed Rate Design	83
2. Demand Charges Should Not Be Included In The Customer Charge.	84
D. Scale Back	92
E. Summary	93
X. MISCELLANEOUS ISSUES	95
XI. CONCLUSION	96

APPENDICES

Appendix A: Tables

Appendix B: List of Testimonies, Exhibits, and Cross Exhibits

Appendix C: Proposed Findings of Fact and Conclusions of Law

TABLE OF AUTHORITIES

	Page(s)
Cases	
<u>Berner v. Pa. P.U.C.</u> , 116 A.2d 738 (1955).....	5
<u>Bluefield Waterworks & Improvement Co. v. Public Service Comm’n of West Virginia</u> , 262 U.S. 679 (1923).....	37, 38, 55
<u>Brockway Glass v. Pa. P.U.C.</u> , 437 A.2d 1067 (1981).....	5
<u>Burleson v. Pa. P.U.C.</u> , 461 A.2d 1234 (Pa. 1983).....	5
<u>Carnegie Nat’l Gas Co. v. Pa. P.U.C.</u> , 433 A.2d 938 (Pa. Commw. 1981).....	14
<u>City of Lancaster (Sewer Fund) v. Pa. P.U.C.</u> , 793 A.2d 978 (Pa. Commw. 2002).....	14
<u>City of Pittsburgh v. Pa. P.U.C.</u> , 126 A.2d 777 (Pa. Super. 1956).....	36
<u>Duquesne Light v. Barasch</u> , 488 U.S. 299 (1989).....	10, 38, 55
<u>Federal Power Commission v. Hope Natural Gas Co.</u> , 320 U.S. 591 (1944).....	38, 55
<u>Hurley v. Hurley</u> , 754 A.2d 1283 (Pa. Super. 2000).....	5
<u>Keystone Water Co., White Deer Dist. v. Pa. P.U.C.</u> , 477 Pa. 594 (1978).....	14
<u>Lancaster Sewer</u> , 2005 Pa. PUC LEXIS 84	31, 32
<u>Lloyd v. Pa. P.U.C.</u> , 904 A.2d 1010 (Pa. Commw. 2004).....	78
<u>Lower Frederick Twp. v. Pa. P.U.C.</u> , 409 A.2d 505 (1980).....	5

<u>Popowsky v. Pa. P.U.C.,</u> 674 A.2d 1149 (Pa. Commw. 1996)	31
<u>Re. North Shore Gas Company,</u> Icc. Docket Nos. (December 05, 2011).....	14
<u>University of Pennsylvania v. Pa. P.U.C.,</u> 485 A.2d 1217 (1984).....	5

Administrative Decisions

<u>Application of Metropolitan Edison Company for Approval of Restructuring Plan</u> <u>Under Section 2806 of the Public Utility Code, 1998 Pa. PUC LEXIS 160</u> (1998).....	78
<u>In the Matter of St. Louis, Missouri, for Authority to File Tariffs to Increase</u> <u>Water Service Provided to Customers in the Missouri Service Area of the</u> <u>Company,</u> 1998 Mo. PSC LEXIS 13.....	62, 63
<u>In the Matter of the Application of Washington Gas Light Company, District of</u> <u>Columbia Division, for Authority to Increase Existing Rates and Charges for</u> <u>Gas Service,</u> 2003 D.C. PUC LEXIS 220.....	62
<u>In the Matter of the Application of Wisconsin Electric Power Company for</u> <u>Authority to Increase its Rates for the Sale of Electricity in Michigan,</u> 2002 Mich. PSC LEXIS 294.....	63
<u>Pa. P.U.C. v. Citizens Utilities Water Co. of Pa.,</u> 169 P.U.R 4th 552 (1996).....	30
<u>Pa. P.U.C. v. PPL Elec. Corp.,</u> 237 P.U.R 4th 419 (2004).....	5, 42
<u>Pa. P.U.C. v. Pa. Power & Light,</u> 55 P.U.R 4th 185 (1983).....	78
<u>Pa. P.U.C. v. Pennsylvania-American Water Co.,</u> 1995 PaPUC LEXIS 170	30
<u>Pa. P.U.C. v. Pennsylvania-American Water Co.,</u> 1993 PaPUC LEXIS 79	30
<u>Pa. P.U.C. v. Aqua Pa, Inc.,</u> 99 Pa. PUC 204 (2004).....	41

<u>Pa. P.U.C. v. Aqua Pa., Inc.,</u> Docket No. R-00072711 Order Entered (July 2008)	78
<u>Pa. P.U.C. v. City of Dubois – Bureau of Water,</u> Docket No. R-2016-2554150 (Order entered May 18, 2017,).....	32, 34, 35
<u>Pa. P.U.C. v. City of DuBois,</u> Docket No. R-2016-2554150 (Order Entered May 18, 2017)	78
<u>Pa. P.U.C. v. City of Lancaster – Bureau of Water,</u> 2011 Pa. PUC LEXIS 1685	32
<u>Pa. P.U.C. v. Columbia Water Co.,</u> 2009 Pa. PUC LEXIS 1423	30, 31
<u>Pa. P.U.C. v. Emporium Water Co.,</u> 2001 Pa. PUC LEXIS 7	16
<u>Pa. P.U.C. v. Emporium Water Co.,</u> 95 Pa. PUC 191, 208 P.U.R 4th 502.....	37
<u>Pa. P.U.C. v. Equitable Gas Co.,</u> 57 Pa. PUC 423 (1983)	5
<u>Pa. P.U.C. v. Metropolitan Edison Co.,</u> 2007 Pa. PUC LEXIS 5	32
<u>Pa. P.U.C. v. National Fuel Gas Distriburton Corp.,</u> 84 Pa. PUC 134 (1995)	31
<u>Pa. P.U.C. v. National Fuel Gas Distribution Corp.,</u> 73 Pa. PUC 552 (1990)	39
<u>Pa. P.U.C. v. PPL Electric Utilities Corp.,</u> Docket No. R-2012-2290597 (Order entered December 28, 2012).....	42, 61, 62, 80
<u>Pa. P.U.C. v. Pennsylvania-American Water Company,</u> 99 Pa. PUC 38 (2004) (<u>PAWC 2004</u>).....	41
<u>Pa. P.U.C. v. Pennsylvania-American Water Co., et al.,</u> Docket No. R-880916, Order (Oct. 21, 1988)	22
<u>Pa. P.U.C. v. Pennsylvania Power Co.,</u> 55 Pa. PUC 552 (1982)	22, 39, 42
<u>Pa. P.U.C. v. Philadelphia Electric Co.,</u> 1990 Pa. PUC LEXIS 155 (May 16, 1990)	23

<u>Pa. P.U.C. v. Philadelphia Electric Co.,</u> 58 Pa. PUC 7 (1983)	23, 25
<u>Pa. P.U.C. v. Philadelphia Gas Works,</u> 2007 Pa. PUC LEXIS 45 (Sept. 28, 2007).....	23, 27
<u>Pa. P.U.C. v. Philadelphia Suburban Water Co.,</u> 71 Pa. PUC 593 (1989)	37
<u>Pa. P.U.C. v. Roaring Creek Water Co.,</u> 87 Pa. PUC 826 (1997)	37
<u>Pa. P.U.C. v. Roaring Creek Water Co.,</u> 73 Pa. PUC 373 (1990)	32
<u>Pa. P.U.C. v. UGI Utilities, Inc. – Electric Division,</u> Docket No. R-2017-2640058, Order (Oct. 25, 2018)	<i>passim</i>
<u>Pa. P.U.C. v. West Penn Power Co.,</u> 119 PUR4th 110 (Pa. PUC 1990)	32
<u>Pa. P.U.C. v. West Penn Power Co.,</u> 53 Pa. PUC 410, Order (Aug. 27, 1979).....	16, 17
<u>Tanya J. McCloskey, Acting Consumer Advocate v. Pa. P.U.C.,</u> Case No. 1529 C.D. 2018 (Order Entered).....	13
<u>Tax Cuts and Jobs Act – Citizens’ Electric Company of Lewisburg, Pa.,</u> Docket No. R-2018-3000558, (Order Entered November 8, 2018)	1, 66, 67
<u>West Virginia Public Service Comm’n v. West Virginia-American Water Works,</u> 2004 W. Va. PUC LEXIS 6	62

Statutes

66 Pa. C.S. § 102.....	9
66 Pa. C.S. § 315(a)	4
66 Pa. C.S. § 315(e)	10, 11, 14
66 Pa. C.S. § 1301.....	10, 13
66 Pa. C.S. § 1308(d)	2, 10

Regulations

52 Pa. Code § 53.52(b)(2).....11
52 Pa. Code § 53.5368
52 Pa. Code § 69.330288, 89
52 Pa. Code § 69.330186, 87

Other Authorities

American Heritage Dictionary, Houghton Mifflin Co. (1985).....78
James H. Cawley & Norman J. Kennard, A Guide to Utility Ratemaking, Pa.
PUC, (2018 ed.).10

I. INTRODUCTION

A. Citizens' Electric of Lewisburg, Pa.

In its revised Supplement No. 132 to Tariff Electric Pa. P.U.C. No. 14 (Supplement No. 132), Citizens' Electric Company of Lewisburg, Pa. (Citizens' or the Company) proposed a requested increase of approximately \$792,246 in annual distribution revenues. In Rebuttal Testimony, the Company reduced its request to \$701,000 in annual distribution revenues. Citizens' proposes to increase the residential customer charge from \$11.24 to \$15.00, or by 33.5 percent, including a demand charge component. The effective date of the proposed rates is May 1, 2020.¹

The Office of Consumer Advocate (OCA) recommends an increase of no more than \$359,459 in annual distribution revenues rather than Citizens' proposed increase of \$701,000 in annual distribution revenues. For Citizens' RS rate class, the OCA recommends an increase of the customer-related components of the customer charge from \$11.24 per month to \$12.94 per month at the Company's full request.

As discussed in greater detail below, the OCA has proposed adjustments to the Company's proposed cost of equity, rate base including the Company's use of an end of test year rate base for the Fully Projected Future Test Year including the corresponding depreciation adjustments, adjustments to the Company's proposed revenues, use of an across-the-board 3.0 percent inflation factor, cash working capital, taxes and net operating income items, including maintenance of overhead lines, customer records and collection expense, outside services employed, employee pension and benefits, rate case expense, and Accumulated Depreciation expense. These

¹ The Company agreed to a voluntary extension of the proposed effective date of rates from March 31, 2020 until May 1, 2020.

adjustments result in the OCA's recommended increase for the annual distribution revenues. The OCA also proposes adjustments to the Company's cost of service study and proposed allocation of revenue. The OCA also opposes the Company's proposal to include demand charges in its customer charge.

B. History of the Proceedings

The OCA hereby submits this Main Brief regarding the rate increase proposed by the Citizens' Electric Company of Lewisburg, Pennsylvania (Citizens'). On July 1, 2019, Citizens' filed Tariff Supplement No. 132 to Tariff Electric – Pa. PUC No. 14, with the Public Utility Commission (PUC or Commission) to become effective August 30, 2019 at Docket No. R-2019-3008212. In its original filing, Citizens' proposed an annual increase in base rate revenues of \$792,246 per year, or a distribution base rate increase of 16.5%. Additionally, the Company proposes to increase the residential fixed monthly charge from \$11.24 to \$15.00.

On July 30, 2019, the OCA filed a Formal Complaint and Public Statement. On July 22, 2019 the Office of Small Business Advocate (OSBA) filed a Notice of Appearance and on August 29, 2019, OSBA filed a Formal Complaint and Public Statement. The Bureau of Investigation and Enforcement (I&E) filed Notice of Appearance on July 19, 2019.

Pursuant to the Commission's Order entered August 29, 2019, the Commission suspended Tariff Supplement No. 132 until March 30, 2020, pursuant to Section 1308(d) of the Public Utility Code, 66 Pa. C.S. § 1308(d), and initiated an investigation into the lawfulness, justness, and reasonableness of the rates, rules, and regulations proposed in Supplement No. 132 and existing rates. Subsequently, the matter was assigned to Administrative Law Judges (ALJs) Steven Haas and Benjamin Myers.

On September 13, 2019, a Prehearing Conference was held and, on September 16, 2019, the ALJs issued a Scheduling Order, after which the Company revised its suspension date to April 29, 2020. On November 4, 2019, in accordance with the procedural schedule, a “smart” Public Input Hearing was held. The Company’s revised suspension date adjusted the procedural schedule resulting in Hearings which were to be concluded on December 17, 2019 and Main and Reply Briefs to be filed on January 6 and January 17, 2020, respectively.

On October 15, 2019, the OCA filed the Direct Testimony of its witnesses: Lafayette K. Morgan,² Jerome D. Mierzwa,³ David S. Habr,⁴ and Stacy L. Sherwood.⁵ On November 14, 2019, the OCA filed the Rebuttal Testimony of its witness Jerome D. Mierzwa. On December 4,

² OCA witness Lafayette Morgan is an independent regulatory consultant focusing in the analysis of public utility operations, with particular emphasis on rate regulation. He has reviewed and analyzed utility rate filings, focusing primarily on revenue requirements, accounting, regulatory policy and cost recovery mechanisms throughout the country. Mr. Morgan was a Senior Regulatory Analyst with Exeter Associates from 1993 through 2010. Prior to his work with Exeter Associates, Mr. Morgan was a Senior Financial Analyst with Potomac Electric Power Company. Prior to that, Mr. Morgan was a Staff Accountant with the North Carolina Utilities Commission. OCA St. 1, Appendix A.

³ OCA witness Jerome Mierzwa specializes in utility-related consulting services. Mr. Mierzwa worked for National Fuel Gas Distribution Corporation, where he conducted financial and statistical analyses related to market activity and state regulatory affairs. He later joined National Fuel Gas Supply Corporations’ rate department, where he conducted utility cost of service and rate design analysis, expense and revenue requirement forecasting, and participated in federal regulation activities. Mr. Mierzwa also prepared the Purchased Gas Adjustment filing and developed interstate pipeline and spot market gas projections. OCA witness Mierzwa joined Exeter Associates, Inc. in 1990, became a principal in 1996, and later became Vice President. He specializes in evaluating gas purchasing practices of natural gas utilities, utility class cost of service and rate design analysis, the unbundling of utility services, and evaluation of customer choice natural gas transportation programs. OCA St. 4 at 1-2.

⁴ OCA witness Dr. David Habr is the owner of Habr Economics, a consulting firm founded in January 2009 that focuses on cost of capital and mergers and acquisitions. Dr. Habr received a Bachelor of Arts and a Master of Arts degree in economics from the University of Nebraska- Lincoln and a Ph.D. degree in Economics from Washington State University. Dr. Habr’s professional background and qualifications are described in OCA St. 3, Exh. DSH-1.

⁵ OCA witness Stacy Sherwood is an Economist with Exeter Associates, Inc. At Exeter, Ms. Sherwood addresses utility revenue requirement, develops utility service assessments, provides bill and rate analysis, and assesses and evaluates the effectiveness of energy conservation and efficiency programs. Prior to joining Exeter, Ms. Sherwood served as a Regulatory Economist with the Maryland Public Service Commission (PSC). At the PSC, she performed analysis on the EmPOWER Maryland energy efficiency and demand response programs, the Exelon Customer Investment Fund, and served as lead analyst for the EmPOWER Maryland limited income programs. OCA St. 1 at 1-2, App. A.

2019, the OCA filed the Surrebuttal Testimony of its witnesses: Lafayette K. Morgan, Jerome D. Mierzwa, David S. Habr, and Stacy L. Sherwood. On December 13, 2019, the OCA filed the Revised Surrebuttal Testimony of its witness Stacy L. Sherwood. Evidentiary Hearings were held in Harrisburg on December 16, and 17, 2019. On December 16, 2019, at the Evidentiary Hearing, the Company orally entered its rejoinder testimony into the record with an accompanying Exhibit.

As discussed herein, the OCA proposes adjustments pertaining to the Company's proposed rate base, including plant additions and cash working capital; cost of capital, including the cost of equity; operations and maintenance expenses, and revenues and taxes. The OCA's adjustments to the Company's position result in the OCA's recommended revenue requirement of no more than \$359,459.44.

The OCA respectfully submits this Main Brief in support of its specific adjustments and recommendations.

C. Legal Standards

The Company bears the burden of proof to establish the justness and reasonableness of every element of its requested rate increase. In this regard, Section 315(a) of the Public Utility Code, 66 Pa. C.S. § 315(a), provides as follows:

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

66 Pa. C.S. § 315(a). The Commonwealth Court has interpreted this principle in stating that:

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

Lower Frederick Twp. v. Pa. P.U.C., 409 A.2d 505, 507 (1980) (citations omitted); see also, Brockway Glass v. Pa. P.U.C., 437 A.2d 1067 (1981).

The “term ‘burden of proof’ is comprised of two distinct burdens, the burden of production and the burden of persuasion.” Hurley v. Hurley, 754 A.2d 1283, 1285 (Pa. Super. 2000). The burden of production dictates which party has the duty to introduce enough evidence to support a cause of action. Id. at 1286. The burden of persuasion determines which party has the duty to convince the finder-of-fact that a fact has been established. Id. “The burden of persuasion never leaves the party on whom it is originally cast.” Hurley at 1286; see also Pa. PUC v. Equitable Gas Co., 57 Pa. PUC 423, 471 (1983).

The Pennsylvania Supreme Court has stated that the party with the burden of proof has a formidable task to show that the Commission may lawfully adopt its position. Even where a party has established a prima facie case, the party with the burden must establish “the elements of that cause of action to prevail, precluding all reasonable inferences to the contrary.” Burleson v. Pa. P.U.C., 461 A.2d 1234, 1236 (Pa. 1983) (Burleson). Thus, a utility has an affirmative burden to establish the justness and reasonableness of every component of its rate request.

The OCA notes that Pennsylvania law is clear that there is no similar burden for a party proposing an adjustment to a utility base rate filing. See e.g., Berner v. Pa. P.U.C., 116 A.2d 738 (1955). In Berner, the Pennsylvania Supreme Court stated:

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

Id. at 744. The Commission recognizes this standard in rate determinations. Pa. P.U.C. v. Equitable Gas Co., 57 Pa. P.U.C., 423, 471 (1983); see also, University of Pennsylvania v. Pa. P.U.C., 485 A.2d 1217 (1984); Pa. P.U.C. v. PPL Elec. Corp., 237 P.U.R. 4th 419 (2004). Thus, it

is unnecessary for the OCA, or any challenger, to prove that the Company's proposed rates are unjust, unreasonable, or not in the public interest. To prevail in its challenge, Pennsylvania law requires only that the OCA show how the Company failed to meet its burden of proof.

Therefore, the Company must affirmatively establish the reasonableness of every element of its claims and demonstrate that its proposed rates are just, reasonable, and in the public interest. In this Main Brief, the OCA will show that the Company has failed to satisfy its statutory burden in the manner set forth below.

II. SUMMARY OF ARGUMENT

As identified in the revised Surrebuttal Testimony of OCA witness Stacy Sherwood, the OCA recommends an increase of no more than \$359,459 in annual distribution revenues rather than Citizens' proposed increase of \$701,000 in annual distribution revenues (as revised in the Rebuttal Testimony of Company witness Gorman). In the Company's initial filing, the Company requested an increase of \$792,683 in annual distribution revenues.

As discussed herein, the OCA proposes adjustments to the Company's proposed cost of equity, rate base including the Company's use of an end of test year rate base of the Fully Projected Future Test Year including the corresponding depreciation adjustments, use of an across-the-board 3.0 percent inflation factor, cash working capital, taxes and net operating income items, including maintenance of overhead lines, customer records and collection expense, outside services employed, employee pension and benefits, and rate case expense. These adjustments result in the OCA's recommended increase for the annual distribution revenues. The OCA respectfully submits this Main Brief in support of the individual adjustments that underlie the recommended revenue increase.

The OCA also proposes adjustments to the Company's cost of service study and proposed allocation of revenue. The OCA also opposes the Company's proposal to include demand charges in its customer charge. If the Commission grants the Company less than its full proposed revenue request, the OCA has recommended a methodology for the scale back of a Commission-authorized rate increase.

Based on the evidence the Company has provided to support its revenue claim and the applicable law, it is clear that the Company's annual distribution revenues should increase by no more than \$359,459. The Tables reflecting the OCA's adjustments and a complete set of schedules supporting the OCA's recommendations are attached to this Brief as Appendix A.

The OCA now submits this Main Brief in support of the positions set forth in the testimony of its witnesses in this case.

III. ISSUES RESOLVED AMONG THE PARTIES

A. Summary

In Rebuttal Testimony, the Company accepted two of the OCA's rate base adjustments regarding Materials and Supplies balances and Customer Deposit balances. Along with a reduction to its ROE and acceptance of Construction Work in Progress for purposes of an end of year rate base, the Company included these adjustments as elements of its proposed reduction of its requested revenue requirement from \$792,000 to \$701,000.⁶ The OCA also accepts the Company's proposed inclusion of a reduction of revenues due to the projected installation of a 600 kW Combined Heat and Power (CHP) facility.

B. Rate Base

⁶ As discussed Section IV(B), the OCA does not agree with the Company's proposed position regarding the treatment of CWIP for an average rate base.

The rate base adjustments adopted by the Company include changes to a 13-month average for Materials and Supplies and Customer Deposit balances. In the Direct Testimony of OCA witness Morgan, the OCA adjusted Citizens' Materials and Supplies balances to reflect a 13-month average instead of the Company's proposed Historic Test Year end amount. OCA St. 2 at 5. In Rebuttal Testimony, Company witness Gorman accepted the use of a 13-month average for Materials and Supplies. Citizens' St. 1-R at 13. The adjustment reduces the Company's rate base by \$3,983. OCA St. 2 at 5, Sch. LKM-3; see, OCA witness Sherwood's flow-through of OCA witness Morgan's rate base adjustments, OCA St. 1 at 3, Sch. SLS-3; OCA St. 1-SR(Revised) at Sch. SLS-1 SR (Revised); App. A, Table II.

Also, in the Direct Testimony of OCA witness Morgan, the OCA adjusted Citizens' Customer Deposits balance to reflect \$82,925 of Customer Deposits being held by the Company. OCA St. 2 at 6. Similar to the adjustment for Materials and Supplies, Mr. Morgan adjusted the balance to reflect a 13-month average instead of the use of the Historic Test Year end amount. OCA St 2 at 7. In Rebuttal Testimony, Company witness Gorman accepted the use of a 13-month average. Citizens' St. 1-R at 13. The adjustment reduces the Company's rate base by \$5,810. OCA St. 2 at 6, Sch. LKM-4; see, OCA witness Sherwood's flow-through of OCA witness Morgan's rate base adjustments, OCA St. 1 at 3, Sch. SLS-3; OCA St. 1-SR at Sch. SLS-1 SR (Revised); App. A, Table II.

C. CHP Customer

In its filing, Citizens' adjusted FPFTY revenues to reflect the elimination of 3,903,000 kWh in sales due to the anticipated completion of a 600-kW Combined Heat and Power (CHP) project by a customer. OCA St. 4 at 30. OCA witness Mierzwa identified a concern that the CHP would not be able to meet the CHP customer's energy requirements due to an outage or

maintenance. OCA St. 4 at 30. In Rebuttal Testimony, Company witness Kelchner explained the adjustment. Citizens' St. 4-R at 11. OCA witness Mierzwa accepted the Company's explanation.

IV. RATE BASE

In testimony, the OCA recommended adjustments to rate base including plant in service, construction work in progress, materials and supplies, customer deposits, and depreciation expense. These adjustments are all the result of OCA witness Lafayette Morgan's testimony. These adjustments are reflected in the Mr. Morgan's Schedules LKM-1 through LKM-5 and have been reflected in Ms. Stacy Sherwood's revenue testimony and schedules and Tables I and II are discussed in Sections A thru B. OCA St. 2 at Sch. LKM-1 through LKM-5; see, OCA witness Sherwood's flow-through of OCA witness Morgan's rate base adjustments, OCA St. 1 at 3, Sch. SLS-3; OCA St. 1-SR (Revised) at Sch. SLS-3 C. The OCA notes that as discussed *supra* in Section III, the Company has accepted the OCA's rate base adjustments related to Materials and Supplies and Customer Deposits. In Section VIII below regarding Taxes, the OCA has made an adjustment related to the flowback of the Excess Deferred Income Taxes (EDIT) which would also have an impact on rate base. OCA witness Morgan also addressed the level of depreciation expense to reflect the use of the average rate base. OCA St. 2 at 8, Sch. LKM-2. The changes to the depreciation expense as a result of the change to the average rate base method is discussed in Section VI below.

Under the Pennsylvania Code, "Rate Base" is defined as: "The value of the whole or any part of the property of a public utility which is used and useful in the public service." 66 Pa. C.S. § 102. The U.S. Supreme Court has held that a "state scheme of utility regulation does not 'take' property simply because it disallows recovery of capital investments that are not 'used and useful

in service to the public.” Duquesne Light v. Barasch, 488 U.S. 299, 301-302 (1989) (Duquesne Light).

A. Plant in Service

1. Fully Projected Future Test Year

Act 11 of 2012 took effect on April 14, 2012 and permits, *inter alia*, utilities to use a Fully Projected Future Test Year (FPFTY) when applying for a general rate increase under Section 1308(d) of the Public Utility Code. 66 Pa. C.S. § 315(e). Act 11 provides in pertinent part:

In discharging its burden of proof the utility may utilize a future test year or a fully projected future test year, which shall be the 12-month period beginning with the first month that the new rates will be placed in effect after application of the full suspension period permitted under section 1308(d)...Notwithstanding section 1315 (relating to limitation on consideration of certain costs for electric utilities), the commission may permit facilities which are projected to be in service during the fully projected future test year to be included in the rate case.

66 Pa. C.S. § 315(e). Although the “notwithstanding” clause of Section 315 permits capital investments that are not used and useful on the first day of new rates to be included in an electric utility’s rate base during the Fully Projected Future Test Year period, Act 11 does not remove the requirement under Section 1301 of the Public Utility Code that rates be just and reasonable. 66 Pa. C.S. § 1301.

Prior to Act 11, utilities were permitted to use an Historic Test Year and a Future Test Year. An Historic Test Year (HTY) includes all of the utility’s revenues, expenses, and other rate base eligible investments from an historic period defined as the prior twelve months. A Future Test Year (FTY) allows utilities to project out their anticipated revenues, expenses, and other rate base eligible investments to approximately the time that new rates became effective. Projections made under a FTY are “projected when filed, but historic at the time rates become effective.” James H. Cawley & Norman J. Kennard, A Guide to Utility Ratemaking, Pa. PUC, at 86 (2018)

ed.). The FPFTY, in contrast, allows for a utility to project out its revenues, expenses, and other rate base eligible investments a full twelve months past the date that new rates become effective. 66 Pa. C.S. § 315(e). Thus, unlike the FTY, projections made under the FPFTY remain projections until one year after the new rates take effective.⁷

In its July 1, 2019 filing, the Company relied upon Act 11 and used a FPFTY period ending December 31, 2020 to determine its proposed revenue increase. OCA St. 1 at 4. Citizens' used an end-of-year methodology for determining its rate base which assumes that on Day 1 of new rates, all projected rate base investments have already been incurred, similar to the methodology used for a FTY claim. The OCA recommends that the Company use an annual average method for determining rate base to more accurately reflect the costs as they are incurred *during* the FPFTY. In support of its position, the OCA submitted testimony from its expert witnesses, Stacy L. Sherwood and Lafayette K. Morgan. Ms. Sherwood testified that Citizens' use of an end-of-year method to determine its investments and expenses during the FPFTY period failed to properly reflect costs actually incurred throughout the FPFTY period, which resulted in the Company overstating its cost of service during the first year. OCA St. 1 at 4. As OCA witness Sherwood explained, when using a FPFTY, rates must reflect costs as they are incurred throughout the year. OCA St. 1 at 4. Otherwise, rates will be set higher than the level of expenses and return that is required.

⁷ The Company filing and OCA witness Sherwood have utilized an historic test year ending December 31, 2018; a future test year ending December 31, 2019; and a fully projected future test year ending December 31, 2020 as the basis for determining the Company's revenue requirements and the revenue increase necessary to recover those requirements. OCA St. 1 at 2-3. The Commission's regulations require that a rate case be filed within 120 days of the Company's historic test year (HTY). 52 Pa. Code § 53.52(b)(2). On February 28, 2019, Wellsboro, Citizens' Electric of Lewisburg, and Valley Energy collectively requested a waiver of the Commission's filing requirements that requires the Companies to file within 120 days of the Company's HTY. In this case, the waiver received extended until July 1, 2019, at which time the Companies filed the instant rate cases. On March 25, 2019, at the respective rate case dockets, the Commission issued a Secretarial Letter granting the waiver.

OCA witness Sherwood explained the impact of the use of the end of test year methodology instead of the average rate base methodology:

The use of the FPFTY allows for the rate year to reflect costs incurred during the first year that the rates are in effect; however, Citizens' FPFTY reflects the costs that will be incurred by year end December 31, 2020. Therefore, Citizens' has overstated its revenue requirement in the FPFTY by reflecting levels of costs that will be experienced at the end of the rate year rather than the levels of costs incurred during the rate year. The use of a year-end rate base would result in Citizens' earning a 12-month return, beginning on January 1, 2020, on the level of plant that will not be in service until December 31, 2020. The Company should not expect ratepayers to pay a return on investments not yet made by the Company.

OCA St. 1 at 4.

Simply put, the end-of-year method will allow the Company to over-earn on its investment in the FPFTY while annual average method recognizes that capital investments will be made throughout the first year that new rates are in effect. OCA St. 1 at 4. The end-of-year method is analogous to an individual telling a bank that the individual will be making an interest bearing deposit on Day 365, but the individual would like to begin receiving interest on Day 1. The bank would likely, and correctly, deny such a request because interest is only paid from the point of investment, not one year in advance. OCA witness Sherwood explained this example:

For example, if a bank requested on December 31, 2019 to begin to pay interest on a deposit made on December 30, 2020, the bank would not agree to those terms and would not pay interest on the deposit until it was made. If the ending account balance on December 31, 2020 was \$500, but the average account balance during the year was only \$250, the bank would only pay interest on the average account balance and not the year-end balance.

OCA St. 1 at 4-5.

The OCA submits that the Company has not met its burden to demonstrate that the use of the end of the test year methodology for rate base results in just and reasonable rates. OCA witness Morgan explained the difference between using the end of test year plant in a FTY versus with the FPFTY:

I continue to believe that average test year plant is appropriate to use for the FPFTY. In rate cases that predated Act 11, the revenue requirements of utilities were established based on FTY costs. Because the FTY ended at approximately the same time that new rates were scheduled to take effect, it was appropriate to make adjustments to reflect the end of the test year because those costs would have been incurred before the new rates went into effect. Adjusting plant balances to year end levels is not appropriate now that a FPFTY is being used to establish rates because those costs will not be incurred when new rates go into effect. Adjusting costs to end of rate year levels and beyond would result in the Company recovering costs from ratepayers that are in excess of the costs that will be incurred during the rate year. Therefore, the use of the end of period balance should be rejected.

OCA St. 2-SR at 2. Mr. Morgan then calculated the average rate base to be used by Ms. Sherwood. See, OCA St. 2 at Sch. LKM-1 through LKM-2; see, OCA witness Sherwood's flow-through of OCA witness Morgan's rate base adjustments, including average rate base. OCA St. 1 at 3, Sch. SLS-3; OCA St. 1-SR (Revised) at Sch. SLS-3 C; App. A, Table II.

In Rebuttal Testimony, Company witness Gorman argued that using the FPFTY average balances would "blunt the purpose of using FPFTY" and identified that the Commission had addressed this issue recently in the UGI Utilities-Electric Division rate proceeding. Citizens' St. 1-R at 12-13, citing Pa. PUC v. UGI Utilities, Inc. – Electric Division, Docket No. R-2017-2640058, Order (Oct. 25, 2018). The Company did not provide any further justification for use of the end of test year instead of the average rate base. The OCA notes that it has challenged the Commission's determination in the UGI case at the Commonwealth Court, and oral argument in the matter was held in December 2019. See, Tanya J, McCloskey, Acting Consumer Advocate v. Pa. PUC, Case No. 1529 C.D. 2018.

The Company's proposed end-of-year method results in rates are unjust and unreasonable. Section 1301 of the Public Utility Code requires that "[e]very rate made, demanded, or received by any public utility, or by any two or more public utilities jointly, shall be just and reasonable, and in conformity with regulations or order of the commission." 66 Pa. C.S. § 1301. Under the

just and reasonable standard, a utility is provided only with “a rate that allows it to recover those expenses that are reasonably necessary to provide service to its customers as well as a reasonable rate of return on its investment.” City of Lancaster (Sewer Fund) v. Pa. PUC, 793 A.2d 978, 982 (Pa. Commw. 2002). The utility bears the burden of “proving the reasonableness of its rates” and proving “the reasonableness of those expenses which form the basis for its rates.” Carnegie Nat’l Gas Co. v. Pa. PUC, 433 A.2d 938, 942 (Pa. Commw. 1981); see also, Keystone Water Co., White Deer Dist. v. Pa. PUC, 477 Pa. 594, 609-610 (1978)(addressing the inclusion of a specific plant in rate base). Allowing a company to recover more than its necessary costs cannot be found to be just and reasonable.

The OCA notes that in a 2013 general rate increase case, the Illinois Commerce Commission reached the conclusion that the average rate base method was the appropriate method to use with a FPFTY:

The Commission finds that an average rate base methodology is more appropriate than a year end based calculation on the facts of the particular cases before us. The selection of an average rate base calculation take [sic] into account that investments are made throughout the test year, rather than the Companies’ method of a year-end rate base which inappropriately assumes, for rate setting purposes, that all investments are made at the beginning of the test year.

Re North Shore Gas Company, ICC Docket Nos. 12-0511/0512, at 38 (Order entered June 18, 2013).

The Company’s proposed end-of-year method will result in rates that are unjust and unreasonable. The end-of-year method allows the Company to over-earn on its investments by collecting through rates more than the actual costs the Company incurred during the test year. 66 Pa. C.S. §§ 315(e), 1301. The proposed change from the Company’s filed end of test year rate base to the OCA’s proposed average rate base would decrease the Company’s proposed rate base by

\$592,756 from \$26,687,785 to \$26,095,029. OCA St. 1 at Sch. SLS-3. OCA witness Morgan provided OCA witness Sherwood with the revised information contained in Schedule LKM-1 to allow Ms. Sherwood to reflect the average plant-related balances and Accumulated Depreciation for inclusion in rate base. OCA St. 2 at 4, Sch. LKM-1; see, OCA St. 1 at Sch. SLS-3. On Schedule LKM-1, OCA witness Morgan adjusted the year-end Plant in Service and Accumulated Depreciation to reflect the average FPFTY amounts for inclusion in rate base by \$592,756 and \$378,420, respectively. OCA St. 2 at 5, Sch. LKM-2; see OCA St. 1 at Sch. SLS-3.

B. Deductions from Rate Base

The Company included the Construction Work in Progress (CWIP) balance as of the end of the HTY in rate base. OCA St. 2 at 4. In the Company's response to OCA-Citizens'-Set-II-20, the Company stated that the reason for including CWIP in rate base is that CWIP represents funds the Company has invested in order to serve customers. OCA St. 2 at 4. The Company stated that it does not capitalize construction period interest, therefore including CWIP in rate base is the mechanism for the Company to earn a return on these assets. OCA St. 2 at 4-5.

OCA witness Morgan recommends that an adjustment be made to remove the CWIP balance of \$70,492 from rate base. OCA St. 2 at 5, Sch. LKM-2; see also, OCA St. 1-SR (Revised) at Sch. SLS-3 C for flow-through of adjustment to OCA witness Sherwood's testimony.⁸ OCA witness Morgan testified:

In order to qualify for inclusion in rate base, a plant item should be completed and placed in service. Moreover, the CWIP balance as of the end of the HTY is likely to already be a part of the plant that is placed in service during the FTY and the FPFTY. Therefore, the inclusion of the CWIP balance would result in a double count of those costs. For these reasons, on Schedule LKM-2, I am recommending an adjustment that removes the CWIP balance of \$70,492 from rate base.

⁸ On December 13, 2019, OCA witness Sherwood corrected the non-Proprietary and Proprietary versions of her Surrebuttal Testimony regarding the CWIP reported in her Schedule SLS-3. OCA St. 1-SR (Revised) at 2. She testified, "the Construction Work in Progress reported in SLS-3 was incorrectly reported as \$800,000 instead of \$70,482." OCA St. 1-SR (Revised) at 2; Tr. 281-282.

OCA St. 2 at 5, Sch. LKM-2. I&E witness Cline also testified that it is not appropriate to include CWIP in rate base and removed the Company's proposed inclusion of CWIP in rate base. I&E St. 3 at 8-11.

Company witness Gorman partially agreed with the OCA's and I&E's adjustment stating that "[i]f the Company uses the end-of-year Plant balances, then it is acceptable to remove CWIP." Citizens' St. 1-R at 13; see also, OCA St. 2-SR at 7. Mr. Gorman acknowledges that specific projects were not identified by the Company in this proceeding, but states that if specific projects had been identified, they would have been included. Citizens' St. 1-R at 13; see also, OCA St. 2-SR at 7. Company witness Gorman states that it is "notable that Mr. Morgan proposes to reject *both* projects in process during the year (CWIP) and projects completed during the year (end of year Plant), which seems self-contradictory." Citizens' St. 1-R at 13 (emphasis in original); see also, OCA St. 2-SR at 7. In Surrebuttal Testimony, OCA witness Morgan states "the relevance of that statement is unclear because he does not indicate what should be done." OCA St. 2-SR at 7.

The OCA submits that it is not appropriate to include CWIP in rate base either using an end of test year or the average rate base test year method because in either case, the plant item will not be completed and placed in service during the FPFTY. See, OCA St. 2 at 6. Moreover, CWIP balance as of the end of the HTY is likely to already be part of the plant placed in service during the FTY and the FPFTY. OCA St. 2 at 5. Inclusion of the CWIP in rate base would result in a double count. OCA St. 2 at 5.

The Commission has historically disallowed the inclusion of CWIP in rate base. See, Pa. PUC v. Emporium Water Co., 2001 Pa. PUC LEXIS *7, Order at *41 (March 8, 2001). As the Commission stated in Pa. PUC v. West Penn Power:

[t]he inclusion in rate base of such CWIP would create a mismatch of revenues, expenses, and plant invest during the test period. It would distort the relationship among costs and revenues by preventing a proper analysis of the company's revenue requirements.

Pa. PUC v. West Penn Power, 53 Pa. PUC 410, Order at 423-424 (Aug. 27, 1979).

The OCA submits that under either the average rate base and year-end rate base approaches, it is improper to include CWIP in rate base. The Commission has been consistent on the exclusion of CWIP in rate base. The OCA submits that the Company's proposed modification to exclude CWIP only with the use of end of test year plant is without merit and should be denied. See, OCA St. 2 at 5, Sch. LKM-2; see also, OCA St. 1-SR (Revised) at Sch. SLS-3 C

V. REVENUES

A. Correction to OCA witness Sherwood Direct Testimony

The OCA submits that OCA witness Sherwood adjusted her revenue calculation in her Surrebuttal. On December 13, 2019, OCA witness Sherwood revised the Proprietary and non-Proprietary versions of her Surrebuttal testimony to address an error in her schedules regarding the Company's revenues. Ms. Sherwood describes the corrections that she made to revenues on page 2 of her Surrebuttal Testimony. OCA St. 1-SR (Revised) at 2; Tr. 281-282. Ms. Sherwood testified about the correction:

I used the historic test year ("HTY") revenue for the Company instead of factoring in its adjustments to the future test year ("FTY") and fully projected future test year ("FPFTY"). With this change, I have maintained OCA witness Mierzwa's adjustment to revenue.

OCA St. 1-SR (Revised) at 2. The change impacted Schedule SLS-1, and Ms. Sherwood corrected the impact on Schedule SLS-1 C. OCA St. 1-SR (Revised) at 2, Sch. SLS-1 C.

B. Proposed 3 MW Solar Installation Project

Citizens' includes the proposed completion of a 3 MW solar installation at Bucknell University (Bucknell). The Company proposes to reduce its sales revenues in order to reflect the installation of the solar project by the end of the FPFTY. The OCA submits that the Company has not demonstrated that the project is likely to be completed during the FPFTY utilized in this proceeding. OCA St. 4 at 8.⁹ As OCA witness Mierzwa testified:

Citizens' has adjusted FPFTY revenues to reflect the elimination of 3,681,000 kWh in sales due to the anticipated completion of a 3-MW solar installation at Bucknell. This reflects 100 percent of the Bucknell energy service requirements currently met by Citizens'. As also previously indicated, completion of the solar installation is unlikely to occur during the FPFTY in this proceeding. Therefore, Citizens' FPFTY revenues should be adjusted to reflect the continuation of historic service levels to Bucknell. An adjustment to FPFTY revenues of \$12,024 to account for provide service to Bucknell is presented on Schedule JDM-5.

OCA St. 4 at 29. OCA witness Sherwood flowed through the recommendation by increasing FPFTY revenues by \$12,024 to eliminate the Company's proposed sales losses associated with a solar installation at Bucknell. OCA St. 4 at 29-30, Sch. JDM-5; see also, OCA witness Sherwood's flow-through of the adjustment at OCA St. 1 at 3, Sch.SLS-1 C (Revised); App. A, Table II.

The OCA submits that the record evidence demonstrates that the completion and timeframe for completion of the proposed Bucknell solar installation is uncertain and is not a known and measurable change that should be reflected in Citizens' revenue requirement. See, OCA St. 4 at 29. There have been delays to the proposed solar installation project due to issues with East Buffalo Township. As discussed in the article attached to OCA witness Mierzwa's Direct Testimony, the East Buffalo Township Planning Commission, in fact, tabled the discussion of the Bucknell solar project earlier this year due to zoning concerns. OCA St. 4 at Sch. JDM-1, page 1. As the article attached as Schedule JDM-1 indicated, there were two problems with Bucknell's proposal:

⁹ The FPFTY test year will conclude on December 30, 2020.

The land doesn't allow for industrial use, which Misener [Planning Commission member] said a solar field would fall under since it generates electricity. The system would be owned by a third-party and built on land leased by Bucknell, which Misener said wouldn't adhere to zoning requirements for university-designated land.

OCA St. 4 at Sch. JDM-1, page 2. As the article attached as Schedule JDM-2 further indicates and Mr. Kelchner identifies in his Rebuttal Testimony, a solar zoning ordinance is needed in order for the project to be considered by the East Buffalo Township. OCA St. 4 at Sch. 2, page 1; Citizens' St. 4-R at 9. In Surrebuttal Testimony, OCA witness Mierzwa presented an additional article from the local paper, the Standard-Journal, that identified that the project had been withdrawn. OCA St. 4 at 14, Sch. JDM-7.

In oral Rejoinder Testimony, Company witness Kelchner confirmed that "[t]here were some issues with zoning, and the panel tabled their land development in order to allow the Township to deal with that." Tr. 134. In fact, East Buffalo Township Planning Commission has only proposed a solar ordinance in December 2019. As Company witness Kelchner admitted, the solar zoning ordinance would still need to be reviewed and approved by the Township. Tr. 147. In cross-examination, Mr. Kelchner acknowledged that in theory, the township could also decide to change or amend the proposed zoning ordinance before finalizing it. Tr. 148-149. Moreover, when asked if the ordinance did get passed, when the zoning ordinance would become effective, Company witness Kelchner responded, "I don't know." Tr. 148. If the solar ordinance is approved at some date in the future, Bucknell would then need to present its plan to the Township. When asked if the Township could potentially recommend changes to the proposal or could, in theory, deny it, Mr. Kelchner responded "Sure" to both questions. Tr. 148, 149. Finally, even if all of these steps are successful, the project would still need to construct the solar installation,

interconnect it, and have it operational at the proposed 3 MW level. There is no evidence that this will occur in any part of the FPFTY.

The OCA submits that there is not sufficient certainty for ratemaking purposes that the project will ever be implemented or will be implemented and operational during the Fully Projected Future Test Year. The Company has been unable to establish that the proposed revenue decrease for Bucknell's proposed solar installation project will be "known and measurable" in the Fully Projected Future Test Year. The OCA submits that only costs that are known and measurable should be included in rates and only projects that are used and useful within the chosen test year (in this case the Fully Projected Future Test Year) should be reflected in the calculation of revenue requirement.

VI. EXPENSES

A. Overview

The expenses at issue in this case include expenses associated with: 1) the across-the-board 3.0 percent inflation factor applied across all expenses; 2) maintenance of overhead lines; 3) customer records and collection expense; 4) outside services employed; 5) employee pension and benefits; 6) rate case expense; 7) the impact on cash working capital as adjusted by the OCA's recommended O&M expenses; and 8) depreciation expense.

B. Inflation Factor

The Company projected in its FPFTY Operations & Maintenance (O&M) expenses to recognize a general level of rising costs of 3.0 percent. OCA St. 2 at 7.¹⁰ The Company identified in response to a discovery request that the 3.0 percent was determined based on judgment rather

¹⁰ The OCA notes that the Company did amend its proposal for the FPFTY to annualize 9 months of actual data and then to apply the 3% inflation factor across-the-board to the annualization. Citizens' St. 1-R at 3; see, OCA St. 1-SR (Revised) at 7-9. The OCA submits that the Company's determination to annualize the actual data does not impact the OCA's arguments regarding why an across-the-board inflation factor is not appropriate.

than a quantitative method and referenced Producer Price Index (PPI) data sourced from the Bureau of Labor Statistics (BLS) that suggest an historical PPI inflation rate higher than 3.0 percent. OCA St. 2 at 7. The Company has used the 3.00 percent inflation rate as a proxy for determining the FPFTY O&M expenses rather than using forecasted data. OCA St. 2 at 7. The OCA submits that the Company's proposed across-the-board 3.0 percent growth rate for determining the FPFTY expenses is unreasonable and must be rejected.

A proposed across-the-board 3.0 percent growth or inflation rate is not known and measurable and is not consistent with the law. As OCA witness Lafayette Morgan testified:

These inflationary adjustments are not actually known and measurable because they do not reflect the true cost of expenses. Inflation adjustments are typically blanket adjustments or increases which do not directly relate to actual costs expected to be incurred by the Company in the period in which rates are set. Costs should be based upon evidence or documentation that supports the Company's adjustments. I do not believe the determination of expenses for the FPFTY was envisioned to be simply applying an inflation rate to expenses. Therefore, my recommendation to Ms. Sherwood is to remove the inflation adjustment from the revenue requirement determination.

OCA St. 2 at 7-8.

OCA witness Sherwood then flowed through this adjustment to remove the inflation factor for all expenses for the FPFTY. As Ms. Sherwood testified, this adjustment impacts all expenses for the FPFTY as the inflation factor was applied to all FTY expenses. OCA St. 1 at 3-4. Ms. Sherwood testified:

To reflect this adjustment, for accounts that I do not recommend specific adjustments, I used the Company's proposed FTY budget for FPFTY. These adjustments are reflected on Schedule SLS-1. By not using the Company's proposed inflation factor, I reduced these accounts by \$48,865. For the accounts which I have recommended specific adjustments, I have not utilized an inflation factor to determine the FPFTY.

OCA St. 1 at 4.

In Rebuttal Testimony, Company witness Gorman argued that the Commission has historically recognized the use of inflation factors in projecting costs. Citizens' St. 1-R at 10. In support of his claim, Mr. Gorman cites to the Commission's Orders in two Pennsylvania-American Water Company rate cases, Docket No. R-00038304 (Order entered January 29, 2004) and Docket No. R-880916 (Order entered October 21, 1988). See, Citizens' St. 1-R at 10, citing Pa. PUC v. Pennsylvania-American Water Co., Docket No. R-00038304, Order at 35 (Jan. 29. 2004); Pa. PUC v. Pennsylvania-American Water Co., et al., Docket No. R-880916, Order at 54 (Oct. 21, 1988).

The OCA submits that the Pennsylvania-American cases cited by Mr. Gorman are not applicable here. The basis of the cost of service in the cases he has cited differs substantially from the FPFTY filed in this matter. and the inflation factor was applied to a limited number of residual expenses. As OCA witness Morgan testified:

First, it is important to recognize that the cases cited by Mr. Gorman pre-date Act 11. In other words, those cases were not based upon Fully Projected Future Test Years (FPFTY). The cases cited by Mr. Gorman were filed at a time when utilities were limited to the use of either a historical test year (HTY) or the partially projected future test year (FTY). When developing the FTY or the adjusted HTY, the cost of service was based upon costs that were known, measurable and certain. Act 11 amended Chapter 3 of the public utility code to allow jurisdictional utilities to make rate case claims based on a FPFTY. However, utilities are not restricted or required to use the FPFTY. The partially projected future test year (FTY) can still be used.

Under the HTY and FTY approach, utilities are required to adjust their actual historical cost of service using the known and measurable principle. When the HTY and FTY approach is used, companies do not base their entire cost increases on an inflation escalation. Thus, in Pennsylvania-American Water Company (PAWC) rate cases, that company would typically adjust the various cost elements based on known and measurable cost increases, and only adjust residual expenses using an inflation factor. The residual expense adjustment generally turned out to be minor relative to the adjustments made and the total cost of service.

I disagree with the Company's approach to developing the cost of service because it is extremely improper since the Company's projections are not based upon planned activities or normal Company operations. The Company's very simplified blanket inflation approach is not a projection as envisioned by Act 11.

OCA St. 2-SR at 3 (footnote omitted).

Escalation of the historical amounts by an inflation factor is not an appropriate method of cost projection consistent with Section 315 of the Public Utility Code because it bears no relationship to the activities planned for the rate year. OCA witness Morgan testified:

In fact, the utility does not meet its burden of proof by applying the inflation to all its costs because there is no way to assess the reasonableness of the FPFTY expenses relative to HTY or the FTY expenses. In my experience with other utilities filing a FPFTY, the utilities have been able to demonstrate and explain reasons for FPFTY cost changes based upon specific causes such as unit price increases, planned activities, and abnormal activity in the HTY. For Citizens', no such detail or causes can be provided because the only explanation is the choice of the inflation escalation rate.

OCA St. 2-SR at 5.

The Commission has often that found across-the-board inflation factors, or attrition adjustments, should not be used to establish rates because they are speculative in nature. See, Pa. PUC v. Philadelphia Gas Works, 2007 Pa. PUC LEXIS 45 (Sept. 28, 2007)(PGW); Pa. PUC v. Philadelphia Electric Co., 1990 Pa. PUC LEXIS 155 (May 16, 1990)(PECO 1990)(rejection of attrition adjustment related to Limerick 2); Pa. PUC v. Philadelphia Electric Co., 58 Pa. PUC 7, 11-12 (1983) (PECO 1983). For example, in a similar fashion as the Company proposes here, PGW sought to determine O&M expenses by increasing expenses across-the-board using a 2% inflation factor, and the Commission denied the proposed use of a five-year forecast with a 2% inflation factor. Similarly, in the PECO 1983 case, the Commission stated "however in the final analysis the company's proposed attrition adjustment must be rejected as speculative in nature." PECO 1983 at 12.

The OCA also submits that even if an inflation factor is considered, the calculation of the Company's proposed inflation factor is unreasonable. OCA witness Morgan testified:

[a] better measure of inflation for ratemaking purposes would be the forecasted Gross Domestic Product-Price Index (GDP-PI) of 2.1 percent for calendar year 2020 instead of the Company's 3.0 percent. This forecasted GDP-PI of 2.1 percent for calendar year 2020 was obtained from the August 2019, Volume 44, No. 8 Blue Chip Financial Forecast. The Blue Chip Financial Forecast is a well-respected publication that is used as a source of economic data. I believe the use of projected GDP-PI is more reasonable than the Company's judgmental approach for three reasons. First, past history is not a good predictor of future inflation. Therefore, relying on past inflation is not reasonable. Second, the 3.0 percent used by the Company was judgmental and did not rely upon an objective quantitative approach for determination. Third, it is a misuse of the PPI to forecast operating costs, especially for projecting expenses for ratemaking purposes. According to the Bureau of Labor Statistics' website,

The Producer Price Index is a family of indexes that measures the average change over time in the selling prices received by domestic producers of goods and services. PPIs measure price change from the perspective of the seller. This contrasts with other measures, such as the Consumer Price Index (CPI), that measure price change from the purchaser's perspective.

The cost changes that the Company is attempting to project are not its price changes. Rather, the cost changes are those Citizens' is projecting for prices or costs it (as a purchaser) will pay in obtaining goods and services. Thus, the PPI is not an appropriate tool to measure the change in costs.

OCA St. 2 at 8-9 (footnote omitted).

In Mr. Gorman's Rebuttal Testimony, he testifies that "[a]t a minimum, the OCA's alternative measure of inflation should be adopted (i.e., 2.1%)" Citizens' St. 1 at 11. By presenting the alternative inflation rate, the OCA is not suggesting that an across-the-board inflation factor is appropriate. The use of any inflation factor in the manner employed by the Company is improper. As the OCA points out, the Company has also utilized an overstated inflation factor that is not appropriate, and if the Commission disagrees with the OCA's recommendation, a more appropriate inflation factor should be used.

For the reasons set forth above, the OCA submits that the proposed 3.0 percent inflation factor applied to all expenses is not known and measurable or consistent with the law. Moreover,

the Company's proposed calculation of the 3.0 percent factor is also flawed. The Commission should reject the Company's use of an inflation factor and adopt the OCA's adjustment.

C. Account 593 – Maintenance of Overhead Lines

The Company projects that the total expenses for the maintenance of overhead lines will be \$456,019. OCA St. 1 at 5. This expense is \$54,544 or 14 percent higher than the expenses in the HTY. Id. OCA witness Sherwood disagrees with the Company's forecast for Account 593. The Company attributes the increase to a \$37,000 increase in vegetation contractor costs. OCA St. 1 at 5. However, OCA witness Sherwood states:

The vegetation contractor costs vary by year, for example, like in 2018 when contractor costs were \$34,000 lower than the budget due to a favorable bid. It is further evident in the annual contractor costs, which varied from \$85,810 to \$174,962 between 2013 and 2018. Due to the variance in the annual cost for the vegetation contract, I recommend using a three-year average. Using this methodology, I recommend that the contractor costs for the FPFTY be adjusted to \$154,940. When the account is adjusted for the removal of the Company's inflation factor for FTY to FPFTY, it effectively decreases the total expense for Account 593 to \$415,367.

OCA St. 1 at 5 (footnote omitted).

I&E witness Patel also proposed a reduction¹¹ to the Company's claim for Account 593 stating "it is apparent that the Company experienced a fluctuating trend. . ." I&E St. 1 at 17. Company witness Kelchner argued that the Company's projected costs were already conservative and that based upon bids received, it appeared that tree trimming costs would be higher than projected. Citizens' St. 4-R at 6. OCA witness Sherwood took into account the fluctuation of the cost and bids for future years in developing her recommendation to average the vegetation management across three years which was appropriate. OCA St. 1-SR (Revised) at 5.

¹¹ A reduction of \$9,564. I&E St. 1 at 17.

The OCA submits that OCA witness Sherwood's recommendation to average the vegetation management contractor costs for three years, 2016 through 2018, is reasonable given the fluctuating in this account. Ms. Sherwood adjusted Account 593 expense by \$40,652. This adjustment is reflected in Schedule SLS-4. OCA St. 1 at 5; OCA St. 1-SR (Revised) at 5; App. A, Table II.

D. Account 903 – Customer Records and Collection Expense

The Company projects that the total cost of customer records and collection expense will be \$469,626. Citizens' St. 1 Exh. HSG-1 Schedule C1-1 at 4, OCA St. 1 at 6. This expense is \$43,597, or 10 percent, higher than the expenses in the HTY. OCA St. 1 at 6. OCA witness Sherwood disagrees with the Company's forecast for Account 903 on the basis that the Company includes costs that are not normal or on-going. OCA St. 1 at 6.

The Company attributes the increase to training of a new employee and employee overlap planned for 2019 and 2020. OCA St. 1 at 6. To remove the overlap expense, OCA witness Sherwood recommends using the 2018 labor and average material cost for the years 2016 through 2018, this adjustment would lower the FPPTY budget for Account 903 to \$426,029. OCA St. 1 at 6. Additionally, I&E witness Patel noted a declining trend in Account 903 and the Company's failure to provide an explanation in support of an increase, therefore resulting in Mr. Patel recommending a reduction.¹² I&E St. 1 at 14-15.

In rebuttal the Company witnesses did not respond directly to the OCA's recommendations regarding Accounts 932 but made general comments about all line items of O&M expenses. Citizens' St. 1-R at 11. Company witness Gorman criticizes OCA witness Sherwood's adjustments to O&M expense in general. Citizens' St. 1-R at 11. Specifically, Mr. Gorman

¹² A reduction of \$13,650. I&E St. 1 at 14-15.

disagrees with OCA witness Sherwood's accounting methods, for example, using a 3-year average. Citizens' St. 1-R at 11.

OCA witness Sherwood responded by stating:

I recommended adjustments to accounts that appeared to have aberrations based upon historical trends and year-to-year comparisons. If the Company reasonably justified the expense increases, then I accepted the Company's proposed claim. My recommended adjustments reflected evidence available at the time of my direct testimony for the Company's proposed increase or expenses to be included in the Company's rates. While my methodology for proposing the adjustments varied, it was done to provide a fair adjustment for the Company . . . Witness Gorman states that the entire year's expenses should be evaluated; however, I would argue that multiple years should be evaluated when considering the budget for the FPFTY. While expenses may be running close to the Company's overall FPFTY claim, it does not necessarily mean that the level of expenses incurred in FTY will be incurred in FPFTY due to one-time expenses or unexpected projects. Historic, FTY, and FPFTY expenses should be considered. Furthermore, there is potential for expenses in the FTY to be higher for one year and not in future years. This is why the historical expense trends should be considered along with known and measurable increases when setting rates.

OCA St. 1-SR (Revised) at 4.

The Company also attributes the increase to the training of new employees, and employee overlap for 2019 and 2020, the overlap is expected to end mid-2020. OCA St. 1 at 6. OCA witness Sherwood testified that the associated labor and material (training) costs are not normal or on-going, therefore they should be eliminated for ratemaking purposes. OCA St. 1 at 6. Expenses that are not normal should not be included in the forecast. See Pa. PUC v. Philadelphia Gas Works, 2007 Pa. PUC LEXIS 45, *26-27. ("The object of using a test year is to reflect typical conditions.")

The OCA submits that OCA witness Sherwood's recommendation to adjust Account 903 expense by \$43,591, this adjustment is reflected in SLS-5. OCA St. 1 at 7; App. A, Table II.

E. Account 923 – Outside Services Employed

The Company projects that the total cost of outside services employed will be \$81,370. OCA St. 1 at 7. This expense is \$10,380, or 11 percent, lower than the expense in the HTY due to the Company removing one-time expenses from HTY. OCA St. 1 at 7. OCA witness Sherwood agrees with removing one-time expenses, but noted that the Company may not have removed all such expenses. OCA witness Sherwood testified:

While the Company may have removed some of the one-time expenses from the account, it appears that they may not have removed all of those charges as the account is still 68 percent, or \$33,078, higher than the five year average (2013-2017). The Company did not indicate that any of the expenses incurred under Account 923 are expected to increase. Further indicative of this is that the Account 923 expenses during the first half of 2019 were approximately \$28,000. If those expenses doubled by the end of 2019, the expenses under Account 923 would be approximately \$25,400 below the Company's FTY projections. Therefore, I recommend averaging the Account 923 expenses for 2016 and 2017, excluding 2018 to eliminate one-time expenses. Using this methodology, I calculate the Account 923 expense to be \$52,915 in the FPFTY.

OCA St. 1 at 7 (footnote omitted).

I&E witness Patel also recommends a reduction¹³ to the Company's claim for Account 923 due to the Company recognizing one-time expenses and the Company's expenses within the first six months not keeping track with projections. I&E St. 1 at 19-20.

In rebuttal, company witness Kelchner states that the actual expenses for the FTY are closer to the Company's claim based upon the annualized expenses presented in Company witness Gorman's rebuttal testimony. Citizens' St. 4-R at 6, Citizens St. 1-R at 4. In response, OCA witness Sherwood explained, however, the Company does not appear to have removed all one-time expenses. OCA ST. 1-SR (Revised) at 6. Additionally, OCA witness Sherwood notes that

¹³ A reduction of \$25,380. I&E St. 1 at 19-20, I&E St. 1-SR at 20-21.

Company witness Gorman's annualized FTY expense amount is \$18,470 below the Company's claim for FPFTY, which indicates that the Company's claim is likely higher than what will actually be incurred. OCA St. 1-SR (Revised) at 6. OCA witness Sherwood further states:

Therefore, it seems unreasonable for the Company to continue using its projected FPFTY claim. The annual historical expenses for this account, accompanied by the actual and annualized expenses for the FTY indicate that the claim for this account is unlikely to be realized.

OCA St. 1-SR (Revised) at 6.

OCA witness Sherwood recommends adjusting Account 923 by \$28,456, the adjustment is reflected in Schedule SLS-6; App. A, Table II. OCA witness Sherwood's adjustment is reasonable and should be adopted.

F. Account 926 – Employee Pension and Benefits

The Company projects that the total cost of employee pension and benefits will be \$10,300. OCA St. 1 at 8. This account includes employee appreciation expenses such as employee gifts, Christmas parties, picnics, and retirement parties. OCA St. 1 at 8. In 2018, the Company spent \$1,150 on retirement party and \$3,270 on Christmas party. Id. OCA witness Sherwood notes that these expenses do not serve to enhance service to customers and should not be supported by rates. OCA St. 1 at 8. OCA witness Sherwood recommended that such expenses be removed, leaving coffee, equipment lease, national night out, and a safety breakfast as the remaining employee appreciation expenses under employee appreciation. OCA St. 1 at 8. OCA witness Sherwood's adjustment results in an \$8,039 reduction to Account 926, as reflected on Schedule SLS-7. OCA St. 1 at 8-9.

In rebuttal, Company witness Kelchner objected to Ms. Sherwood's adjustment, stating that the company parties help improve morale and decrease employee turnover. Citizens' St. 4-R

at 7. However, the Commission has consistently disallowed these types of entertainment expenses based on its reasonable determination that they are not necessary in the provision of public utility service. See Pa. P.U.C. v. Pennsylvania-American Water Co., 1993 PaPUC LEXIS 79, *121-23 (PAWC 1993) (expenses for entertainment and gifts inappropriately included in utility's rates because they did not directly relate to the provision of quality water service); see also Pa. P.U.C. v. Citizens Utilities Water Co. of Pa., 169 PUR4th 552, 584-85 (1996) (disallowing expenses for gifts, flowers, in-house luncheons and horticultural service despite the Company's claim that these items improved employee morale). Only expenses directly related to "employee recognition" dinners are permitted. See PAWC 1993 at *123; Pa. P.U.C. v. Pennsylvania-American Water Co., 1995 PaPUC LEXIS 170, *38-39 (PAWC 1995)

OCA witness Sherwood demonstrates that the Company's decision to incur these expenses, especially at these levels, do not enhance service to customers. OCA St. 1-SR at 6-7. The OCA submits that OCA witness Sherwood's adjustment to exclude expenses that do not enhance service to customers should be adopted. An adjustment of \$8,039 to Account 926, as reflected on Schedule SLS-7 is necessary. OCA St 1-SR at 6-7, OCA St. 1 at 8-9.

G. Rate Case Expense

The Company claims \$326,000 of rate case expense normalized¹⁴ over 36 months, for an annual expense of \$108,667. Citizens' St. 1 at 11. The OCA has not recommended any adjustment to the level of expense claimed, but does recommend an adjustment to the 36-month normalization

¹⁴ Company witness Gorman uses the terms "amortization" and "normalization" interchangeably but they are different. Citizens' St. 1 at 11. Rate case expense is normalized pursuant to Pennsylvania precedent. Pa. PUC v. Columbia Water Co., 2009 Pa. PUC LEXIS 1423 (2009).

period proposed by the Company. The OCA submits a 45-month normalization period as appropriate. OCA St. 1 at 9, see also OCA St. 1-SR (Revised) at 11.¹⁵

Company witness Gorman stated that the 3-year normalization period is appropriate, as that is the time period since its last rate case filing. OCA St. 1-SR (Revised) at 10. Additionally, the Company cites lack of forecasted future load growth, increased capital expenses and tree trimming costs for the 3-year normalization period. Citizens' St. 1-R at 3.

OCA witness Sherwood recommends a 45 month normalization period. Ms. Sherwood explained:

There is Commission precedent to utilize the average period between rate cases to determine the normalization of the rate case expense, as I have done to calculate the normalization period in this case. This method is not to penalize or discourage the Company from filing a rate case as needed, rather it is a way to match the expense recovery over the average period of time of when cases are filed. Therefore, I maintain my recommendation to utilize a 45-month normalization period. Additionally, as with the Company's concern regarding under-recovery, there is concern for over-recovery of rate case expense if the Company does not file within the time period.

OCA St. 1-SR (Revised) at 11.

The Company's rate case expense must be adjusted to reflect a proper normalization period that is consistent with Commission precedent. The Commission has consistently held that rate case expenses are normal operating expenses, and normalization should, therefore, be based on the historical frequency of the utility's rate filings. Popowsky v. Pa. PUC, 674 A.2d 1149, 1154 (Pa. Commw. 1996); Pa. PUC v. Columbia Water Co., 2009 Pa. PUC LEXIS 1423 (2009); Lancaster Sewer, 2005 Pa. PUC LEXIS *84; Pa. PUC v. National Fuel Gas Distribution Corp., 84 Pa. PUC

¹⁵ I&E witness Patel recommends a normalization period of 48 months and disagrees with the Company's proposal because "it is not supported by the Company's historic filing frequency. The proposed normalization period fails to properly rely upon the historic data and is speculative in nature." I&E St. 1 at 7.

134, 175 (1995); Pa. PUC v. Roaring Creek Water Co., 73 Pa. PUC 373, 400 (1990); Pa. PUC v. West Penn Power Co., 119 PUR4th 110, 149 (Pa. PUC 1990). In recent cases the Commission reiterated that the normalization period is determined, “by examining the utility’s actual historical rate filings, not upon the utility’s intentions.” Pa. PUC v. City of Lancaster – Bureau of Water, 2011 Pa. PUC LEXIS 1685, *56-57 (Lancaster 2011); Pa. PUC v. Metropolitan Edison Co., 2007 Pa. PUC LEXIS 5 (2007); Lancaster Sewer, 2005 Pa. PUC LEXIS *84; Pa. PUC v. City of Dubois – Bureau of Water, Docket No. R-2016-2554150 (Order entered May 18, 2017, at 65) (City of Dubois).

By changing the normalization period, OCA witness Sherwood is recommending an adjustment of \$21,734, this adjustment is reflected in SLS-8. OCA St. 1 at 9; App. A, Table II.

H. Cash Working Capital

The Company calculated its cash working capital based upon 12.5 percent or one-eighth of the operations and maintenance (“O&M”) expense, excluding depreciation expense, uncollectible and taxes. OCA St. 1 at 9. OCA witness Sherwood as well as I&E witness Patel adopted the Company’s methodology. OCA St. 1 at 9, I&E St. 1 at 22-23. OCA witness Sherwood states:

Citizens’ calculated its cash working capital based upon 12.5 percent or one-eighth of the operations and maintenance (“O&M”) expense, excluding depreciation expense, uncollectibles and taxes other than income. I have adopted this methodology, except that, as shown on Schedule SLS-9, I have adjusted the cash working capital to \$271,705, accounting for my recommended adjusted O&M expenses.

OCA St. 1 at 9.

OCA witness Sherwood is recommending adjusting working capital based on the final level of O&M expense. OCA St. 1 at 9; App. A, Table II.

I. Depreciation Expense

As a result of Citizens' use of the end of test year rate base, Citizens' has also based its rate year depreciation expense on the projected balance of plant in service as of the end of the FPFTY. OCA St. 2 at 7. For the reasons set forth in Section IV(A)(1) above, the OCA recommends that the Company use an average test year rate base instead of the Company's proposed end of test year rate base. The OCA submits that as a result of the OCA's proposed modification to use the average rate base, the related depreciation expense would also change. OCA witness Morgan explained the impact of the change:

[m]y adjustment to Plant in Service changed the amount included in rate base to reflect the average plant in service during the FPFTY instead of the end of period plant balance used by the Company. In my derivation of the level of depreciation expense that will be incurred during the rate year, I have calculated depreciation expense that will be incurred during the rate year. I have calculated depreciation expense based on the average balance of plant in service. I have based this calculation on the depreciation rates for the categories of plant accounts proposed by Citizens' in this case. Hence, the depreciation adjustment only reflects changes in the depreciable balances. As shown on Schedule LKM-1, my adjustment to reflect the depreciation expense that will be incurred during the rate year ending December 31, 2020 reduces depreciation expense by \$22,663.

OCA St. 2 at 8; see, flow-through of adjustment as corrected in OCA witness Sherwood's Surrebuttal Testimony, OCA St. 1-SR (Revised) at Sch. SLS-3 C; App. A, Table II.¹⁶

VII. RATE OF RETURN

A. Introduction

Citizens' seeks a 7.62% overall rate of return, including a 10.30% return on common equity.¹⁷ Citizens' St. 2-R at 2. The Company's proposed capital structure is 50.67% equity/

¹⁶ On December 13, 2019, OCA witness Sherwood revised the Proprietary and Non-Proprietary versions of her Surrebuttal Testimony regarding depreciation expense. OCA witness Sherwood testified "I had inadvertently excluded the adjustment to depreciation expense, reflected in OCA witness Morgan's direct testimony, in the amount of \$22,663." OCA St. 1-SR (Revised) at 2.

¹⁷ The Company's original return on equity claim was 11.15%, which was revised to 10.30% in witness D'Ascendis' rebuttal. The revised overall return based on this updated ROE is 7.62%. Citizens' St. 2-R at 2.

49.33% debt. Id at 3. The Company’s proposed cost of capital is excessive as both the testimony of OCA witness David S. Habr, I&E witness Anthony Spadaccio, and the following discussion demonstrate. Dr. Habr’s testimony demonstrates that a fair cost of common equity is 8.38% and a fair overall rate of return is 6.64%. OCA St. 3 at 3. The OCA submits that Dr. Habr has presented a reasonable cost of capital proposal that accurately portrays the current low cost capital environment and reflects reasonable returns for investors. The Company, OCA, and I&E proposals presented in this matter are summarized below.

Citizens’ presented the testimony of Dylan W. D’Ascendis to support its rate of return request. The following table summarizes the Company’s request:

Capital Type	Percent of Total (%)	Cost Rate (%)	Weighted Cost (%)
Debt	49.33	4.86	2.40
Common Equity	50.67	10.30	5.22
Total	100		7.62

Citizens’ St. 2-R at 2. To reach his recommendation, Mr. D’Ascendis has included adjustments that increase his cost of common equity determination in this matter. Citizens’ St. 2 at 5. The first adjustment is a proposed “size adjustment” that adds 1.00% to the proposed cost of common equity. The second is a “performance factor adjustment” that adds an additional 0.25% to the cost of equity. Citizens’ St. at 5.

The OCA presented the testimony of Dr. David S. Habr, an expert economic consultant specializing in utility regulation, to support its rate of return allowance. In determining an appropriate cost of capital OCA witness Habr accepted the Company’s capital structure. OCA St.

3 at 2-3. Adopting the Company’s capital structure, the OCA recommends an 8.38% return common equity and a return on rate base of 6.64%:

Capital Type	Percent of Total (%)	Cost Rate (%)	Weighted Cost (%)
Long-term Debt	49.33	4.86	2.40
Common Equity	50.67	8.38	4.24
Total	100		6.64

Id. The 8.38% cost of equity recommended by Dr. Habr is the result of his Discounted Cash Flow (DCF) analysis and is the median value “of all the DCF and [Federal Energy Regulatory Commission (FERC)] 2-Step cost rates.” OCA St. 3 at 25.

I&E presented the testimony of Anthony Spadaccio, Fixed Utility Financial Analyst with I&E to support its rate of return recommendation. The recommendation of Cost of Capital by I&E is as follows:

Capital Type	Percent of Total (%)	Cost Rate (%)	Weighted Cost (%)
Long-term Debt	49.33	4.86	2.40
Common Equity	50.67	8.10	4.10
Total	100		6.50

I&E St. 2 at 8.

The OCA submits that the Company’s 11.15%, as updated to 10.30%, cost of common equity request is well in excess of an objective assessment of investor market requirements in the current economic environment and should be rejected. The Company’s recommendation is based

on a flawed DCF analysis. In addition, both OCA witness Dr. Habr and I&E witness Spadaccio testified the return on equity (ROE) adjustments proposed by Mr. D'Ascendis are inappropriate, unnecessary and only serve to inflate the Company's equity cost estimate. If included in the cost of equity determination, these adders will substantially and unreasonably increase costs for ratepayers. See OCA St. 3 at 30; see also I&E St. 2 at 40-42. The OCA opposes the inclusion of these adjustments.

The OCA recommends the Company be given the opportunity to earn 8.38% on their common equity, resulting in an overall allowed return on rate base of 6.64%. OCA St. 3 at 2-3. When applied to the OCA's recommended rate base, this will provide the Company an opportunity to earn a fair rate of return while benefiting consumers with public utility service at reasonable rates, consistent with Pennsylvania law and public policy as set forth in the Public Utility Code. The Commission should adopt the recommendations of the OCA as to rate of return and cost of capital.

B. The Legal Framework for Determining What Rate of Return is Fair to Citizens' Consumers and the Company

The law charges the Commission with the duty of protecting the rights of the public. City of Pittsburgh v. Pa. PUC, 126 A.2d 777, 785 (Pa. Super. 1956) (City of Pittsburgh II). As a general rule, a public utility whose facilities and assets have been dedicated to public service, is entitled to no more than a reasonable opportunity to earn a fair rate of return on shareholder investment. Discussing rate of return, the City of Pittsburgh II court wrote "[i]t is the function of the commission in fixing a fair rate of return to consider not only the interest of the utility but that of the general public as well. The commission stands between the public and the utility." Id.

Typically, cost of capital is the basis for determining a fair rate of return. Pa. PUC v. Philadelphia Suburban Water Co., 71 Pa. PUC 593, 623 (1989) (PSWC 1989). The Commission has defined an appropriate rate of return as:

[T]he amount of money a utility earns, over and above operating expenses, depreciation expense and taxes, expressed as a percentage of the legally established net valuation of utility property, the rate base. Included in the 'return' are interest on long-term debt, dividends on preferred stock, and earnings on common stock equity. In other words, the return is the money earned from operations which is available for distribution among the capital. In the case of common stockholders, part of their share may be retained as surplus.

Pa. PUC v. Emporium Water Co., 95 Pa. PUC 191, 196, 208 PUR4th 502, 507 (2001) (EWC 2001) (quoting Public Utility Economics, Garfield and Lovejoy, 116 (1964)). Further, "[t]he return authorized must not be confiscatory, and must be based upon the evidence presented." PSWC 1989, 71 Pa. PUC at 623 (citing Pittsburgh v. Pa. PUC, 165 Pa. Super. 519, 69 A.2d 844 (1949) (Pittsburgh)).

A public utility with facilities and assets used and useful in the public service is entitled to no more than a reasonable opportunity to earn a fair rate of return on its investment. Pa. PUC v. Roaring Creek Water Co., 87 Pa. PUC 826, 844 (1997) (Roaring Creek 1997). The United States Supreme Court established the standard with which to evaluate whether a rate of return is fair in Bluefield Waterworks & Improvement Co. v. Public Service Comm'n of West Virginia, 262 U.S. 679 (1923) (Bluefield), stating:

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 raise the money necessary for the proper discharge of public duties.

Bluefield, 262 U.S. at 693. The Court also said that allowed rates of return should reflect the following:

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

Bluefield, 262 U.S. at 692. Twenty-one years later, the Court reviewed the issue of fair rate of return in Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944) (Hope). In Hope, the Court held that a fair rate of return “should be commensurate with returns on investments in other enterprises having corresponding risks” while being sufficient “to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and attract capital.” Hope, 320 U.S. at 603. The Court noted that “[t]he rate-making process under the Act, *i.e.*, the fixing of ‘just and reasonable’ rates, involves a balancing of the investor and consumer interests . . . and does not insure that the business shall produce revenues.” Id. More recently, the Court stated that consumers are obliged to rely upon regulatory commissions to protect them from excessive rates and charges. See Permian Basin Area Rate Cases, 390 U.S. 747, 794-95 (1968) (*citing Atlantic Refining Co. v. Public Service Comm’n*, 360 U.S. 378, 388 (1959)).

Finally, in Duquesne Light Co. v. Barasch, the Court stated

whether a particular rate is ‘unjust’ or ‘unreasonable’ will depend to some extent on what is a fair rate of return given the risks under a particular rate setting, and on the amount of capital upon which the investors are entitled to earn on that return.

Duquesne Light Co., 488 U.S. at 310. In determining a fair rate of return this Commission has described its task as follows:

A fair rate of return for a public utility, however, is not a matter which is to be determined by the application of a mathematical formula. It requires the exercise of informed judgment based upon an evaluation of the particular facts presented in each proceeding. There is no one precise answer to the question as to what constitutes the proper rate of return. The interests of the Company and its investors are to be considered along with those of the customers, all to the end of assuring adequate service to the public at the least cost,

while at the same time maintaining the financial integrity of the utility.

Pa. PUC v. Pennsylvania Power Co., 55 Pa. PUC 552, 579 (1982) (emphasis added). See Pa. PUC v. National Fuel Gas Distribution Corp., 73 Pa. PUC 552, 603-605 (1990).

In the present matter, the OCA's recommended rate of return, including its 8.38% cost of common equity, represents a fair rate of return for the Company. The OCA's proposed rate of return will provide the Company's shareholders with a reasonable opportunity to earn a market-based return on their investment, will provide for the financial integrity of the Company and will protect ratepayers from excessive and unjustified rates as case law dictates.

C. Capital Structure

The OCA accepted the Company's Capital Structure. OCA St. 3 at 2-3. Additionally, I&E witness Spadaccio also accepted the Company's Capital Structure. I&E St. 2 at 16.

D. Cost of Debt

The OCA accepted the Company's long-term cost of debt of 4.86%. OCA St. 3 at 3.

E. Cost of Common Equity

1. Introduction

The OCA submits that the Company's proposal for a common equity rate of 11.15%, as updated to 10.30%, is excessive and results in a shareholder windfall at the expense of ratepayers, further leading to rates that are unjust and unreasonable. As OCA witness Dr. Habr testified, profits for the provision of utility services are regulated because the services tend to be produced under conditions that approximate a natural monopoly. OCA St. 3 at 3. The current economic conditions and outlook produce a favorable cost of equity environment for the Company. As will be discussed in the following sections, however, Company witness D'Ascendis' DCF analysis is

flawed, and he has artificially inflated his ROE recommendation in this matter through a variety of methods and adjustments. The OCA submits that such unnecessary and unsupported “adjustments” should not be considered.

The following table summarizes the parties’ findings based on the DCF methodology and the parties’ subsequent ROE recommendations.

Party	DCF Results	Recommended ROE
Citizens’	9.05% ¹⁸	10.30 %
OCA	8.16-8.51%	8.38%
I&E	8.10%	8.10%

Dr. Habr explained that he used the DCF method to estimate the cost of equity for the Company. OCA St. 3 at 9. As explained in more detail below, the OCA’s recommended 8.38% common equity cost rate is the median value “of all the DCF and FERC 2-Step cost rates shown on Table – 2 [in OCA St. 3 at 21,]; half of the observations lie above this value and half lie below it. This middle-of-the-pack value is appropriate for” the Company. Id at 25.

The OCA submits that its 8.38% cost of common equity recommendation is reasonable. The Commission should adopt an 8.38% cost of equity over the Company’s recommendation of 11.15%, as updated to 10.30%, because an 8.38% cost is in line with results of the DCF analyses and with current economic conditions. Considering these facts, it would be unreasonable to burden Citizens’ ratepayers with higher costs based on the Company’s 11.15%, as updated to 10.30%, ROE proposal. The Company’s 11.15%, as updated to 10.30%, cost of equity recommendation is considerably higher than DCF results return expectations published by major consulting firms, brokerage houses and market data publications. See OCA St. 3 at 23. OCA witness Habr properly

¹⁸ Mr. D’Ascendis DCF result is 9.05% before adding 1.25% for size and performance adjustments. Exhibit DWD-1R, Schedule DWD-1R at 2.

applied a DCF analysis checked by the Capital Asset Pricing Model (CAPM) in this proceeding to arrive at a reasonable rate of return that should be adopted here.

2. OCA Witness Habr Has Derived His Common Equity Cost Recommendations From The Commission's Preferred Method of Setting Common Equity Cost Rates – The Discounted Cash Flow Model

The Testimony of OCA witness Habr clearly indicates that he developed a market-based cost of common equity recommendation using the DCF model, which is the method primarily relied upon by this Commission. In January 2004 in its Opinion and Order in Pa. PUC v. Pennsylvania American Water Company, the Commission wrote:

Historically, we have primarily relied on the DCF methodology in arriving at our determination of the proper cost of common equity. We have, in many recent decisions, determined the cost of common equity primarily based upon the DCF method and informed judgment. *See Pennsylvania Public Utility Commission v. Philadelphia Suburban Water Company*, 71 Pa. PUC 593, 623-632 (1989); *Pennsylvania Public Utility Commission v. Western Pennsylvania Water Company*, 67 Pa. PUC 529, 559-570 (1988); *Pennsylvania Public Utility Commission v. Roaring Creek Water Company*, 150 PUR4th 449, 483-488 (1994); *Pennsylvania Public Utility Commission v. York Water Company*, 75 Pa. PUC 134, 153-167 (1991); *Pennsylvania Public Utility Commission v. Equitable Company*, 73 Pa. PUC 345-346 (1990). We determine that the DCF method is the preferred method of analysis to determine a market based common equity cost rate.

Pa. PUC v. Pennsylvania American Water Company, 99 Pa. PUC 38, 42 (2004) (PAWC 2004), aff'd on other grounds, Popowsky v. Pa. PUC, 868 A.2d 606 (Pa. Commw. Ct. 2004); accord Pa. PUC v. Aqua Pa, Inc., 99 Pa. PUC 204, 233 (2004).

In its recent UGI-Electric decision, the Commission affirmed its primary reliance on the DCF method, stating that it has “found no reason to deviate from the use of this method in the instant case.” Pa PUC v. UGI Utilities, Inc. – Electric Division, Docket No. R-2017-2640058, et al, slip op. at 106 (Order entered October 25, 2018) (UGI-E). This Commission has stated that

determining a fair rate of return is an exercise of informed judgment, based upon the facts of each case. Pa. PUC v. Pennsylvania Power Co., 55 Pa. PUC 552, 579 (1982). “The interests of the Company and its investors are to be considered along with those of the customer, all to the end of assuring adequate service to the public at the least cost, while at the same time maintaining the financial integrity of the utility involved.” Pa. PUC v. Pennsylvania Power Co., 55 Pa. PUC at 579.

In coming to this informed judgment, the Commission has stated on numerous occasions its preference to rely upon the DCF methodology over other methods such as the Risk Premium (RP) and Capital Asset Pricing Model (CAPM) in determining the rate of return. In PPL’s 2012 and 2004 base rate case, the Commission reaffirmed its reliance upon the DCF method. Pa. PUC v. PPL Electric Utilities Corp., Docket No. R-2012-2290597 (Order entered December 28, 2012) (PPL 2012); Pa. PUC v. PPL Electric Utilities Corp., 237 P.U.R. 4th 419, 2004 Pa. PUC LEXIS 40 (December 2, 2004) (PPL 2004). The Commission additionally noted, however, that while it is not required, other methodologies can be used to check DCF results. PPL 2012 at 80.

Considering the DCF results of OCA witness Dr. Habr as checked by his CAPM and current financial market conditions, the OCA submits that a review of the evidence in this proceeding supports an ROE of 8.38%.

3. Dr. Habr’s Analysis of the Cost of Common Equity for Similar Risk Utility Operations Supports a Cost of Equity 8.38%

In this case, Dr. Habr conducted DCF and Capital Asset Pricing Model (CAPM) analyses. OCA St. 3 at 14. Dr. Habr primarily relied on the DCF method, using the CAPM method as a check, and has recommended an 8.38% return on common equity.

Dr. Habr explained why it is appropriate to rely on the DCF model in this proceeding. Dr. Habr testified as follows:

I rely primarily on the Discounted Cash Flow (DCF) model. This model is straight forward and provides reliable results when the growth rate used in the model is consistent with the model's assumptions.

The model begins with the proposition that the market price for a share of common stock that an investor is *willing to pay under any market conditions* is equal to the present value of the stock's expected dividend stream. The present value of an expected income stream is determined by discounting the stream with a rate that reflects, among other items, the investor's perception of the asset's inherent and relative riskiness compared to similar or other companies the investor may be considering. In this manner, the economic principle of opportunity cost finds expression in the DCF method.

The discount rate will also tend to track general capital market conditions. That is, the discount rate will tend to move up when interest rates in general rise and it will tend to move down when interest rates in general decline.

From the investor's point of view, *this discount rate reflects the rate of return the investor expects to earn on his or her investment in the asset*. For an asset like a utility company common stock that is freely traded in the market, the market price conceptually represents the present value of the expected income stream for investors who are willing and able to buy that asset instead of another asset.

OCA St. 3 at 9-10 (emphasis in original).

In the PAWC 2004 case, the ALJ quoted the following description of the DCF model from a leading treatise on public utility rate making:

The DCF method is derived from valuation theory, and rests on the premise that the market price of a stock is the present value of the future benefits of holding a stock. Those benefits are the future cash flows provided by holding the stock. They are, quite simply, the dividends paid and the proceeds from the ultimate sale of the stock. Since dollars to be received in the future are not worth as much as dollars received today, the cash flows must be discounted back to the present at the investor's required rate of return. The most basic form of this model assumes that dividends grow at a constant rate each year (g), and that the stock is held "forever". Since the stock is not sold, the only relevant contribution to its value is the dividends to be received. The basic theoretic difficulties are the assumption of

a constant or fixed retention or payout rate and the assumption that dividends will grow at a constant “g” rate in perpetuity.

The first point to remember in evaluating the growth rate is that it is not what a witness thinks the growth rate should be that matters. What matters is what investors expect the growth rate to be. The rate of return analyst is really trying to (or should be trying to) replicate the thinking of investors in developing their expectations regarding the growth in dividends. In all, the DCF method takes into account several factors important in the determination of the fair rate of return: (1) preferences of investors; (2) equity financing; (3) risk, and (4) inflation.

PAWC 2004, Docket No. R-00038304, R.D. at 65 (Nov. 26, 2003) quoting J. Bonbright, A.

Danielsen & D. Kamerschen, Principles of Public Utility Rates 318 - 319 (2d ed. 1988).

Based on the results of his analysis, Dr. Habr made the following recommendation:

Based on my DCF analysis, I am recommending they be given the opportunity to earn 8.38% on their common equity . . . My recommended 8.38% common equity cost rate is the median value of all the DCF and FERC 2-Step cost rates shown on Table – 2 above; half of the observations lie above this value and half lie below it. This middle-of-the-pack value is appropriate for both Citizens’ and Wellsboro.

OCA St. 3 at 24-25.

a. Dr. Habr’s Adjusted Proxy Group

To estimate the cost of equity, a proxy group of similar companies is needed. A proxy group is generally preferred over the use of data exclusively from any one company because it has the effect of smoothing out potential anomalies associated with a similar company and is therefore a more reliable measure. See UGI-E at 82. In developing his recommendation, Dr. Habr accepted and utilized Mr. D’Ascendis’ chosen electric proxy group with two exceptions.¹⁹ First, Dr. Habr explained that El Paso Electric Company should be removed due to the recent sale of that utility.

¹⁹ As discussed in Section E-2 below, Mr. D’Ascendis’ non-price regulated proxy group should be disregarded.

El Paso announced in mid-2019 that it agreed to be purchased by “The Infrastructure Investments Fund for \$68.25 per share, 17.3% above its \$58.20 previous trading day close. A price change of this magnitude significantly distorts the DCF common equity cost estimates for El Paso Electric.” OCA St. 3 at 6.

Additionally, Dr. Habr recommended removal of AVANGRID Inc.. AVANGRID, Inc. is controlled by its parent Iberdrola, S.A., which owns over 80 percent of AVANGRID, Inc.’s outstanding common stock. Id. Because only AVANGRID, Inc.’s minority owned common shares are traded on the New York Stock Exchange (NYSE), the AVANGRID, Inc. shareholders have a risk profile that is completely different from the risk profile faced by the common shareholders of the rest of the electric utility holding companies in the proxy group and therefore are no longer applicable to the analysis. OCA St. 3 at 6-7. Notably, I&E witness Spadaccio also excluded both El Paso and AVANGRID from his proxy group. I&E St. 2 at 13. Dr. Habr’s modified proxy group consisted of the remaining 17 electric companies utilized by Company witness D’Ascendis. OCA St. 3 at 21; see Citizens’ St. 2 at 11, 12; see also OCA St. 3 at 6-9.

OCA witness Dr. Habr’s proxy group should be adopted because it contains companies of similar risk to Citizens’. Dr. Habr’s proxy group, unlike Mr. D’Ascendis’ proxy group does not include non-price regulated proxy results which should not be given any weight.

4. The Commission Should Adopt The 8.38% Equity Cost Rate Proposed By The OCA As Appropriate For The Company

a. DCF

Dr. Habr relied primarily on the Discounted Cash Flow model, “[t]his model is straight forward and provides reliable results when the growth rate used in the model is consistent with the model’s assumptions.” OCA St. 3 at 9. The model begins with the proposition that the market price for a share of common stock that an investor is willing to pay under any market conditions

is equal to the present value of the stock's expected dividend stream. The present value of an expected income stream is determined by discounting the stream with a rate that reflects, among other items, the investor's perception of the asset's inherent and relative riskiness compared to similar or other companies the investor may be considering. In this manner, the economic principle of opportunity cost finds expression in the DCF method. Dr. Habr explained the DCF equations as follows:

If the expected dividend growth remains unchanged, the price an investor would be willing to pay for the stock is given by equation (1). The numerator reflects a perpetual dividend stream growing at the rate "g" and the denominator reflects the cost of equity (discount rate) "k" used to determine the present value of the dividend stream. This equation only has a finite solution if "k" is greater than "g." A value of "g" greater than "k" would imply a share price that is infinitely large.

$$P_0 = \int_0^{\infty} \frac{D_0 e^{(g)t}}{e^{(k)t}} dt \quad (1)$$

P_0 = the current market price of the stock.
 D_0 = the current indicated annual dividend.
 k = the cost of common equity.
 g = the long-term sustainable growth rate.
 e = the base for natural logarithms.
 t = time.
 dt = the differential of time

The solution to equation (1) is:

$$P_0 = \frac{D_0}{k - g} \quad (2)$$

Equation (2) can be rearranged to the familiar dividend yield plus growth format used to find the implied value of k based on observed values of D_0 , P_0 , and g :

$$k = \frac{D_0}{P_0} + g \quad (3)$$

In the constant growth version of the model, the expected growth rate is a rate that could be economically/financially sustained by the company “forever” (or infinitely from the mathematical point of view). This constant growth assumption puts an implicit upper limit on the magnitude of the dividend growth rate.

OCA St. 3 at 10-11.

The DCF is used to assess the value of an investment based on its future cash flows. This method, essentially attempts to gauge the value of a company today, based on projections of how much money it will generate in the future.

b. OCA Witness Dr. Habr’s Application of the DCF

As seen above, the DCF equation calls for a company’s growth rate and annual dividend yield to produce its result. Citizens’ is not a publically traded company with a dividend yield and therefore, lacks the necessary data to run a unique DCF analysis. Because the DCF cannot be applied directly to Citizens’, OCA witness Dr. Habr instead conducted multiple DCF analyses for each company within his electric proxy group. See OCA St. 3 at 21-22. Specifically, Dr. Habr calculated 3 constant growth DCFs for each of the 17 companies in his proxy group. OCA St. 3 at 21. Dr. Habr calculated 3 separate constant growth DCFs for each company because he used three separate growth rates, one DCF calculation for each source, Yahoo!, Value Line, and Zack’s. OCA St. 3 at 21. Calculating a DCF for each company in the proxy group provided for more accurate results as Dr. Habr was able to utilize each company’s actual dividend yield and growth rate in his calculation. OCA St. 3 at 21. In the same format, Dr. Habr conducted 3 sets of FERC 2-Step DCF and Two-Stage DCF for each company as well. OCA St. 3 at 21.

Dr. Habr explained that in the DCF model, the expected growth rate is a rate that could be economically/financially sustained by the company “forever (or infinitely from the mathematical point of view).” OCA St. 3 at 11. This constant growth assumption puts an implicit upper limit on

the magnitude of the dividend growth rate. Id. Dr. Habr went on to explain that if the magnitude of the dividend growth rate used exceeds the magnitude of the expected long-term growth in Gross Domestic Product (GDP), the results of the model become confounded. Id.

Q: WHAT UPPER LIMIT IS IMPOSED ON THE DIVIDEND GROWTH RATE?

A: The upper limit is the expected long-term GDP growth rate. If the magnitude of the dividend growth rate used exceeds the magnitude of the expected long-term growth in Gross Domestic Product (GDP), the results of the model become confounded. A company with a perpetual, sustainable growth rate greater than the economy as a whole will eventually exceed the economy as a whole in size. That is, the company would become the economy, a quite unlikely real world outcome. For this reason one must be very careful when using analysts' growth forecasts that exceed GDP growth forecasts because the use of these forecasts results in an overestimate of a given utility's cost of common equity.

OCA St. 3 at 11.

A company with a perpetual, sustainable growth rate greater than the economy as a whole (GDP) will eventually exceed the economy as a whole in size, “[t]hat is, the company would become the economy, a quite unlikely real world outcome.” OCA St. 3 at 11. For this reason one must be very careful when using analysts' growth forecasts that exceed GDP growth forecasts because the use of these forecasts results in an overestimate of a given utility's cost of common equity.

The DCF can be modified to take into account the fact that an individual company cannot grow faster than the economy as a whole in perpetuity by using a weighted average of the analysts' growth forecasts and the long-term GDP growth rate forecast to establish “g” in the equation.

Therefore, Dr. Habr employed a 2 step, weighted average of the analysts' growth forecasts, which is the same approach as is done at FERC. OCA St. 3 at 12. Dr. Habr explained:

A weighted average of the analysts' growth forecasts and the long-term GDP growth rate forecast can be used for "g" in the standard dividend yield plus growth DCF model to temper the impact of short-term growth rate forecasts that are not sustainable in the long-run.

FERC has been using a weighted average growth rate in the DCF model in natural gas and oil pipeline cases since the mid-1990's and recently adopted the same methodology in regulated utility cases. (See FERC Opinions 531, 531-A, and 531-B). FERC gives two-thirds weight to the earnings growth forecasts and one-third weight to the GDP growth forecast. This tempers the impact of unsustainably high earnings growth forecasts on DCF cost estimates. A DCF model with two growth periods or stages can also be used to estimate a weighted average growth rate.

Id.

Dr. Habr's ultimate recommendation was then based on the median of his combined DCF and FERC 2-Step DCF. Table 2 summarized Dr. Habr's findings:

TABLE 2 -- ELECTRIC PROXY GROUP DCF COST OF COMMON EQUITY RESULTS

Company	DCF			FERC 2-Step DCF			Two-Stage DCF			Individual Company Average	Individual Company Median
	Yahoo! Growth Rates	Zacks Growth Rates	Value Line Growth Rates	Yahoo! Growth Rates	Zacks Growth Rates	Value Line Growth Rates	Yahoo! Growth Rates	Zacks Growth Rates	Value Line Growth Rates		
ALLETE, Inc.	8.90%	9.91%	8.90%	8.57%	9.24%	8.57%	8.03%	8.17%	8.03%	8.70%	8.57%
Alliant Energy Corporation	8.05%, as updated to 7.62%	8.51%	9.52%	8.04%	8.35%	9.02%	8.02%	8.08%	8.22%	8.43%	8.22%
Ameren Corporation	7.52%	9.14%	9.14%	7.56%	8.64%	8.64%	7.63%	7.80%	7.80%	8.21%	7.80%
American Electric Power	9.28%	8.87%	7.15%	8.92%	8.64%	7.49%	8.33%	8.27%	8.06%	8.34%	8.33%
Avista Corporation	7.05%	6.95%	7.15%	7.60%	7.53%	7.66%	8.45%	8.44%	8.47%	7.70%	7.60%
Dominion Energy, Inc.	9.55%	9.73%	11.48%	9.69%	9.81%	10.97%	9.86%	9.90%	10.38%	10.15%	9.86%
Duke Energy	9.00%	9.20%	10.33%	9.11%	9.25%	9.99%	9.31%	9.35%	9.60%	9.46%	9.31%
Edison International	7.64%	9.37%	N.A.	8.05%, as updated to 7.62%	9.20%	N.A.	8.66%	8.95%, 8.05%, as updated to	8.24%	8.59%	8.66%
Eversource Energy	8.60%	8.57%	8.47%	8.39%	8.37%	8.30%	8.15%	7.62%	8.03%	8.33%	8.37%
IDACORP, Inc.	4.90%	6.32%	6.02%	5.79%	6.73%	6.53%	7.36%	7.45%	7.43%	6.50%	6.53%
NorthWestern Corporation	6.53%	5.88%	6.29%	7.14%	6.70%	6.98%	8.13%	8.06%	8.92%	7.18%	6.98%
OGE Energy Corp.	6.58%	7.90%	10.04%	7.23%	8.11%	9.54%	8.28%	8.45%	8.79%	8.33%	8.28%
Otter Tail Corporation	11.86%	9.84%	7.81%	10.52%	9.17%	7.82%	8.43%	8.08%	7.83%	9.04%	8.43%
Pinnacle West Capital Corp.	8.25%	9.31%	8.70%	8.24%	8.95%	8.54%	8.22%	8.37%	8.28%	8.54%	8.37%
PNM Resources, Inc.	8.66%	7.97%	9.49%	8.27%	7.81%	8.82%	7.59%	7.52%	7.68%	8.20%	7.97%
Portland General Electric Co.	7.72%	7.72%	7.42%	7.80%	7.80%	7.59%	7.95%	7.95%	7.91%	7.76%	7.80%
Xcel Energy, Inc.	8.65%	7.74%	8.35%	8.39%	7.78%	8.19%	7.95%	7.85%	7.91%	8.09%	7.95%
Proxy Group Average	8.16%	8.41%	8.51%	8.19%	8.36%	8.42%	8.26%	8.28%	8.33%		
Proxy Group Median	8.25%	8.57%	8.58%	8.24%	8.37%	8.42%	8.15%	8.08%	8.06%		
	Proxy Group Combined DCF			Proxy Group Combined FERC 2-Step DCF			Proxy Group Combined Two-Stage DCF			Overall Proxy Group Descriptive Statistics	
	Median:	8.54%		Median:	8.33%		Median:	8.13%		Maximum:	11.86%
	Average:	8.36%		Average:	8.32%		Average:	8.29%		Median:	8.25%
	Combined DCF/FERC 2-Step Median:			8.38%						Average:	8.32%
	Combined DCF/FERC 2-Step Average:			8.34%						Minimum:	4.90%

OCA St. 3 at 21; see also OCA St. 3, Exh. DSH-4.

Dr. Habr then summarized his recommendation from this data:

Q: HOW DID YOU ARRIVE AT YOUR 8.38% COMMON EQUITY COST RATE?

A: My recommended 8.38% common equity cost rate is the median value of all the DCF and FERC 2-Step cost rates shown on Table – 2 above; half of the observations lie above this value and half lie below it. This middle-of-the-pack value is appropriate for both Citizens’ and Wellsboro.

OCA St. 3 at 25.

7. OCA Witness Habr’s Capital Asset Pricing Model/Risk Premium Method Analysis Provides a Reasonable Check on his Recommendations

To check his DCF results, Dr. Habr conducted both a CAPM and a risk premium method analysis. OCA St. 3 at 14. The CAPM is a theory about how expected return of stocks and capital assets are related. The biggest problem with the basic CAPM is that the closest measure there is for a true risk free rate, the rate on short duration T-bills, is highly influenced by Federal Reserve monetary policy and thus does not reflect a market determined risk free rate. OCA St. 3 at 15. While the Commission does not favor the CAPM approach, it is reasonable to conduct such an analysis as a check on DCF results.

Dr. Habr testified as to the CAPM/Risk Premium model that he uses:

I use the Capital Asset Pricing Model (CAPM) and a risk premium method that is based on the CAPM as checks to my DCF analysis. The basic CAPM is represented by the equation:

$$k_e = R_f + \beta_e(R_m - R_f)$$

where:

k_e = company’s market cost of common equity.

R_f = risk free rate of return.

R_m = market rate of return.

β_e = the company’s common stock beta.

The core problem with the basic CAPM is that the closest measure there is for a “true” risk free rate,²⁰ the rate on short duration T-bills, is highly influenced by Federal Reserve monetary policy and thus does not reflect a market determined risk free rate.

The basic risk premium model consists of a bond yield plus a risk premium, that is:

²⁰ The “true” risk free rate has neither default risk nor interest rate risk.

$$k_e = k_b + (k_e - k_b)$$

The core problem with the risk premium model is pretty obvious; the cost of common equity has to be estimated somehow to come up with the risk premium to be added to the bond yield, k_b , to determine the cost of common equity. Going through this process adds nothing to the information already contained in the original common equity cost estimate.

These two problems can be solved recognizing that it is conceptually possible to estimate bond yields using the CAPM. That is:

$$k_b = R_f + \beta_b(R_m - R_f)$$

where k_b is the bond yield and β_b is the company's bond beta. A risk premium that can be added to the company's bond yield can now be calculated as:

$$k_e - k_b = (\beta_e - \beta_b)(R_m - R_f)$$

That is, the equity risk premium to be added to the company's bond yield is equal to difference between equity and bond betas times the market risk premium. The risk premium model now takes the form:

$$k_e = k_b + (\beta_e - \beta_b)(R_m - R_f)$$

Thus, we have a model that combines positive aspects of the risk premium model and the CAPM. From the risk premium model, we have the observable bond yield, k_b , and, from the CAPM we have empirically estimated values for the betas and the market risk premium. Even if bond betas are not available, this model can be used to estimate maximum values for CAPM common equity costs by assigning a value of zero to the bond beta. That is what I have done in the current analysis.

OCA St. 3 at 14-16.

Dr. Habr calculates his CAPM analysis by using a time frame that includes the time frame he used in his DCF analysis. OCA St. 3 at 16. Dr. Habr calculates bond betas for the electric Proxy Group companies based on the New York Stock Exchange Index using weekly holding period returns for the period September 1, 2014 through August 31, 2019. *Id.* The calculated betas were then adjusted using *Value Lines* adjusted formula. OCA St. 3 at 16.

Dr. Habr then discussed the market risk premium used in his CAPM/Risk Premium analysis:

I used four different estimates of the market risk premium. The first, 7.12%, is a historical risk premium based on total return data for

Large Capitalization Stocks and U.S. Treasury Bills found in Appendices B-1 and B-9 in the 2019 edition of the SBBI Yearbook. The second, 7.24%, is based on a DCF cost estimate for the S&P 500 index itself. The third and fourth estimates, 8.32% and 9.77% respectively, are based on forecast equity cost estimates for the dividend paying companies in S&P 500 index.

OCA St. 3 at 17.

Additionally, Dr. Habr discussed the historical risk premium included in his analysis:

[m]y historical risk premium is the average of the annual difference between annual holding period returns (continuously compounded) for Large Capitalization Stock and the annual holding period returns (continuously compounded) for U.S. Treasury Bills. For the period 1983 through 2018, that average is 6.87%, which I converted to the annual compounding equivalent, 7.12%, for use in the CAPM models. (See Exhibit DSH-3.)

OCA St. 3 at 18. The reason Dr. Habr saw fit to include a historical risk premium in his analysis is because:

Whether making a hiring decision or a decision to buy a common stock, the rational decision maker will look at past accomplishments as well as current and future potentials. Past performance provides a reality check; it tells us what the experience has been relative to the future expectations.

OCA St. 3 at 18.

Dr. Habr calculated 8.32% and 9.77% risk premiums. OCA St. 3 at 17. He explained:

Two different data sets were used to calculate these risk premiums, a Bloomberg data set and a Value Line data set. The Bloomberg data set produced the 8.32% risk premium while the Value Line data set produced the 9.77% risk premium. Each of these data sets contained market capitalization, dividend yields, and 5-year earnings growth forecasts for the companies in the S&P 500.

Because many of the companies had 5-year growth rates that exceeded 20%, the FERC 2-Step method was used to calculate the individual firm's cost of common equity. Relative market capitalization was used to weight the individual cost of equity estimates to arrive at a weighted average cost of common equity for each data set. The average cost of common equity for the

Bloomberg data set is 10.99% and 12.44% for the Value Line data set. Subtracting the March 1, 2019 – August 31, 2019 average 2.67% 30-year constant maturity yield from these cost rates produces the 8.32% and 9.77% risk premiums.

OCA St. 3 at 19-20.

Dr. Habr applied his CAPM/Risk Premium model to the proxy group and summarized the results:

Q: WHAT DO THE RESULTS OF YOUR ELECTRIC CAPM ANALYSIS SHOW?

A: As I noted earlier, the CAPM/Risk Premium model yields maximum common equity estimates when it is applied assuming the bond betas equal zero as done in this case. Thus, the combined CAPM/Risk Premium median 8.76% and 8.92% average provide an upper limit for common equity cost rates. All of the measures of central tendency (medians and averages) for my DCF analysis fall below these values.

OCA St. 3 at 24; see also OCA St. 3, Exh. DSH-5.

The OCA submits that Dr. Habr's CAPM/Risk Premium median 8.76% and 8.92% confirms the validity of his DCF results because they provide upper limits not to be exceeded.

8. The Commission Should Reject the Company's Overstated 11.15%, as updated to 10.30%, Equity Cost Rate Which is Based on Multiple Costing Methods with Biased Inputs

a. Introduction

Company witness D'Ascendis applied three cost rate models to a nineteen company proxy group. Mr. D'Ascendis used the DCF model, the Risk Premium Model and the Capital Asset Pricing Model (CAPM). Citizens' St. 2 at 16. From the results of all of these models, Company witness D'Ascendis identified an indicated equity cost range of 9.00%-10.39%. Id at 5. He selected 9.90% as the indicated cost of common equity before adjustments and then added 100

basis points to reflect a Size Adjustment and then added 25 basis points to reflect a Performance Factor Adjustment. Id.

As explained below, the Company's risk adjusted return of 11.15%, as updated to 10.30%, overstates the appropriate cost of equity for the Company through the blending of results of flawed valuation analyses plus improper adjustments. In addition, an inflated equity return cannot be justified as necessary to generate a higher overall return. Established rate making principles, the law of Hope, Bluefield, Barasch and established Commission practice do not support the Company's claim.

b. Mr. D'Ascendis' Cost of Equity Analyses are Not Reasonable for Ratemaking Purposes

Company witness D'Ascendis' application of the DCF model is flawed because the inclusion of AVANGRID, Inc. in his electric proxy group results in an upward bias in his DCF results. OCA St. 3 at 32. AVANGRID is an improper inclusion in the proxy group because it has a higher risk level than other members of the Electric Proxy Group. Id. On Schedule DWD-3, page 1, Mr. D'Ascendis shows a 13.12% common equity cost for AVANGRID, which is 215 basis points more than Dominion Energy's 10.97%, the second highest. Given the 33.44% average common equity ratio Mr. D'Ascendis shows for Dominion on Schedule DWD-2, page 3, a higher common equity cost would be expected for Dominion. I&E St. 2 at 33. Likewise, AVANGRID'S higher common equity cost would suggest an even lower common equity ratio. I&E St. 2 at 33. OCA witness Dr. Habr demonstrated that with the proper adjustments, Mr. D'Ascendis' average DCF cost would be 8.69% instead of 8.92% and his median would be 9.03% instead of 9.14%. OCA St. 3 at 33.

Additionally, Dr. Habr also demonstrated that Mr. D'Ascendis' DCF model is flawed in that he does not consider making any adjustment to his DCF analysis to take into account the

impact on his results of analysts' short-term forecasts that exceed the expected long-term GDP growth. Because these growth rates are not sustainable, their use results in the DCF cost rates being over estimated. OCA St. 3 at 33.

OCA witness Dr. Habr similarly refuted Mr. D'Ascendis' CAPM analysis. OCA St. 3 at 34. Mr. D'Ascendis relied on an average 3.36% 30-year treasury yield based on a period covering the second quarter of 2019 through 2029. Id. He also uses this same forecast in part of his risk premium analysis. Id. The purpose of a test-year in utility regulation is to match the costs incurred that year with the services provided during that year. Test-year costs are not based on costs that may exist during some period in the future. Id. To rectify this problem, Dr. Habr substituted the 2.66% 30-year treasury yield that was used in Dr. Habr's CAPM/Risk Premium analysis. The columns in the Table below representing the Electric Company proxy group (Table – 8 from OCA St. 3 at 34) demonstrate the impact of this change in the 30-year treasury rate as well as the impacts of making the appropriate modifications of the Electric Proxy Group and removing the allowed returns risk premiums from the Risk Premium Model results:

Table – 8 Citizens' Electric Company / Wellsboro Electric Company / Valley Energy, Inc.
Brief Summary of Common Equity Cost Rate

HABR ADJUSTED

Line No.	Principal Methods	Proxy Group of Nineteen Electric Companies	Proxy Group of Seven Natural Gas Distribution Companies
1.	Discounted Cash Flow Model (DCF) (1)	8.86 %	8.63 %
2.	Risk Premium Model (RPM) (2)	9.62	9.60
3.	Capital Asset Pricing Model (CAPM) (3)	8.72	9.45
4.	Market Models Applied to Comparable Risk, Non-Price Regulated Companies (4)	<u>10.61</u>	<u>11.05</u>
5.	DCF, Risk Premium, CAPM Average	9.07 %	9.23 %
6.	Size Adjustment (5)	1.00	1.00
7.	Performance Factor Adjustment (6)	0.25	0.25
8.	Recommended Common Equity Cost Rate	<u>10.32 %</u>	<u>10.48 %</u>

Notes: (1) From page 1 of Schedule DWD-3.
(2) From page 1 of Schedule DWD-4.
(3) From page 1 of Schedule DWD-5.
(4) From page 1 of Schedule DWD-7.

OCA St. 3 at 34-35.

The 8.86% DCF, 9.62% Risk Premium, and 8.72% CAPM for the Electric Proxy Group are all lower than Mr. D’Ascendis’ 9.03%, 10.39%, and 9.42% for the same categories. OCA St.

3 at 35. This clearly validates that Mr. D’Ascendis’ results should not be relied upon to establish the proper allowed return on common equity in these proceedings.

Furthermore, OCA witness Dr. Habr and I&E witness Spadaccio also opposed Mr. D’Ascendis’ use of an improper proxy group that was comprised of companies that are not regulated electric utilities. I&E St. 2 at 31. Dr. Habr confirmed that Mr. D’Ascendis’ use of non-price regulated firm results in establishing his recommended allowed rate of returns invalidates his conclusions. OCA St. 3 at 31-32. Mr. D’Ascendis claims his non-price regulated proxy groups are similar in risk to the electric proxy groups he uses in his analysis. This is not the case. OCA St. 3 at 32. Table – 7 of Dr. Habr’s testimony shows that the common equity cost estimates for the non-price regulated proxy groups are systematically higher than his utility common equity cost estimates by 66 to 208 basis points.

Table -- 7 Comparison of Mr. D'Ascendis' Utility v. Non-Price Regulated Cost of Common Equity Results

Estimation Method	Proxy Group 19 Electric Companies	Proxy Group of 6 Non-Price Regulated Companies	Proxy Group of 7 Natural Gas Distribution Companies	Proxy Group of 6 Non-Price Regulated Companies
DCF	9.03%	9.74%	8.63%	10.71%
Risk Premium	10.39%	11.05%	10.21%	11.53%
CAPM	9.42%	10.71%	10.15%	11.01%
Average	9.61%	10.50%	9.66%	11.08%

Source: Schedules DWD-1, page 2 and DWD-7, page 1.

OCA St. 3 at 32. The non-price regulated proxy group results should be given no weight in these proceedings.

c. The Company’s Proposed Size and Performance Adders Should Be Rejected

i. Size

Regarding the 100-basis point size adjustment made by Mr. D’Ascendis, both OCA and I&E witness explained why the Company should not be awarded a size premium. Dr. Habr testified:

Q: TURNING TO MR. D’ASCENDIS’ TESTIMONY, DO YOU AGREE WITH HIS 100 BASIS POINT SIZE ADJUSTMENT ADDITION TO HIS RECOMMENDED RETURN ON COMMON EQUITY FOR CITIZENS’ ELECTRIC, WELLSBORO ELECTRIC, AND VALLEY ENERGY?

A: No, I do not. The size premiums on Schedule DWD-8, page 1 do not tell the whole story. Duff & Phelps also provides the OLS (ordinary least squares) betas associated with each of the size deciles shown on this page. Table -6 below shows the size premium and OLS beta for each size decile from an earlier Duff & Phelps study.

Table -- 6 Duff & Phelps Size Premium and Associated OLS Betas

Decile	Market Capitalization (\$Mil)		Size Premium	OLS Beta
	Low	High		
1	\$24,361.659	\$609,163.498	-0.35%	0.92
2	\$10,784.101	\$24,233.747	0.61%	1.04
3	\$5,683.991	\$10,711.194	0.89%	1.11
4	\$3,520.556	\$5,676.716	0.98%	1.13
5	\$2,392.689	\$3,512.913	1.51%	1.17
6	\$1,571.193	\$2,390.899	1.66%	1.17
7	\$1,033.341	\$1,569.984	1.72%	1.25
8	\$569.279	\$1,030.426	2.08%	1.30
9	\$263.715	\$567.843	2.68%	1.34
10	\$2.516	\$262.891	5.59%	1.39

Source: Duff & Phelps, Valuation Handbook, 2017, p. 7-11 and Appendix 3.

When the OLS betas and size premiums for all ten deciles are taken into account, it is clear that regulated utility companies have more in common with the first decile.

What this table shows is that positive size premiums are associated with OLS betas that are greater than one. All of the utility holding companies in the proxy groups in this proceeding have betas

that were calculated using ordinary least squares and have values less than one. This suggests that if any adjustment is made for size, it should be negative rather than positive.

OCA St 3 at 29-30 (footnote omitted).

Dr. Habr further commented on the proposed size adjustment with an additional basis:

Yes. Utility customers should not be required to pay higher costs associated with inefficient utility operations. If a utility company chooses to operate at such a small scale that its cost of common equity is truly increased, there is no reason for the utility's captive customers to pay any increased costs resulting from the utility's inefficient size.

Id.

ii. Performance

In a similar way, Company witness D'Ascendis added a 25 basis point adjustment based on performance. Both OCA and I&E refute this adder. Dr. Habr testified:

I found descriptions of management doing the job they are expected to do. That is, they are taking actions any successful company has to take to efficiently maintain its operations and provide satisfactory customer service. Regulated utilities are expected to operate efficiently and should not be given a rewarded for doing what is expected.

OCA St. 3 at 31.

Additionally, I&E witness Spadaccio testified:

Ultimately, for any company, true management effectiveness is earning a higher return through its efficient use of resources and cost cutting measures. The greater net income resulting from growth, cost savings, and true efficiency in management and operations is available to be passed on to shareholders. I do not believe that Wellsboro or Citizens' should be granted additional basis points for doing what they are required to do in order to provide adequate, efficient, safe, and reasonable service.

I&E St. 2 at 43.

Both adders proposed by the company are misplaced and unsupported and would only have the effect of unreasonably inflating rates.

iii. Leverage

Company witness D'Ascendis states "one must de-leverage the implied cost of common equity based on DCF. This is derived using the Modigliani / Miller equation as illustrated in Schedule DWD-3R . . ." Citizens' Statement No. 2-R at 15 (footnote omitted).

Dr. Habr also responded to the leverage adjustments Mr. D'Ascendis describes in schedule DWD-3R. OCA St. 3-SR at 3.

Q: ARE THE LEVERAGE ADJUSTMENTS MR. D'ASCENDIS DESCRIBES IN SCHEDULE DWD-3R PROPER FOR REGULATED UTILITY COMPANIES?

A: No, they are not. In fact, their use in the regulated utility industry results in double counting regulatory risk. As I noted in the previous answer, M/B ratios greater than one are indicative of expected earned returns exceeding the cost of common equity. In the regulatory arena, sustained earned returns that exceed the cost of common equity can be reduced at any time through regulatory action. The regulatory risk of this action is already reflected in the price investors are willing to pay for the utility company's common stock.

Q: DO YOU HAVE ANY OTHER COMMENTS CONCERNING MR. D'ASCENDIS' LEVERAGE ADJUSTMENT?

A: Yes. Mr. D'Ascendis' market value capital structure is essentially a fair value capital structure whose components: common equity, preferred equity, and debt are all valued at current market prices instead of the actual dollars the company received for the common stock, preferred stock, and various debt instruments issued. Utilizing a market value capital structure effectively allows common shareholders to earn a return on funds they did not contribute to the utility. Original cost rate making assures that investors are only allowed to earn a return on funds that have actually been provided to the utility.

OCA St. 3-SR at 3.

Importantly, in 2012 PPL filed a rate case with proposed adders, to which the Commission rejected. Pa. PUC v. PPL Electric Utilities Corp., Docket No. R-2012-2290597 at 91 (Order entered December 28, 2012) (PPL 2012). In rejecting the adders the Commission stated:

Based upon our analysis of the evidence of record, we are persuaded by the arguments of the OCA and I&E that PPL's requested leverage adjustment is not reasonable and should be denied. The fact that we have granted leverage adjustments in a few select cases in the past as noted by PPL does not mean that such adjustments are warranted in all cases. The award of such an adjustment is not precedential but discretionary with the Commission. In fact, the Commission has rejected leverage/financial risk adjustments that are similar to the one proposed by PPL in this proceeding. *See, e.g., Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket No. R-00072711, at 38-39 (Order entered July 31, 2008). Moreover, in the context of our determination, *supra*, of a reasonable return on equity for PPL of 10.28%, **we conclude that there is no need to have an artificial upwards adjustment to compensate for any perceived risk related to PPL's market-to-book ratio.** Accordingly, we shall deny the Exceptions of PPL and adopt the ALJ's recommendation to reject PPL's requested leverage adjustment.

PPL 2012 at 91 (emphasis added).

Other state commissions have uniformly recognized this type of adjustment as unwarranted in their decisions. The D.C. Commission rejected such adjustment, reasoning as follows:

[t]he record in this proceeding does not support WGL's prediction that, without such an adjustment, investors will sell their stocks. Investors know that the returns allowed by public service commissions are applied to book value/rate base. An adjustment of the type witness Olson recommends would provide excessive returns to the Company's shareholders at the expense of ratepayers.

In the Matter of the Application of Washington Gas Light Company, District of Columbia Division, for Authority to Increase Existing Rates and Charges for Gas Service, 2003 D.C. PUC LEXIS 220, *72 (2003); *see also, West Virginia Public Service Comm'n v. West Virginia-American Water Works*, 2004 W. Va. PUC LEXIS 6, *18 (2004). The Public Service Commission of the State of Missouri rejected a utility's argument for a market-to-book adjustment to the DCF-

derived return on equity. In the Matter of St. Louis, Missouri, for Authority to File Tariffs to Increase Water Service Provided to Customers in the Missouri Service Area of the Company, 1998 Mo. PSC LEXIS 13, *17 (1988). In rejecting the adjustment, the Missouri Commission concluded that investors are aware that returns on equity for regulated utilities are “based on assets valued at original cost, and they take this factor into account in their investment decisions.” Id. Finally, the Michigan Public Service Commission also rejected a market-to-book adjustment in excess of DCF results. See gen’ly In the Matter of the Application of Wisconsin Electric Power Company for Authority to Increase its Rates for the Sale of Electricity in Michigan, 2002 Mich. PSC LEXIS 294, *37-38 (2002).

The OCA submits that for the reasons just discussed, and taking the record as a whole, such adjustments should not be considered in this matter.

8. Summary

For all the foregoing reasons, the OCA submits that the Company has failed to meet its burden of proof in support of its requested 11.15%, as updated to 10.30%, return on equity. The Commission should adopt the OCA’s recommended rate of return of 8.38% on common equity and an overall allowed return on rate base of 6.64%.

VIII. TAXES

A. EDIT

On December 22, 2017, the Tax Cuts and Jobs Act (TCJA) was signed into law. An important provision of the TCJA was the reduction of the Federal Income Tax rate from 35 percent to 21 percent. OCA St. 2 at 9. The reduction in the Federal Income Tax rate created excess deferred income taxes (EDIT). OCA St. 2 at 9. As OCA witness Morgan explained:

In simple terms, EDIT were created because deferred taxes arising from tax timing differences were recorded at 35 percent on the Company's books, but with the passage of the TCJA, those taxes will be paid at the 21 percent rate. The difference between the 35 percent and the 21 percent represents the EDIT.

OCA St. 2 at 9. The OCA submits that the Company's proposed treatment of the EDIT and the timeframe over which the Company will flow back the EDIT balance must be adjusted.

In its filing, the Company has identified the EDIT balance and proposes to flow the EDIT back to customers over a 10-year period. The EDIT balance presented by the Company for the FPFTY, however, assumes the flow back of EDIT began in 2018, but this assumption is incorrect.

As OCA witness Morgan testified:

I disagree with the Company on the commencement of the flowback of the EDIT because rates were not changed in 2018 to reflect the flowback of the EDIT. Instead, rates were changed to reflect the reduction of the current Federal Income Tax expense included in rates.

OCA St. 2 at 9. The OCA recommends that since rates were not changed to reflect the flowback of the EDIT, there should be an adjustment to reverse the flowback of EDIT that is reflected in the Company's filing. OCA St. 2 at 9-10, Sch. LKM-5. The adjustment increases the EDIT balance by \$17,480 and reduces the rate base by the same amount. OCA St. 2 at 10, Sch. LKM-5; see, OCA witness Sherwood's flow-through of Mr. Morgan's adjustment at OCA St. 1 at 3; OCA St. 1-SR(Revised) at Sch. SLS-3C; App. A, Table II.

In Rebuttal Testimony, Company Gorman claims that the rates were, in fact, changed in 2018 to reflect the TCJA, which gave rise to the EDIT. Citizens' St. 1-R at 13. The OCA submits, however, that Mr. Gorman did not provide any documentation to support the claim that the rates were reduced to reflect the TCJA. OCA St. 2-SR at 8. OCA witness Morgan testified:

[A]ccording [to] the Company, in Docket No. R-2018-3000558, the Commission reduced its rates by -0.82 percent to reflect the decrease in the Federal income tax rate. Below, I have reproduced Appendix A, Attachment C from the Order in this proceeding. As can be seen from that Attachment, there is no recognition of the

flowback of the EDIT in the determination of the -0.82 percent rate reduction. Hence, unless the Company can demonstrate how the EDIT was returned to customers during that period, I believe my adjustment remains valid.

OCA St. 2-SR at 8-9. As shown below, the Appendix A, Attachment C, Page 2 of Citizens' filing does not identify any flowback of the EDIT in the determination of the Company's rate reduction.

Effect of Tax Cuts and Jobs Act (TCJA) on Rates

Attachment C
Page 2

<u>Pre TCJA Taxes</u>	<u>Net Tax Effect</u>
Federal- Current (Page 1, Column 4, Line 23)	\$ 274,492
Federal- Deferred	\$ 1,984,100
<u>Less: Post TCJA Taxes</u>	
Federal- Current (Page 1, Column 4, Line 24)	\$ 169,539
Federal- Deferred	\$ 1,438,800
Effect of TCJA On Income (A)	\$ 104,953
Change in ADIT	\$ 545,300
Commission Approved Rate of Return (Note 1)	5.27%
Effect of ADIT Change on Income (B)	\$ 28,737
Earnings Excess (Line A - Line B) Complement of Tax Rate	\$ 76,216 0.711079
Revenue Excess	\$ 107,183
Commission Allowed Revenues (Note 2)	\$ 13,135,279
Percent Decrease Per Bill	-0.8160%

Note 1: Citizens' last approved rate case was a black box settlement. The rate used in the above calculation is based on the rate of return from the 2017 earnings report.

Note 2: Excludes Other Operating Revenues.

OCA St. 2-SR at 9. Mr. Gorman did not provide any Rejoinder Testimony in response to Mr. Morgan in order to demonstrate how the EDIT was returned to customers during that period.

The OCA submits that the Company did not provide any evidence to demonstrate that the EDIT has been returned to customers, commencing in 2018. Since the rates do not appear to have been changed to flow back the EDIT, OCA witness Morgan recommended an adjustment on Schedule LKM-5 to reverse the flowback of EDIT reflected in the Company's filing. This

adjustment increases the EDIT balance by \$17,480 and reduces rate base by the same amount. OCA St. 2 at 10, Sch. LKM-5; see, OCA witness Sherwood's flow-through of Mr. Morgan's adjustment at OCA St. 1 at 3; OCA St. 1-SR(Revised) at Sch. SLS-3C; App. A, Table II.

B. Deferred Regulatory Liability

In Docket No. M-2108-2641242, the Commission ordered each utility to create a deferred regulatory liability account to record the tax savings associated with the TCJA for the January 1, 2018 through June 30, 2018 time period. Tax Cuts and Jobs Act of 2017, Docket No. M-2018-261242, Order (May 17, 2018); see also, OCA St. 2 at 10. The Company did not provide a reconciliation related to the tax savings identified in the Order. OCA St. 2 at 10. The Company stated that it has requested to forgo any changes in the current TCJA sur-credit due to the plan to file this rate case. OCA St. 2 at 10. At docket number R-2018-3000562, the Commission granted the Company a waiver, and based upon the waiver, the Company proposes to maintain the current distribution rates reflecting the TCJA Voluntary Surcharge during the pendency of this base rate case.²¹ The Commission's Order states:

Based on the Companies' assertions that accurate tax calculations will not be available in time for January 1, 2019 TCJA implementation dates (and that both Citizens' and Wellsboro expect to file 1308(d) base rate cases in 2019), the Commission grants the Companies permission to reconcile their TCJA surcharges 60 days prior to July 1 and to adjust these surcharges on July 1. Specifically, the Companies need not implement TJCA surcharges on January 1, 2019, but may instead: 1) maintain the current rates in effect through July 1, 2019, 2) submit recalculations, including reconciliations 60 days prior to July 1, 2019, and 3) maintain the July 1st rate change and reconciliation process for subsequent years until the Companies submit rate cases.

²¹ Tax Cuts and Jobs Act – Citizens' Electric Company of Lewisburg, Pa., Docket No. R-2018-3000558, Order (November 8, 2018). The OCA notes that the Company initially filed its Joint Petition for Amendment of the May 17, 2018 Orders Directing Citizens' Electric Company of Lewisburg, PA and Wellsboro Electric Company to Supplement Their Tariffs in Response to the Tax Cuts and Jobs Act" under the Tax Cuts and Jobs Act Order of 2018 docket at M-2018-2641242 docket because the Company was requesting an amendment of the Order and also under the utility-specific rate docket at R-2018-3000558. Petition was granted under the Company's rate docket at R-2018-3000558.

Tax Cuts and Jobs Act – Citizens’ Electric Company of Lewisburg, Pa., Docket No. R-2018-3000558, Order at 6. (November 8, 2018)(footnotes omitted). The Company states that it will provide a final reconciliation of the TCJA Voluntary Surcharge and implement any further customer credits or surcharges within 120 days after the proposed new rates take effect.

The OCA submits that the Company’s proposal should not be adopted and is not consistent with the Commission’s Order at Docket No. R-20193000558. Tax Cuts and Jobs Act – Citizens’ Electric Company of Lewisburg, Pa., Docket No. R-2018-3000558, Order at 6. (November 8, 2018). OCA witness Morgan testified regarding the issue:

I believe a reasonable approach is for the Company to provide the necessary reconciliation before the rates in this proceeding are determined so that any required over or under recovery can be reflected in the rates from this proceeding. In addition, I also believe the tax savings collected from January 2018 through June 2018, including accumulated interest, should be returned to customers as soon as possible. Therefore, it is important that the Company provides a more concrete plan for the return of these customer funds. Thus, the Commission should require the information to be filed sooner rather than 120 days after the rates are determined in this proceeding.

OCA St. 2 at 10.

The OCA recommends that the Company provide the necessary reconciliation before the rates in this proceeding are determined so that any required over- or under-recovery can be reflected in the rates from this proceeding. The tax savings collected from January 2018 through June 2018, including accumulated interest, should be returned to customers as soon as possible. The OCA respectfully requests that the Commission require the Company to provide a more concrete plan for the return of these customer funds. The OCA recommends that the Commission require the information to be filed sooner rather than 120 days after the rates are determined in this proceeding.

IX. CUSTOMER RATE STRUCTURE

A. Allocated Class Cost of Service Study

1. Introduction

Company witness Howard Gorman presented an Allocated Class Cost of Service Study (ACCOSS) for Wellsboro and Citizens'. An ACCOSS was presented for Wellsboro and Citizens' pursuant to the settlement of the Companies' last base rate proceedings in 2016.²² The OCA presented the testimony of Jerome D. Mierzwa to analyze the Company's ACCOSS. Mr. Mierzwa found flaws in Mr. Gorman's ACCOSS and recommended modification to the ACCOSS. Mr. Mierzwa's modified ACCOSS more properly reflects the costs of providing service to each class and should be used in this proceeding.

In his ACCOSS, Company witness Gorman classified 100 percent of primary distribution plant as demand-related, 100% of services and meters as customer-related, and a significant portion of secondary distribution plant upstream of meters and services as customer-related. OCA St. 4 at 8. Mr. Gorman also reflected the completion of a 3 MW solar installation at Bucknell in the cost study. OCA St. 4 at 8. While Mr. Mierzwa testified that an argument could be made that a portion of the primary distribution plant should be classified as energy-related, OCA witness Mierzwa has accepted Mr. Gorman's classification of primary distribution plant as demand-related. Mr. Mierzwa also accepted the classification of services and meters as customer-related. As discussed below, however, Mr. Mierzwa does not accept the reduction in revenue associated with the proposed solar installation in the ACCOSS. OCA St. 4 at 8. In addition, Mr. Mierzwa's testimony demonstrates that Mr. Gorman inappropriately classified secondary distribution costs

²² Valley did not have a requirement to file an ACCOSS because Valley was not a part of the rate case proceedings filed in 2016. The regulations only require that an ACCOSS be filed if the rate request is in excess of \$1 million. 52 Pa. Code § 53.53, Exh. A(IV)(B)(1).

upstream of the meters and service drops as partially customer-related. OCA witness Mierzwa testified that classifying secondary distribution plant costs as demand-related is a better reflection of cost causation principles. OCA St. 4 at 8.

OCA witness Mierzwa explained the purposes of the class cost-of-service studies:

The class cost-of-service studies of the type performed by Mr. Gorman are performed in an attempt to determine the costs that are incurred to provide service to each class of customers. Such studies are referred to as average, embedded cost studies because they attempt to directly assign or allocate to each customer class, actual book plant and related costs, adjusted to test year levels as authorized by the Commission. These cost studies are also referred to as “fully allocated” because they require that 100 percent of the allowed total jurisdictional costs of service be allocated among the various classes. This is done by determining the average costs of the various components of service (the total cost of the component divided by the units of service for that component), and then by allocating these component costs to each of the classes based on each class’ service units that have caused, or benefit from, that cost.

In a typical cost study, the costs are first functionalized into broad categories, such as primary and secondary distribution costs. Costs are then classified as to whether they are demand-related, energy-related, customer-related or related to some other factor, such as labor costs or revenue. Finally, the costs are allocated among the customer classes on the basis of the most appropriate measure of demand, energy, or customers, in proportion to each class’ share of the various allocation measures.

OCA St. 4 at 5-6.

For the reasons discussed below, the OCA submits that the Company’s proposed ACCOSS that reflects a loss of revenue from the solar installation at Bucknell and classifies a significant portion of secondary upstream distribution plant as customer-related is inappropriate for use in this proceeding. Secondary distribution plant should be classified as 100% demand-related as these costs are incurred to meet the coincident loads of the customers served by the Company, and no revenue loss should be included in the ACCOSS. OCA witness Mierzwa’s modified ACCOSS, which properly classifies secondary distribution plant as demand-related and reflects an appropriate level of revenue, should be adopted.

2. The Company's ACCOSS Improperly Classified A Significant Portion Of Upstream Secondary Distribution Plant As Customer-Related.

The OCA submits that Mr. Gorman's classification of a significant portion of secondary distribution plant costs upstream of the meters and service drops as customer-related is improper. As OCA witness Mierzwa explains, the secondary portion of upstream distribution plant should be classified as 100% demand-related. OCA St. 4 at 4, 10. OCA witness Mierzwa explained why classification of a significant portion of upstream secondary distribution plant as customer-related is counter to the purpose of the plant. Mr. Mierzwa testified:

The size and costs of the required plant are a function of the diversity of the customers' loads that must be served from this plant, as well as the expected future coincident loads that may have to be served from these facilities as growth occurs on the system. There is no direct relationship between the number of customers and the size or the cost of poles, conductors or transformers. That is clearly the case for poles and conductors, but it is also true in most cases for transformers. While transformers generally serve more than one customer, there is no requirement to install a transformer for a given number of customers on many systems. The Companies have previously acknowledged that there is no standard number of customers per transformer. The number, sizes (and therefore the costs) of transformers will depend on the diversity of the loads of the customers in the locality, the mix of customers served from the system in the area, the density of the population in the area, and probably the general configuration of the distribution system in that locality. To hypothetically carve out some portion of that cost as customer-related is simply inappropriate.

OCA St. 4 at 10.

Mr. Gorman, however, classifies a significant portion of secondary distribution plant as customer-related using the two methodologies to determine the customer-related component. Mr. Gorman uses a minimum system approach to estimate a customer-related portion of line transformers and what he terms a "zero-load analysis" to estimate the customer-related portion of all other upstream secondary distribution plant (poles; towers, fixtures, overhead conductors and devices; underground conduit; and underground conductors and devices). OCA St. 4 at 9. In determining the classification for secondary distribution plant as customer-related, however,

Company witness Gorman failed to account for how the distribution system is engineered and how it is designed to work on a day-to-day basis. Even if one were to accept that a portion of secondary distribution plant should be classified as customer-related, Mr. Gorman's methodologies are flawed and cannot be relied on for use in this proceeding.

- a. In His "Zero-Load Analysis," Company Witness Gorman Did Not Provide A Reasonable Basis To Classify Upstream Secondary Distribution Plant As Customer-Related.

Company witness Gorman performed what he referred to as a "zero-load analysis" to determine a customer-related portion of secondary distribution plant other than line transformers.

Mr. Mierzwa explained the process that Mr. Gorman used to perform his "zero-load analysis":

Mr. Gorman has examined what appears to be the installed replacement costs of poles, overhead conductors and underground conductors. He has disaggregated these installed costs into two categories: labor-related (i.e., all costs except materials), and the cost of material. He then assumes that all of the labor-related costs are customer-related, while the material costs are demand-related. The basis for this division, as explained in the 2016 base rate proceedings of Wellsboro and Citizens', is that "The portion of total installation costs that are labor-related (i.e., all costs except material) is a zero-load system because a system with no material costs would have zero load-carrying capability. Since this "Zero-Load Component" has no load-carrying capacity, no adjustment to the demand allocators is proposed by Mr. Gorman.

OCA St. 4 at 11 (footnote omitted).

The "zero-load analysis" is fundamentally flawed. OCA witness Mierzwa explained the significant flaw:

I would agree that the installation of no material would result in a system that has zero load-carrying capability. But, at the same time, I cannot envision a system that has no material (i.e., no actual conductor and no actual poles) connecting customers to the system, which is the basic concept behind classifying some portion of upstream secondary distribution plant as customer-related. There are no facilities to connect the customer to the system. Further, the very idea of sending a crew out to undertake work to construct a secondary distribution system with no material has no basis.

When a distribution line is upgraded, the costs of doing so are integrated. If new conductor is added, or new poles installed, there is no rationale in trying to separate out the costs of labor, vehicle and overhead as customer-related while only the costs of the poles and the conductor are related to demand. Without the poles and the conductor there would be no distribution line upgrade, and that upgrade was no doubt required because the expected future coincident demand to be imposed on those facilities required the upgrade. Mr. Gorman's separation of these installation costs into customer- and demand-related is artificial, and merely has the effect of shifting cost responsibility to those classes with numerous small customers.

OCA St. 4 at 11.

As can be seen, Mr. Gorman's "zero-load analysis" has no basis in how secondary distribution costs are actually incurred or the reason for the incurrence of such costs. Secondary distribution plant costs are incurred to meet the coincident loads of customers and the size and costs are a function of the diversity of customers' loads and expected future coincident loads. OCA St. 4 at 10. The artificial assumptions used by Mr. Gorman improperly shift cost responsibility and must be rejected.

b. Company Witness Gorman's Minimum System Analysis For Classifying A Portion Of Line Transformers As Customer-Related Is Flawed.

Mr. Gorman also used a minimum system analysis for the portion of secondary distribution plant represented by line transformers to determine the percentage that is customer-related. A minimum system method hypothetically reconstructs the distribution system with the smallest size poles, conductors, and transformers possible. In this case, it was applied to line transformers. The cost of the hypothetical system is deemed to be customer-related and the remaining actual cost is deemed to be demand-related. OCA St. 4 at 9. Even if a partial customer classification were appropriate, the Company's minimum system study used to determine the customer percentage for line transformers is flawed. Company witness Gorman classified a portion of line transformer

costs as customer-related based upon his estimate of the minimum size transformer. OCA St. 4 at

12. Mr. Gorman's methodology, however, is unsupported. OCA witness Mierzwa testified:

For Citizens', that minimum size was determined to be a 50 kilovolt-amperes (kVa) transformer serving four customers, or 12.5 kVa per customer. He then multiplies this minimum size transformer cost for each of the Companies by the number of line transformers on the system to arrive at the portion of total line transformer costs that he defines as customer-related. As indicated earlier, there is no direct relationship between the number of customers and the cost of line transformers. The total transformation capacity will depend upon the coincident loads that must be met by the local neighborhood distribution systems. The reasons for making transformer investments are the need to meet those local coincident loads. Finally, the so-called minimum size transformer has significant load-carrying capability and so the investment is not made simply to connect the customer to the system. For all of these reasons, Mr. Gorman's classification of these costs should be rejected and 100 percent of these costs should be classified as demand-related.

OCA St. 4 at 12.

Mr. Gorman's use of a minimum system analysis for transformers fails to reflect that the number, size, and costs of transformers will depend on the diversity of loads of the customers in a locality, the mix of customers served from the system in the area, the density of the population and the general configuration of the distribution system in the locality. Moreover, the size of the transformer Mr. Gorman has deemed minimum has significant load carrying capability. For these reasons, the OCA submits that Company witness Gorman's proposed minimum system analysis for line transformers should be rejected.

OCA witness Mierzwa further explained the problem created by classifying line transformers based on a minimum system approach, while classifying the rest of the upstream secondary distribution system using a zero load approach. OCA St. 4 at 13. Mr. Mierzwa testified:

This dual approach to cost classification assumes that line transformers have a minimum load-carrying capability, but the rest of the upstream secondary distribution system does not. Conceptually, it results in a situation where the customer-related portion of line transformers can carry a load of 12.5 kVa or 10 kVa for the average customer, but the poles and lines don't exist to permit them to carry any load at all. One wonders on what structures the minimum size line

transformers will be mounted if there is no material included in the zero load secondary upstream distribution system.

OCA St. 4 at 13.

As can be seen, Company witness Gorman's methodologies are flawed and inconsistent.

The resulting ACCOSS is unreliable and should not be used in this proceeding.

c. OCA Witness Mierzwa's Modified ACCOSS Which Of Classifies Upstream Secondary Distribution Plant As 100 Percent Demand-Related Should Be Adopted In This Proceeding.

OCA witness Mierzwa had the ACCOSS modified to determine the impact of the classification of upstream secondary distribution plant as 100 percent demand-related. Mr. Mierzwa requested that Company witness Gorman adjust his cost studies to reflect Mr. Mierzwa's requested modifications to the cost studies. OCA witness Mierzwa specifically requested that the classification of poles, towers and fixtures (Account 364); overhead conductors and devices (Account 365); underground conduits and conductors (Account 366); and line transformers (Account 368) be changed to 100 percent demand-related. OCA St. 4 at 16. The allocation of secondary demand-related line transformer costs was changed to Mr. Gorman's NCP-Sec allocator which is how the other secondary upstream distribution demand-related plant is allocated. OCA St. 4 at 16. As OCA witness Mierzwa testified, "this change was necessary because Mr. Gorman's cost study accounted for the load-carrying capability of his transformer system, which I have eliminated." OCA St. 4 at 16. The Citizens' cost study was also modified to include the electric service requirements for Bucknell. OCA St. 4 at 16.²³

The following Table 2 provides a comparison of the results of Citizens' and the OCA's revised cost studies at present rates:

²³ The reasons for the OCA's proposed modification to Citizens' revenues to include the electric service requirements for Bucknell is discussed at Section V above.

**Table 2. Citizens' Electric Company of Lewisburg –
Comparison of Cost of Service Study Results**

Rate Class	Company		OCA	
	Rate of Return	Index	Rate of Return	Index
RH	(0.39%)	(0.10)	(0.28%)	(0.07)
SH	0.48	0.12	(0.10)	(0.02)
GLP-1	7.38	1.87	7.53	1.86
GLP-3	18.96	4.81	18.69	4.63
MBL	(5.41)	(1.37)	(5.37)	(1.33)
PL	8.18	2.07	8.52	2.11
Total:	3.95%	1.00	4.04%	1.00

OCA St. 4 at 16; see also, OCA St. 4 at Sch. JDM-4.²⁴ As shown in Table 2, the Citizens' rates of return for the residential class generally improve as a result of the modifications. OCA St. 4 at 16.

The OCA submits that Mr. Mierzwa's ACCOSS provides a better guide for the Commission. As Mr. Mierzwa explained his ACCOSS:

will best reflect the factors that have caused this plant to be constructed – the need to meet local neighborhood peak demands and the need to deliver energy at usable voltages during all hours of the year.

OCA St. 4 at 14.

In addition, as discussed in OCA witness Mierzwa's Surrebuttal Testimony, his methodology is supported by the eminent scholar, Professor Bonbright. Mr. Mierzwa testified:

Professor James Bonbright, at pages 491 and 492 of his *Principles of Public Utility Rates*, states:

But the really controversial aspect of customer-cost imputation arises because of the cost analyst's frequent practice of including, not just those costs that can be definitely earmarked as incurred for the benefit of specific customers but also a substantial fraction of the annual maintenance and capital costs of the secondary (low voltage)

²⁴ The OCA notes that there are two typographical errors in Table 2. Rate RH should be labeled as RS, and Rate PL should be labeled as Rate OL.

distribution system -- a fraction equal to the estimated annual costs of a hypothetical system of minimum capacity. This minimum capacity is sometimes determined by the smallest sizes of conductors deemed adequate to maintain voltage and to keep from falling of their own weight. In any case, the annual costs of this phantom, minimum-sized distribution system are treated as customer costs and are deducted from the annual costs of the existing system, only the balance being included among those demand-related costs to be mentioned in the following section. Their inclusion among the customer costs is defended on the ground that, since they vary directly with the area of the distribution system (or else with the lengths of the distribution lines, depending on the type of distribution system), they therefore vary indirectly with the number of customers.

What this last-named cost imputation overlooks, of course, is the **very weak correlation between the area (or the mileage) of a distribution system and the number of customers served by this system.** For it makes no allowance for the density factor (customers per linear mile or per square mile). Indeed, if the Company's entire service area stays fixed, an increase in number of customers does not necessarily betoken any increase whatever in the costs of a minimum-sized distribution system.[emphasis added]

OCA St. 3-SR at 2-3, quoting Principles of Public Utility Rates, Second Edition, James C. Bonbright; Albert L. Danielsen; David R. Kamerschen; Public Utility Reports, Inc., 1988, pages 491-492.

The OCA submits that the Commission should adopt Mr. Mierzwa's ACCOSS for Citizens' which classifies 100 percent of the upstream secondary distribution plant as demand-related. Mr. Mierzwa's revised ACCOSS adopts Mr. Gorman's classification of 100 percent of primary distribution as demand-related, 100 percent of services and meters as customer-related. See, OCA St. 4 at Sch. JDM-4. The modification of the classification of secondary distribution plant as demand-related, however, will best reflect the factors that have caused this plant to be constructed – the need to meet local neighborhood peak demands and the need to deliver energy at usable voltages during all hours of the year. See, OCA St. 4 at 14.

3. Proposed 3 MW Solar Installation Project

As discussed in Section V above, the Company has inappropriately included in its proposed revenues the installation of a 3 MW solar installation. The OCA does not agree that there is evidence to demonstrate that the solar installation will be completed in any part of the FPFTY. In addition to including the solar installation project in the FPFTY revenues, Company witness Gorman also reflected the completion of this 3 MW solar installation in his cost study. OCA St. 4 at 8. For the reasons set forth above in Section V, OCA witness Mierzwa does not accept the reduction in revenue associated with the proposed solar installation in the ACCOSS. OCA St. 4 at 8. The OCA submits that the Company's proposed inclusion of the revenue loss in the ACCOSS from the solar installation is inappropriate in this proceeding.

B. Revenue Allocation

Based on the results of the revised ACCOSS, Mr. Mierzwa next reviewed the Company's proposed allocation of the revenue increase to the various customer classes. Mr. Mierzwa first set forth the following principles of a sound revenue allocation and rate design:

- Yield the total revenue requirement;
- Reflect fairness in the apportionment of the total cost of service among the various customer classes.
- Utilize class cost-of-service study results as a guide;
- Provide stability and predictability of the rates themselves, with a minimum of unexpected changes seriously adverse to ratepayers or the utility (gradualism); and
- Provide for simplicity, certainty, convenience of payment, understandability, public acceptability, and feasibility of application.

OCA St. 4 at 17 (footnote omitted).

The Commonwealth Court of Pennsylvania provided that the "polestar" for determining the level of revenue for the different rate classes should be the cost of providing service to those

different rate classes. Lloyd v. Pa. P.U.C., 904 A.2d 1010, 1020 (Pa. Commw. Ct. 2004)(Lloyd). “Polestar” is a literary reference meaning “directing principle” or a “guide.”²⁵ The Commission has long regarded cost of service studies as more of an art form and a guide rather than as a source of actual data. Application of Metropolitan Edison Company for Approval of Restructuring Plan Under Section 2806 of the Public Utility Code, 1998 Pa. PUC LEXIS 160, *159 (1998); Pa. P.U.C. v. Pa. Power & Light, 55 P.U.R. 4th 185, 249 (Pa. PUC 1983); Pa. PUC v. Aqua Pa., Inc., Docket No. R-00072711, Order (July 2008). Factors such as gradualism, rate shock, rate continuity, competitive concerns, and principles of fundamental fairness must also weigh in the determination. Lloyd at 1020-1021. In City of DuBois, the Commission correctly stated that “while *Lloyd* establishes cost of service rates as the polestar of ratemaking, it does not preclude consideration of other factors.” Pa. PUC v. City of DuBois, Docket No. R-2016-2554150, slip. op. at 26 (May 18, 2017). Mr. Mierzwa has included these important considerations in developing his alternative recommendations concerning revenue allocation.

In his Direct Testimony, OCA witness Mierzwa describes the principles used to guide Company witness Gorman’s proposed revenue allocation. OCA witness Mierzwa testified:

[a]s is the case for Wellsboro, I agree that it is appropriate to move each class closer to its indicated cost of service and that extreme impacts should be mitigated. Similar to Wellsboro, I also believe that no class should receive a rate decrease at a time when rates are increasing. While I generally find Mr. Gorman’s proposed revenue distribution to be reasonable, I disagree with Mr. Gorman’s proposed rate decrease for the GLP-3 rate class.

OCA St. 4 at 20-21. Mr. Mierzwa also testified that “[u]nder Mr. Gorman’s proposed revenue distribution, no rate class receives an increase that is more than 1.6 times the system average increase.” OCA St. 4 at 20. As discussed in Mr. Mierzwa’s Table 5, Citizens’ proposes the following revenue distribution:

²⁵ The American Heritage Dictionary, Houghton Mifflin Co. (1985).

**Table 5. Citizens' Electric Company of Lewisburg, PA –
Proposed Revenue Distribution**

Rate Class	Present Rates	Proposed Rates	Increase	Percent
RS	\$2,647,362	\$3,315,161	\$667,799	25.2%
SH	24,362	30,256	5,894	24.2
GLP-1	917,008	1,055,971	138,963	15.2
GLP-3	1,110,186	1,074,356	(35,830)	(3.2)
MBL	17,615	22,246	4,631	26.3
PL	73,307	86,532	11,225	14.9
Total:	\$4,791,840	\$5,584,522	\$792,682	16.5%

OCA St. 4 at 20.²⁶

Generally, the OCA agrees that it is appropriate to move each class close to the properly determined cost of service, consistent with the principles of gradualism, avoiding rate shock, rate continuity, and principles of fundamental fairness as set forth by Mr. Mierzwa. OCA St. 4 at 20. Mr. Gorman's proposal, however, would provide for a rate decrease of 3.2 percent for the GLP-3 rate class. OCA St. 4 at 20-21. Such a rate decrease for Rate GLP-3 when others' rates are increasing is not appropriate. Mr. Mierzwa explained:

[N]o class should receive a rate decrease at a time when rates are increasing. While I generally find Mr. Gorman's proposed revenue distribution for Citizens' to be reasonable, I disagree with Mr. Gorman's proposed rate decrease for the GLP-3 rate class.

OCA St. 4 at 20. Mr. Mierzwa also noted that in the Citizens' 2010 base rate proceeding, Mr. Gorman agreed with additional objective. OCA St. 4 at 18.

The Commission has recognized this important consideration regarding rate decreases for some classes at a time of significant increases for others. In PPL's 2012 base rate proceeding, the

²⁶ The OCA notes that there is a typographical error in the table. Rate PL should be Rate OL.

Commission rejected providing rate decreases in a general base rate proceeding, holding, “as a matter of fairness, those customer classes that have not been allotted any rate increase via the Company’s original revenue allocation should not receive rate decreases as argued by the OSBA and PPLICA.” Pa. PUC v. PPL Electric Utilities Corp., Docket No. R-2012-2290597, Order at 124 (March 30, 2018)(PPL 2012).

OCA witness Mierzwa recommends that the “rate decrease proposed for the GLP-3 rate class be eliminated and proportionately distributed to the rate classes receiving an increase that is greater than or equal to 1.5 times (rounded) the system average increase.” OCA St. 4 at 21. Mr. Mierzwa’s recommendations are summarized in Table 6 of his Direct Testimony:

Rate Class	Present Rates	Proposed Rates	Increase	Percent
RS	\$2,647,362	\$3,279,887	\$632,525	23.9%
SH	24,362	29,945	5,583	22.9
GLP -1	917,008	1,055,971	138,963	15.2
GLP -3	1,110,186	1,110,186	0	0.0
MBL	17,615	22,001	4,386	24.9
PL	73,307	86,532	11,225	14.9
Total:	\$4,791,840	\$5,584,522	\$792,682	16.5%

OCA St. 4 at 21.²⁷

Under OCA witness Mierzwa’s revenue allocation, the \$35,830 decrease proposed for the GLP-3 rate class is eliminated and proportionately distributed to the rate classes receiving an increase that is greater than or equal to 1.5 times (rounded) the system average increase. OCA St. 4 at 21-22; OCA St. 4-R at 4. I&E witness Cline made a similar recommendation. I&E St. 3 at

²⁷ The OCA notes that there is a typographical error in the table. Rate PL should be Rate OL.

29-30. I&E witness Cline recommends that \$35,830 decrease proposed for the GLP-3 rate class be eliminated with \$10,500 assigned to the PL rate case, and the remaining \$25,316 be applied to the GLP-1 rate class. I&E St. 3 at 30-32; see also, OCA St. 4-SR at 10-11.

OSBA witness Kalcic used a three-step process to develop his proposed revenue allocation. First, Mr. Kalcic assigned each rate class the full revenue increase indicated by Citizens' cost study based on Citizens' requested revenue increase. OSBA St. 1 at 7-8; see also, OCA 4-R at 5; OCA St. 4-SR at 11. Second, he adjusted the increases indicated in Step 1 so no class received an increase greater than 26.2 percent or a rate decrease. OSBA St. 1 at 7-8. Under the third step, Mr. Kalcic reallocated the revenue shortfall resulting from Steps 1 and 2 to the remaining customer rate classes, GLP-1 and OL. OSBA St. 1 at 8.

While Mr. Mierzwa and I&E witness Cline have made similar recommendations regarding the proposed rate decrease, the OCA does not agree with Mr. Cline's proposed redistribution of the resulting dollars. OCA St. 4-R at 5. The OCA also does not agree with OSBA's three step proposal. OCA witness Mierzwa testified as to Mr. Cline's and Mr. Kalcic's proposals:

Citizens' has requested a system average increase in distribution rates of 16.3 percent. Under the initial revenue distribution proposed by Citizens', the OL rate class was assigned an increase of 6.5 percent, and the GLP-1 rate class was assigned an increase of 15.2 percent. The rate increase proposed by Citizens' for several other rate classes is approximately 25 percent. Under Mr. Cline's proposal, the rate increases for the OL and GLP-1 rate classes would be reduced to 1.0 percent and 12.4 percent, respectively. Given the significant increases proposed for other rate classes, I believe a revenue distribution that provides for additional gradualism, such as the proposal I have made, is more reasonable than Mr. Cline's proposal.

Under Mr. Kalcic's proposed revenue distribution, the rate increase for the OL and GLP-1 rate class would be reduced to 6.5 percent and 9.0 percent, respectively. The rate increase for the [RS] and SH rate classes would each increase to 26.2 percent, while the increase proposed by Citizens' for the MBL rate class would remain at 26.2 percent. An increase of 26.2 percent is 1.6 times the system average increase requested by Citizens'. Given the significant rate increases which would result under Mr. Kalcic's proposal for the [RS], SH, and MBL rate classes, I believe

a revenue distribution that provides for additional gradualism, such as the proposal I have made, is more reasonable than Mr. Kalcic's proposal.

OCA St. 4-R at 5-6.

Company witness Gorman states in his Rebuttal Testimony that Citizens' does not accept the proposition that no class should receive a rate decrease. Citizens' St. 1 at 7. He argues that Citizens' supports moving each of the rate classes closer to the cost of service. Citizens' St. 1 at 7. Mr. Mierzwa's proposed allocation, however, does move the GLP-3 class closer to cost of service without a rate decrease at the time of increasing rates for other rate classes. OCA witness Mierzwa testified:

Under the initial revenue distribution presented in his Direct Testimony, the GLP-3 rate class would receive a 3.2 percent rate reduction while the RS, SH, and MBL rate classes would each receive a rate increase of approximately 25 percent. My proposal provided for additional rate mitigation for these three rate classes and further promoted the concept of gradualism which Mr. Gorman supports. I would note that as indicated in my Direct Testimony, Mr. Gorman has previously supported the rate design principle that no class should receive a rate decrease at a time when overall, rates are increasing. As subsequently shown in my Surrebuttal Testimony in responding to Mr. Kalcic, there is substantial movement of the GLP-3 rate class toward the cost of service even without a rate reduction. Therefore, my proposed revenue distribution is consistent with moving the GLP-3 rate class toward the cost of service.

OCA St. 4-SR at 11-12.

Mr. Mierzwa further explained how overall the rate classes would move closer to cost of service without a rate decrease:

Mr. Kalcic's claims concerning GLP-1 and MBL are based on the alleged changes to the subsidies for each class at present and proposed rates. As indicated in my response to Mr. Kalcic concerning his claims with respect to my proposed revenue distribution for Wellsboro, the problem with Mr. Kalcic's subsidy approach is the change in subsidy is based on two different costs of service, and a better alternative approach is a comparison of the percentages of the cost of service being recovered under present versus proposed rates. This alternative comparison is presented in Table 1-S.

**Table 1-S.
Citizens' Electric Company of Lewisburg, PA
Percentage of Cost of Service Recovered at
Present and OCA Proposed Revenues^[1]**

Rate Class	Present Rates	OCA Proposed Rates	Change
RS	84.3%	90.2%	5.8%
SH	86.3	90.4	4.1
GLP-1	113.1	111.6	(1.5)
GLP-3	158.5	135.3	(23.2)
MBL	32.5	30.8	(1.7)
OL	128.6	114.0	(14.6)
TOTAL:	100.0%	100.0%	0.0%

^[1] Percentages based on Citizens' ACOS in recognition that results of the ACOS presented in my Direct Testimony did not vary significantly from the results of Citizens' ACOS, and to facilitate the comparison of the proposed revenue distributions.

As shown in Table 1-S, contrary to Mr. Kalcic's claim, my proposed revenue distribution results in movement toward the cost of service for GLP-1 rate class. That is, at present rates GLP-1 customers are paying 113.1 percent of the cost of service, and under my proposed revenue distribution, GLP-1 customers would be paying 111.6 percent of the cost of service, a decrease of 1.5 percent. For the GLP-3 rate class, the percentage decrease is 23.2 percent. I would note that my evaluation of the impact on the MBL rate class does reflect a slight movement away from the cost of service (1.7 percent).

OCA St. 4-SR at 12-13. In order to address OSBA witness Kalcic's concern, as Mr. Mierzwa testified, one could reallocate the \$245 from rate class MBL to other customer classes. See, OCA St. 4-SR at 13.

C. Rate Design

1. Summary of Citizens' Proposed Rate Design

Citizens' has one residential rate class, Schedule RS. For rate class RS, Citizens' proposes to increase the residential RS customer charge from \$11.24 to \$15.00 per month, or a 33.5 percent increase. OCA St. 4 at 23. Citizens' also proposes to increase the volumetric energy charge from

\$0.02184 per kWh to \$0.02658 per kWh energy charge, or a 21.7 percent increase in the energy charge.

The customer-related cost component calculated by the Company is based upon the service, meter, customer accounting software investment costs and the related operation and maintenance expenses that have been identified in the Company's cost of service study. OCA St. 4 at 24. The customer-related component is \$12.94. OCA St. 4 at 24. As part of its increase to a residential customer charge of \$15.00 per month, Citizens' also proposes to include a demand-related cost component in addition to the traditional customer-related charge. OCA St. 4 at 24.

The OCA does not dispute in this proceeding the customer-related components that the Company has included. At the Company's full request, that would result in a customer charge of \$12.94 per month. OCA St. 4 at 28. As discussed below, the OCA submits that demand charges should not be included in the residential customer charge.

The OCA recommends that the monthly customer charges for residential customers should also reflect the final authorized increase approved by the Commission. OCA St. 4 at 28. OCA witness Mierzwa explained in his Direct Testimony:

For Citizens', the increase in the current monthly Residential customer charge to a cost-based charge based on the Company's requested increase would be from \$11.24 to \$12.94, or \$1.70. If the Commission were to also authorize an increase for Citizens' which was 50 percent of Citizens' requested increase, Citizens' monthly Residential customer charge would be increased to \$12.09 ($\$11.24 + (\$1.70/50 \text{ percent})$).

OCA St. 4 at 28.

2. Demand Charges Should Not Be Included In The Customer Charge.

The OCA submits that it is not appropriate to include demand charges in the customer charge. OCA witness Mierzwa explained the Company's claim:

Mr. Gorman claims that for the Residential customers of Wellsboro and Citizens', the current customer charges recover only a portion of customer-related costs. He claims that the balance of customer-related costs, as well as all demand-related costs, are recovered in the kWh charge. Mr. Gorman claims that this was done in the past due to the lack of customer-level demand data, the need for revenue stability for the utility, and cost stability for customers. He is proposing to include a demand-related component in Residential customer charges to help stabilize the utility revenues and customers' costs, even though he acknowledges that the past rate design practices of Wellsboro and Citizens' achieved this result.

OCA St. 4 at 24-25.

Company witness Gorman calculated the amount of the proposed demand-related costs to include in residential customer charges as follows:

Mr. Gorman first determined the average demand costs per kilowatt ("kW") for the Residential class based on each Company cost study...for Citizens' the average demand cost was \$5.40 per kW-month...for Citizens' he included the cost of 0.38 kW-demand [in the monthly Residential customer charge]. He claims that these amounts represent a fair balance between revenue stability and the principle of gradualism.

OCA St. 4 at 25; see also, Citizens' St. 1 at 37-38. While Mr. Gorman proposed to include 0.38 kW-demand of his identified calculation in the customer charge, he also argues that the demand-related amounts should increase over time. Citizens' St. 1 at 38; OCA St. 4 at 25.

The OCA does not support the Company's inclusion of demand-related costs in the monthly customer charge or agree that the demand-related amounts should increase over time. The Company's proposal marks a dramatic change in how the Company and the Commission have developed customer charges in the past without any support. Such a change would also alter the price signals customers have become accustomed to without any meaningful benefit. As OCA witness Mierzwa testified:

First, Mr. Gorman acknowledges that the historic practices of Wellsboro and Citizens' with respect to the design of monthly Residential customer charges have achieved revenue stability for each Company and cost stability for ratepayers. He has presented no analysis indicating otherwise.

In addition, the cost structure of the distribution systems of Wellsboro and Citizens' largely reflect costs which vary with changes in demand. As such, the customer charge does not provide price signals that are particularly relevant to the cost structure. The inclusion of demand charges of any type in the customer charge is not appropriate. The volumetric energy charge is the primary source of meaningful price signals. A lower customer charge ensures that a greater portion of costs are recovered through energy charges, is more consistent with the Commonwealth's energy conservation and efficiency goals, and will help minimize electric distribution system costs over the long-term.

OCA St. 4 at 25-26.

Company witness Gorman claims that the proposal aligns with the goals outlined in the Commission's Final Proposed Policy Order at Docket No. M-2015-2518883 and the resultant Fixed Utility Distribution Rates Policy Statement. Citizens' St. 1 at 34-37; OCA St. 4 at 26; Fixed Utility Distribution Rates Policy Statement, Final Policy Statement Order (July 18, 2019)(Final Policy Statement Order). The OCA submits that Mr. Gorman's proposal does not align with the goals enumerated in the Fixed Utility Distribution Rates Policy Statement and Final Policy Statement Order implementing the Policy Statement.

The Final Policy Statement Order specifically states that the purpose of the Policy Statement is to encourage the efficient use of electricity. See, Final Policy Statement Order at 1; 52 Pa. Code § 69.3301. As the Final Policy Statement Order states:

On May 23, 2018, the Pennsylvania Public Utility Commission (Commission) issued for comment a Proposed Policy Statement that identifies factors the Commission will consider in determining just and reasonable distribution rates that promote the efficient use of electricity, natural gas or water, and the use of distributed energy resources, as well as reduce disincentives for such efficient use and resources and ensure adequate revenue to maintain the safe and reliable operation of fixed utility distribution systems.

Final Policy Statement Order at 1. Similarly, Section 69.3301 of the Purpose and Scope of the Policy Statement states:

Federal and State policy initiatives promote the efficient use of electricity, natural gas and water through technologies and information, including distributed energy

resources. The purpose of this policy statement is to invite the proposal, within a utility's base rate proceeding, of fixed utility distribution ratemaking mechanisms and rate designs that promote these Federal and State objectives, the objectives of 66 Pa. C.S. § 1330 (relating to alternative ratemaking for utilities), and may include reducing disincentives for promoting these objectives, providing incentives to improve system economic efficiency, and avoiding unnecessary future capital investments, while ensuring that fixed utilities receive adequate revenue to maintain safe, secure and reliable operation of their distribution systems. At the same time, an alternative rate design methodology should reflect the sound application of cost of service principles, establish a rate structure that is just and reasonable, and consider customer impacts.

52 Pa. Code § 69.3301. The proposed inclusion of demand charges as a part of the customer charge, however, has the opposite effect because the inclusion of demand charges in the fixed customer charge prevents the customer from seeing price signals that would otherwise encourage conservation and the efficient use of electricity.

OCA witness Mierzwa and I&E witness Cline both oppose the proposed inclusion of demand charges in the customer charge. See, OCA St. 4 at 23-29; I&E St. 3 at 33-41. The OCA does not agree that the purposes of the Commission's Policy Statement are met by the Company's proposal. As stated, the purpose of the Commission's Policy Statement is to promote the efficient use of electricity, and the Company's proposal would be contrary to that objective. As OCA witness Mierzwa testified:

The efficient use of a resource such as electricity requires that the resource be priced to discourage wasteful consumption. As indicated previously, the cost structures of Wellsboro and Citizens' largely reflect costs that vary with changes in demand. The proposal of Wellsboro and Citizens' to include demand costs in the fixed monthly charge will not provide price signals that are particularly relevant to the cost structure. The volumetric energy charge is the primary source of price signals. Therefore, inclusion of demand charges as proposed by Wellsboro and Citizens' will not promote the efficient use of energy.

OCA St. 4 at 27.

Moreover, as Mr. Mierzwa explained, following Mr. Gorman's recommendations to the final steps and logical conclusion would result in the entire cost of service for Citizens' being recovered through monthly customer charges. As OCA witness Mierzwa testified:

This would send customers inappropriate price signals, significantly reduce the incentive for customers to conserve energy and reduce consumption, and increase total costs in the long term. The Commission should not embrace a policy that will ultimately lead to these results.

OCA St. 4 at 26.

Section 69.3302 identifies 14 factors to be considered in support of the proposed alternative ratemaking mechanisms, and as discussed below, Mr. Gorman's proposed inclusion of demand charges as a part of the customer charges fails to meet the necessary criteria to be approved. Mr. Gorman's Direct Testimony responds to each of these 14 factors as required, but the OCA submits that the Company's responses do not align with the goals identified by the Final Policy Statement Order. See, Citizens' St. 1 at 34-37. The 14 factors include:

- (1) How the ratemaking mechanism and rate design align revenues with cost causation principles as to both fixed and variable costs.
- (2) How the ratemaking mechanism and rate design impact the fixed utility's capacity utilization.
- (3) Whether the ratemaking mechanism and rate design reflect the level of demand associated with the customer's anticipated consumption levels.
- (4) How the ratemaking mechanism and rate design limit interclass and intraclass cost shifting.
- (5) How the ratemaking mechanism and rate design limit or eliminate disincentives for the promotion of efficiency programs.
- (6) How the ratemaking mechanism and rate design impact customer incentives to employ efficiency measures and distributed energy resources.
- (7) How the ratemaking mechanism and rate design impact low-income customers and support customer assistance programs.

(8) How the ratemaking mechanism and rate design impact customer rate stability principles.

(9) How the weather impacts utility revenue under the ratemaking mechanism and rate design.

(10) How the ratemaking mechanism and rate design impact the frequency of rate case filings and affect regulatory lag.

(11) If or how the ratemaking mechanism and rate design interact with other revenue sources, such as Section 1307 automatic adjustment surcharges, 66 Pa.C.S. § 1307 (relating to sliding scale of rates; adjustments), riders such as 66 Pa.C.S. § 2804(9)(relating to standards for restructuring of electric industry) or system improvement charges, 66 Pa.C.S. § 1353(relating to distribution system improvement charge).

(12) Whether the alternative ratemaking mechanism and rate design include appropriate consumer protections.

(13) Whether the alternative ratemaking mechanism and rate design are understandable to consumers.

(14) How the ratemaking mechanism and rate design will support improvements in utility reliability.

52 Pa. Code § 69.3302.

In response, I&E witness Cline specifically enumerates why each of the 14 factors demonstrated that the proposal is not appropriate and responds directly to each of these 14 enumerated factors. Mr. Cline testified:

1) I do not agree that the proposed rate design aligns revenues with cost causation principles, because, for the reasons described above, demand costs should not be counted as fixed costs.

2) Mr. Gorman's statement that "in the future the Company will consider rate designs that promote customer's efficient utilization of resources" is at odds with the proposed increase to the customer charge. As I discussed above, customer utilization of resources is determined by the price signals customers receive through their bill. A higher fixed charge and lower usage charge serves to dampen those price signals because changes in usage have less effect on a customer's bill.

3) Mr. Gorman stated that the proposed addition to the customer charge does not reflect the level of demand from customers. He instead points to some unknown

rate designs that the Company may consider in the future that would reflect customers' actual demand levels, though he provides no detail or support as to how those rate designs would differ from what the Company is currently proposing.

4) I disagree with Mr. Gorman regarding the proposed rate design reducing intraclass cost-shifting. Rate design is based on the revenue allocations determined through the use of the cost of service study. Rates individually have no impact on intraclass cost-shifting as long as the demand portion of the rate is allocated to each class appropriately.

5) Mr. Gorman is correct that the rate proposal promotes revenue stability for the Company and provides some insulation for reduction in usage that may be caused by efficiency efforts. However, revenue stability for the utility must be balanced against affordability and conservation concerns.

6) The Company's proposal would have a detrimental effect on customer incentives to employ efficiency measures and distributed energy resources. As discussed above, a higher fixed charge and lower usage charge removes price signals and incentives for customers to employ energy efficiency measures and distributed energy resources. A customer would be less likely to purchase more expensive energy efficient appliances if the benefits are not reflected in their utility bills.

7) I disagree with Mr. Gorman that the Company's proposal does not materially impact low-income customers. Low income customers who are also low usage customers will experience a higher percentage increase to their bill than under traditional Commission approved rate making as shown on I&E Exhibit No. 3, Schedule 15.

8) I disagree with Mr. Gorman's statement that customer rate stability is related to the utility's costs. However, a higher customer charge does promote a greater level of rate stabilization, but at the expense of price signals and a higher cost for lower usage customers as discussed above.

9) I agree that the Company's proposal does not materially impact weather related costs.

10) The Company has not provided any evidence or support for its statement that its proposal would reduce the frequency of rate cases nor has it proposed a rate case stay out of any length of time.

11) Mr. Gorman is correct that Section 1307 automatic adjustment surcharges would not be materially impacted by the Company's rate design proposal.

12) The Company's proposal does not include any specific consumer protections.

13) A large increase in customer charge would not require customer education unless it is required by the Commission. The Company has not proposed or supported what it considers “rates that fully reflect demand-based costs” in this proceeding, and, therefore, the Commission has not approved such rates. The Company should not begin to educate customers regarding a potential rate methodology change until such a change is presented and fully supported in front of the Commission.

14) Mr. Gorman is correct that a higher customer charge results in a higher level of revenue stability for the utility. However, as I established above, that revenue stability is at the expense of higher bills for low usage customers and less incentive for customers to participate in energy conservation.

I&E St. 3 at 38-40

In Rebuttal Testimony, Mr. Gorman specifically focuses on Mr. Cline’s arguments. In his response to Mr. Cline, Mr. Gorman responds that Mr. Cline’s arguments are based on “his claims that demand costs are not fixed because some future capital investment [could] be avoided and that higher fixed charges do not signal to customers either to avoid usage at the peak or to conserve energy at all times.” Citizens’ St. 1-R at 8. Mr. Gorman argues that the Company should include a modest portion of demand-related costs in the fixed monthly charge, and then at some point in the future, explore programs that will “link rates to how well customers manage their peak demand and their usage, while protecting low-income and low-usage customers.” Citizens’ St. 1-R at 9. The Company, however, should have considered these links before proposing to include demand charges as a part of the customer charge.

Moreover, the OCA submits that Mr. Gorman’s arguments miss the point. Mr. Gorman’s arguments cannot overcome the fact that customers would not receive any price signals that are relevant to the distribution system cost structure. To approve demand charges and then look at some point in the future at how the demand charges in a fixed customer charge should link to peak demand and customer usage will not further any energy efficiency or demand response goals. As OCA witness Mierzwa testified:

The cost structure of the [Citizens'] distribution system largely reflects costs which vary with changes in demand. As such, the customer charge does not provide signals that are particularly relevant to the cost structure. Although Mr. Gorman believes programs that link rates to how well customers manage their high demand and usage should be explored, no such programs are in place to link demand charges and customer demands. Under Mr. Gorman's rate design proposal, for each meter size, the same demand charge would be included in the customer charge of each Residential customer, and the demand charge assessed to each customer will not change if a customer reduces or increases its peak demand. In addition, demand charges fail to provide Residential customers with adequate price signals because the majority of Residential customers have no way of knowing when peak demand periods are occurring. Therefore, the inclusion of demand charges of any type in the customer charge is not appropriate. The volumetric energy charge is currently the primary source of meaningful price signals. A lower customer charge ensures that a greater portion of costs are recovered through energy charges, is more consistent with the Commonwealth's energy conservation and efficiency goals, and will help minimize electric distribution system costs over the long-term.

OCA St. 4-SR at 9, 13.²⁸

For the reasons set forth above, the Company's proposed inclusion of demand charges in the fixed customer charge should be denied. The Company has not provided a sufficient basis to demonstrate that the proposed change would facilitate the stated energy efficiency purposes of the Commonwealth or the Commission's Policy Statement. Moreover, the proposed customer charge would unduly prejudice low usage customers and would not provide a price signal to encourage customer conservation.

D. Scale Back

In the event that Citizens' authorized increase is less than its requested increase, the OCA and I&E recommend a proportionate scale back for each rate class, including the customer charge.

OCA St. 4 at 21; I&E St. 3 at 42. OSBA witness Kalcic recommended that a rate increase less

²⁸ The OCA notes that the quotation from Mr. Mierzwa's Surrebuttal Testimony only references Wellsboro. The OCA submits, however, that as Mr. Mierzwa later testifies regarding this issue in the Citizens' portion of his Surrebuttal Testimony, "Mr. Gorman's Rebuttal Testimony on this issue is the same as that presented for Wellsboro, and my response to Mr. Gorman is the same as that previously discussed for Wellsboro." OCA St. 4-SR at 14. The referenced discussion would also apply to Mr. Gorman's identical arguments raised in Citizens'.

than the full request should also be scaled back proportionately, with the exception of Rate MBL. OSBA St. 1 at 9. In OSBA witness Kalcic's proposed revenue allocation, Mr. Kalcic did not assign a proposed rate increase to Rate MBL, so Mr. Kalcic stated that rather than assign an increase to Rate MBL, Rate MBL should be excluded from any proportionate scaleback. OSBA St. 1 at 9.

For the scale back of the customer charge, OCA witness Mierzwa proposed:

For Citizens', the increase in the current monthly Residential customer charge to a cost-based charge based on the Company's requested increase would be from \$11.24 to \$12.94, or \$1.70. If the Commission were to also authorize an increase for Citizens' which was 50 percent of Citizens' requested increase, Citizens' monthly Residential customer charge would be increased to \$12.09 ($\$11.24 + (\$1.70/50 \text{ percent})$).

OCA St. 4 at 28.

E. Summary

The OCA submits that its recommendations correct a number of deficiencies and misallocations in Citizens' ACCOSS. The OCA's proposed revenue allocation, which is based on a reasonable ACCOSS, represents an appropriate allocation that provides sufficient progress toward moving to the cost of service, applies the principles of gradualism, and reflects basic fairness. The OCA's proposed revenue allocation is as follows:

**Table 6. Citizens' Electric Company of Lewisburg, PA –
OCA Proposed Revenue Distribution**

Rate Class	Present Rates	Proposed Rates	Increase	Percent
RS	\$2,647,362	\$3,279,887	\$632,525	23.9%
SH	24,362	29,945	5,583	22.9
GLP -1	917,008	1,055,971	138,963	15.2
GLP -3	1,110,186	1,110,186	0	0.0
MBL	17,615	22,001	4,386	24.9
PL	73,307	86,532	11,225	14.9
Total:	\$4,791,840	\$5,584,522	\$792,682	16.5%

OCA St. 4 at 21. Under the OCA’s revenue allocation, the rate decrease proposed for Rate GLP-3 is eliminated and proportionately distributed to the rate classes receiving an increase that is greater than or equal to 1.5 times (rounded) the system average increase.” OCA St. 4 at 21. In order to address OSBA witness Kalcic’s concern, as Mr. Mierzwa testified, one could reallocate the \$245 from rate class MBL to other customer classes. See, OCA St. 4-SR at 13.

The OCA further submits that the proposed demand charges should be removed from the customer charge. For Citizens’ rate class RS, the OCA recommend an increase of the customer charge from \$11.24 per month to \$12.94 per month at the Company’s full request. OCA St. 4 at 23-24, 28. Therefore, the OCA respectfully requests that the Commission reject Citizens’ proposed revenue allocation and \$15.00 per month customer charge (including demand-related components) and adopt the OCA’s revenue allocation and \$12.94 per month customer charge (including only customer-related components). OCA St. 23-24, 28. The revenue distribution and customer charge should be scaled back in accordance with OCA witness Mierzwa’s recommendation if the Company is not authorized to recover its full request. OCA St. 4 at 28.

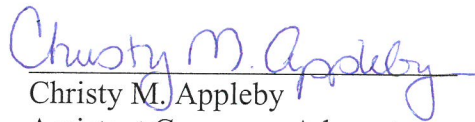
X. MISCELLANEOUS ISSUES

The OCA does not have any additional issues to address for Citizens’.

XI. CONCLUSION

For the reasons set forth in this Main Brief, the OCA respectfully submits that the Commission should adopt the OCA's adjustments and modifications to the Company's rate increase request. The Company's as-proposed rate increase will not result in just and reasonable rates and will not reflect sound ratemaking policy or Pennsylvania law. In particular, a fair revenue allocation, monthly Residential customer charge, and return on equity must be adopted in this proceeding.

Respectfully Submitted,



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TABLE I
CITIZENS' ELECTRIC COMPANY
INCOME SUMMARY
R-2019-3008212

	Pro Forma Present Rates	Company Adjustments	Pro Forma Present Rates (Revised) (1)	OCA Adjustments	OCA Present Rates	OCA Revenue Increase	Total Allowable Revenues (2)
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	4,860,408		4,860,408	12,024	4,872,432	359,460	5,231,892
Expenses:							
O & M Expense	2,803,733		2,803,733	(191,343)	2,612,390	0	2,612,390
Depreciation	1,029,328		1,029,328	(22,663)	1,006,665	0	1,006,665
Taxes, Other	356,823		356,823	46,742	403,565	0	403,565
Income Taxes:							
State	49,319		49,319	74,513	123,832		123,832
Federal	111,471		111,471	140,985	252,456		252,456
Total Expenses	4,350,674		4,350,674	48,234	4,398,908	0	4,398,908
Net Inc. Available for Return	509,734		509,734	(36,210)	473,524	359,460	832,984
Rate Base	12,847,336		12,847,336	(302,397)	12,544,939		12,544,939
Rate of Return	3.97%		3.97%				6.64%

(1) Company Main Brief

(2) Due to a difference rounding, the net income number is slightly higher than the OCA's surrebuttal position.

TABLE I(A)
 CITIZENS' ELECTRIC COMPANY
 RATE OF RETURN
 R-2019-3008212

	<u>Structure</u>	<u>Cost</u>	<u>After-Tax Weighted Cost</u>	<u>Effective Tax Rate Complement</u>	<u>Pre-Tax Weighted Cost Rate</u>
Total Cost of Debt					
Long-term Debt	49.33%	4.86%	2.39743800%		2.40%
Short-term Debt		0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	<u>50.67%</u>	8.38%	<u>4.24614600%</u>	0.711079	<u>5.97%</u>
	<u>100.00%</u>		<u>6.64358400%</u>		<u>8.37%</u>
Pre-Tax Interest Coverage	3.49				
After-Tax Interest Coverage	2.77				

TABLE I(B)
 CITIZENS' ELECTRIC COMPANY
 REVENUE FACTOR
 R-2019-3008212

100%	1.00000000
Less:	
Uncollectible Accounts Factor (*)	0.00000000
PUC, OCA, OSBA Assessment Factors (*)	0.00000000
Gross Receipts Tax	0.59000000
Other Tax Factors	0.00000000
	0.41000000
State Income Tax Rate (*)	0.09990000
Effective State Income Tax Rate	0.04095900
Factor After Local and State Taxes	0.36904100
Federal Income Tax Rate (*)	0.21000000
Effective Federal Income Tax Rate	0.07749861
Revenue Factor (100% - Effective Tax Rates)	0.29154239

(*) Company Main Brief

TABLE II
CITIZENS' ELECTRIC COMPANY
SUMMARY OF ADJUSTMENTS
R-2019-3008212

<u>Adjustments</u>	<u>Rate Base</u>	<u>Revenues</u>	<u>Expenses</u>	<u>Depreciation</u>	<u>Taxes-Other</u>	<u>State Income Tax</u>	<u>Federal Income Tax</u>
	\$	\$	\$	\$	\$	\$	\$
RATE BASE:							
Reflect Average Balance for Plant in Service and Accumulated Depreciation	(214,336)						
EDIT Adjustment	(17,480)						
CWC (1)	(70,581)						
CWC:							
Int. & Div. (Table IV)							
Taxes (Table V)							
O & M (Table VI)							
REVENUES:		12,024					
Increase Solar for Bucknell Sales Adjustment for Solar							
EXPENSES:							
Eliminate for 3% Inflation Factor Used for 2020			(48,865)				
Normalize Maintenance of Overhead Lines			(40,652)				
Remove Employee Overlap Expenses from Customer Records and Collection Expense			(43,597)				
Normalize Outside Services Employed			(28,456)				
Remove Non-Service Enhancing Expenses and Normalize Employee Pension and Benefits			(8,039)				
Normalize Rate Case Expense Over 3.75 Years			(21,734)				
Adjust Depreciation Expense to Reflect Average Plant				(22,663)			
Adjust Taxes Other Than Income					46,742		
TAXES:							
Interest Synchronization (Table III)						74,513	140,985
TOTALS	<u>(302,397)</u>	<u>12,024</u>	<u>(191,343)</u>	<u>(22,663)</u>	<u>46,742</u>	<u>74,513</u>	<u>140,985</u>

(1) CWC adjustment will not match OCA schedules to adjust for the difference between the Company's rebuttal position and OCA's surrebuttal position

TABLE III
 CITIZENS' ELECTRIC COMPANY
 INTEREST SYNCHRONIZATION
 R-2019-3008212

	Amount \$
Company Rate Base Claim	12,847,336
OCA Rate Base Adjustments	<u>(302,397)</u>
OCA Rate Base	12,544,939
Weighted Cost of Debt	<u>2.39743800%</u>
OCA Interest Expense	300,757
Company Claim (1)	<u>308,341</u>
Total OCA Adjustment	7,584
Company Adjustment	<u>0</u>
Net OCA Interest Adjustment	7,584
State Income Tax Rate	<u>9.99%</u>
State Income Tax Adjustment	<u>758</u>
Net OCA Interest Adjustment	7,584
State Income Tax Adjustment	<u>758</u>
Net OCA Adjustment for F.I.T.	6,826
Federal Income Tax Rate	<u>21.00%</u>
Federal Income Tax Adjustment	<u><u>1,433</u></u>

(1) Company Main Brief

TABLE IV
CITIZENS' ELECTRIC COMPANY
CASH WORKING CAPITAL - Interest and Dividends
R-2019-3008212

Accrued Interest	Long-Term Debt	Short-Term Debt	Preferred Stock Dividends
Company Rate Base Claim	\$12,847,336	\$12,847,336	Company Rate Base Claim
OCA Rate Base Adjustments	(\$302,397)	(\$302,397)	OCA Rate Base Adjustments
			\$12,847,336
OCA Rate Base	\$12,544,939	\$12,544,939	OCA Rate Base
Weighted Cost of Debt	2.39743800%	0.00%	Weighted Cost Pref. Stock
			\$12,544,939
OCA Annual Interest Exp.	\$300,757	\$0	OCA Preferred Dividends
			\$0
Average Revenue Lag Days	0.0	0.0	Average Revenue Lag Days
			0.0
Average Expense Lag Days	-45.0	0.0	Average Expense Lag Days
			0.0
Net Lag Days	45.0	0.0	Net Lag Days
			0.0
Working Capital Adjustment			
OCA Daily Interest Exp.	\$824	\$0	OCA Daily Dividends
Net Lag Days	45.0	0.0	Net Lag Days
			\$0
OCA Working Capital Company Claim (1)	\$37,080	\$0	Company Claim (1)
	\$0	\$0	\$0
OCA Adjustment	\$37,080	\$0	\$0
			\$0
Total Interest & Dividend Adj.	\$37,080		

(1) Company Main Brief.

TABLE V
 CITIZENS' ELECTRIC COMPANY
 CASH WORKING CAPITAL - TAXES
 R-2019-3008212

Description	Company Proforma Tax Expense Present Rates	OCA Adjustments	OCA Pro forma Tax Expense Present Rates	OCA Allowance	OCA Adjusted Taxes at Present Rates	Daily Expense	Net Lead/Lag Days	Accrued Tax Adjustment
	PUC Assessment	\$44,186	\$0	\$44,186	\$0	\$44,186	\$121.06	0.00
Public Utility Reality	\$23,066	\$0	\$23,066	\$0	\$23,066	\$63.19	0.00	\$0
Pennsylvania Use Tax	\$6,852	\$0	\$6,852	\$0	\$6,852	\$18.77	0.00	\$0
Pennsylvania Gross Receipts Tax	\$329,461	\$0	\$329,461	\$0	\$329,461	\$902.63	0.00	\$0
State Income Tax	\$49,319	\$74,513	\$123,832	\$0	\$123,832	\$339.27	0.00	\$0
Federal Income Tax	\$111,471	\$140,985	\$252,456	\$0	\$252,456	\$691.66	0.00	\$0
	<u>\$564,355</u>	<u>\$215,498</u>	<u>\$779,853</u>	<u>\$0</u>	<u>\$779,853</u>			
						OCA Allowance		0
						Company Claim (1)		0
						OCA Adjustment		0

(1) Company Main Brief

TABLE VI
 CITIZENS' ELECTRIC COMPANY
 CASH WORKING CAPITAL -- O & M EXPENSE
 R-2019-3008212

Description	Company Pro forma F.T.Y. Expense	OCA (2)	OCA Pro forma Expenses	Lag Days	Lag Dollars
O&M	\$2,803,733	(\$191,344)	\$2,612,389	45.00	\$117,557,505
Less: Uncollectibles	\$20,600	(\$600)	\$20,000	45.00	\$900,000
Service Company					
Chemicals					
Group Insurance					
Insurance, Other					
Labor					
Leased Equip./Rent					
Leased Vehicles					
Miscellaneous					
Natural Gas					
Power					
Purchased Water					
Telephone					
Waste Disposal					
Post Retirement Benefits					
Pensions					
	<u>\$2,783,133</u>	<u>(\$191,944)</u>	<u>\$2,592,389</u>	<u>45.70</u>	<u>\$118,457,505</u>
OCA Average Revenue Lag	0.0				
Less: OCA Avg. Expense Lag	45.7				
Net Difference	-45.7				Days
OCA Pro forma O & M Expense per Day	<u>\$7,102</u>				
OCA CWC for O & M	(\$324,561)				
Less: Company Claim (1)	<u>(\$342,721)</u>				
OCA Adjustment	<u>\$18,160</u>				

(1) Company Main Brief

(2) The adjustment will not match Table II due to the Company adjusting its inflation adjustment and levels of expenses in rebuttal. OCA did not accept the Company's rebuttal adjustments to expenses.

OCA List of Testimonies, Exhibits and Cross Exhibits

DIRECT TESTIMONY

STATEMENT	EXHIBITS	SPONSORING WITNESS
OCA Statement No. 1	SLS-1 – SLS-9; App. A.	Stacy L. Sherwood
OCA Statement No. 2	LKM-1 – LKM-4; App. A.	Lafayette K. Morgan
OCA Statement No. 3	DSH-1 – DSH-8	David S. Habr
OCA Statement No. 4	JDM-1 – JDM-6	Jerome D. Mierzwa

REBUTTAL TESTIMONY

STATEMENT	EXHIBITS	SPONSORING WITNESS
OCA Statement No. 4-R		Jerome D. Mierzwa

SURREBUTTAL TESTIMONY

STATEMENT	EXHIBITS	SPONSORING WITNESS
OCA Statement No. 1-SR (Revised) (Non-Proprietary)	SLS-1C (Revised) & SLS-3C (Revised)	Stacy L. Sherwood
OCA Statement No. 1-SR (Revised) (Proprietary)	SLS-1C (Revised) & SLS-3C (Revised)	Stacy L. Sherwood
OCA Statement No. 2-SR		Lafayette K. Morgan
OCA Statement No. 3-SR		David S. Habr
OCA Statement No. 4-SR	JDM-6S – JDM7	Jerome D. Mierzwa

CROSS EXAMINATION EXHIBITS

OCA Citizens’ Cross Exam Exh. 1 – OCA-Citizens’-II-4

PROPOSED FINDINGS OF FACT

III. Issues Agreed Upon Among the Parties

1. Materials and Supplies balances should be calculated to reflect a 13-month average. OCA St. 2 at 5; Citizens' St. 1-R at 13.
2. The Materials and Supplies adjustment reduces the Company's rate base by \$3,983. OCA St. 2 at 5, Sch. LKM-3; OCA St. 1-SR (Revised) at Sch. SLS-1SR (Revised).
3. Customer Deposits should be calculated to reflect a 13-month average. OCA St. 2 at 7; Citizens' St. 1-R at 13.
4. The Customer Deposits adjustment reduces the Company's rate base by \$209. OCA St. 2 at 6, Sch. LKM-4; OCA St. 1-SR (Revised) at Sch. SLS-1 SR (Revised).
5. In its filing, Citizens' adjusted FPFTY revenues to reflect the elimination of 3,903,000 kWh in sales due to the anticipated completion of a 600-kW Combined Heat and Power (CHP) project by a customer. OCA St. 4 at 30.

IV. Rate Base**A. Plant in Service****Fully Projected Future Test Year**

6. In its July 1, 2019 filing, the Company relied upon Act 11 and used a FPFTY period ending December 31, 2020 to determine its proposed revenue increase. OCA St. 1 at 4.
7. Citizens' used an end-of-year methodology for determining its rate base which assumes that on Day 1 of new rates, all projected rate base investments have already been incurred, similar to the methodology used for a FTY claim. OCA St. 1 at 4.
8. An annual average method for determining rate base more accurately reflects the costs as they are incurred during the FPFTY. OCA St. 1 at 4.
9. The end-of-year method will allow the Company to over-earn on its investment in the FPFTY while annual average method recognizes that capital investments will be made throughout the first year that new rates are in effect. OCA St. 1 at 4.
10. The proposed change from the Company's filed end-of-test year rate base to the OCA's proposed average rate base would decrease the Company's proposed rate base by \$592,756 from \$26,687,785 to \$26,095,029. OCA St. 1 at Sch. SLS-3.

11. OCA witness Morgan adjusted the year-end Accumulated Depreciation to reflect the average FPFTY amounts for inclusion in rates by \$378,420. OCA St. 2 at 5, Sch. LKM-2; see, OCA St. 1 at Sch. SLS-3.

B. Deductions from Rate Base

Construction Work in Progress

12. In order to qualify for inclusion in rate base, a plant item should be completed and placed in service during the test year. OCA St. 2 at 5.

13. The CWIP balance as of the end of the HTY is likely to already be a part of the plant in service during the FTY and the FPFTY. OCA St. 2 at 5.

14. Inclusion of the CWIP in rate base would result in a double count of these costs. OCA St. 2 at 5.

15. An adjustment should be made to remove the Construction Work in Progress balance of \$70,492 from rate base. OCA St. 2 at 5, Sch. LMK-2.

16. Specific projects were not identified by the Company in this proceeding. Citizens' St. 1-R at 13; OCA St. 2-SR at 7.

17. It is not appropriate to include CWIP in rate base either using an end of test year or average rate base test year method. OCA St. 2 at 6.

18. In either case, the plant item will not be completed and placed in service during the FPFTY. OCA St. 2 at 6.

V. Revenues

19. Citizens' has adjusted FPFTY revenues to reflect the elimination of 3,681,000 kWh in sales due to the anticipated completion of a 3-MW solar installation at Bucknell University. OCA St. 4 at 29.

20. The completion and timeframe for completion of the proposed solar installation is uncertain and is not a known and measurable change that should be reflected in Citizens' revenue requirement. OCA St. 4 at 29.

21. There have been delays to the proposed solar installation project due to issues with East Buffalo Township. OCA St. 4 at Sch. JDM-1.

22. A zoning ordinance is needed in order for the project to be considered by East Buffalo Township. OCA St. 4 at JDM-2; Citizens' St. 4-R at 9; Tr. 134.

VI. Expenses

A. Inflation Factor

23. The Company projected in its FPFTY Operations & Maintenance (O&M) expenses to recognize a general level of rising costs of 3.0 percent. OCA St. 2 at 7.
24. The 3.0 percent was determined based on judgment rather than a quantitative method. OCA St. 2 at 7.
25. The Company has used the 3.0 percent inflation rate as a proxy for determining the FPFTY O&M expenses rather than using forecasted data. OCA St. 2 at 7.
26. The proposed across-the-board 3.0 percent growth or inflation rate is not known and measurable. OCA St. 2 at 8.
27. Inflation adjustments do not directly relate to actual costs expected to be incurred by the Company in the period in which rates are set. OCA St. 2 at 7.
28. If the Commission determines to allow an inflation factor, the calculation of the inflation factor should be limited to 2.1 percent. OCA St. 2 at 8-9.

B. Account 593- Maintenance of Overhead Lines

29. The Company projects that the total expenses for the maintenance of overhead lines will be \$456,019 which is \$54,544 or 14 percent higher than the expenses in the HTY. OCA St. 1 at 5; App. A, Table II.
30. The Company's forecast for Account 593 because the Company did not take into account the fluctuating nature of vegetation contractor costs. OCA St. 1 at 5.
31. The OCA took into account the fluctuating cost of vegetation management and averaged the vegetation management across three years. OCA St. 1-SR (Revised) at 5; App. A, Table II.
32. The OCA adjusted Account 593 by \$40,652. OCA St. 1-SR (Revised) at 5; App. A, Table II.

C. Account 903- Customer Records and Collection Expense

33. The Company projects that the total cost of customer records and collection expense will be \$469,626, which is \$45,597, or 10 percent, higher than the expenses in HTY. OCA St. 1 at 6; App. A, Table II.
34. The Company's forecast for Account 903 because the Company includes costs that are not normal or on-going.
35. The OCA recommends using the average labor and material costs for the years 2016 through 2018 to eliminate expenses that are not normal. OCA St. 1 at 6.

36. The OCA recommends adjusting Account 903 expense by \$43,591; App. A, Table II.

D. Accounts 923- Outside Services Employed

37. The Company projects that the total cost of outside services employed will be \$81,370 which is \$10,380, or 11 percent, lower than the expense in HTY due to the Company removing one-time expenses from HTY. OCA St. 1 at 7; App. A, Table II.

38. The OCA agrees with removing one-time expenses from the Account but noted that the Company may not have removed all of the expenses. OCA St. 1 at 7.

39. The Company's annualized FTY expense amount was \$18,470 below the Company's claim for FPFTY. OCA St. 1-SR (Revised) at 6.

40. The OCA recommends adjusting Account 923 by \$28,456; App. A, Table II.

E. Account 926- Employee Pension and Benefits

41. The Company projects that the total cost of employee pension and benefits will be \$10,300. OCA St. 1 at 8; App. A, Table II.

42. Account 926 includes expenses such as employee gifts, Christmas parties, picnics, and retirement parties. OCA St. 1 at 8.

43. Expenses such as employee gifts, Christmas parties, picnics, and retirement parties do not serve to enhance service. OCA St. 1 at 8.

44. The Commission has consistently disallowed these types of entertainment expenses based on its reasonable determination that they are not necessary in the provision of public utility service.

F. Rate Case Expense

45. The OCA has not recommended any adjustment to the level of expense claimed, but recommends an adjustment to the normalization period. The Company proposed a 3 year, 36 month period. OCA St. 1-SR (Revised) at 11; App. A, Table II.

46. The OCA recommends a normalization period of 45-months. OCA St. 1-SR (Revised) at 11.

47. The Company's 36 month suggested period is only based off of the time since their last rate case filing. OCA St. 1-SR (Revised) at 11; App. A, Table II.

G. Cash Working Capital

48. The Company calculated its cash working capital based on 12.5 percent or one-eighth of the operations and maintenance expense, excluding depreciation expense, uncollectible and taxes, which the OCA adopted. OCA St. 1 at 9; App. A, Table II.

H. Depreciation Expense

49. As a result of Citizens' use of the end of test year rate base, Citizens' has also based its rate year depreciation expense on the projected balance of plant in service as of the end of the FPFTY. OCA St. 2 at 7.

50. The adjustment to reflect the depreciation expense that will be incurred during the rate year ending December 31, 2020 reduces depreciation expense by \$22,663. OCA St. 2 at 8.

VII. Rate of Return

51. The OCA accepted the Company's Capital Structure and recommends an 8.38% return on common equity and a return on rate base of 6.64%. OCA St. 3 at 2-3.

52. The Company's recommendation is based on a flawed DCF analysis. OCA St. 3 at 6-8.

53. Profits for the provision of utility services are regulated because the services tend to be produced under conditions that approximate a natural monopoly. OCA St. 3 at 3.

54. The Commission primarily relies upon the DCF method.

55. Dr. Habr conducted DCF and Capital Asset Pricing Model (CAPM) analyses. OCA St. 3 at 14.

56. The DCF model is straight forward and provides reliable results when the growth rate used in the model is consistent with the model's assumptions. OCA St. 3 at 9-10.

57. Dr. Habr primarily relied on the DCF method, using the CAPM method as a check, and has recommended an 8.38% return on common equity. OCA St. 3 at 14.

58. To estimate the cost of equity, a proxy group of similar companies is needed, a proxy group is generally preferred over the use of data exclusively from any one company because it has the effect of smoothing out potential anomalies associated with a similar company and is therefore a more reliable measure. OCA St. 3 at 14.

59. Dr. Habr accepted and utilized Mr. D'Ascendis' chosen electric proxy group with two exceptions. OCA St. 3 at 6.

60. Dr. Habr removed El Pasto and AVANGRID from the proxy group due to non-conforming characteristics of each utility. OCA St. 3 at 6.

61. Company witness D'Ascendis' application of the DCF model is flawed because the inclusion of AVANGRID, Inc. in his electric proxy group results in an upward bias in his DCF results. OCA St. 3 at 32.
62. AVANGRID is an improper inclusion in the proxy group because it has a higher risk level than other members of the Electric Proxy Group. OCA St. 3 at 32.
63. Dr. Habr confirmed that Mr. D'Ascendis' use of non-price regulated firm results in establishing his recommended allowed rate of returns invalidates his conclusions. OCA St. 3 at 31-32.
64. Both OCA and I&E witness explained why the Company should not be awarded a size premium. OCA St. 3 at 29-30.
65. Both OCA and I&E witness explained why the Company should not be awarded a performance premium. OCA St. 3 29-30.
66. Dr. Habr calculates his CAPM analysis by using a time frame that includes the time frame he used in his DCF analysis. OCA St. 3 at 16.
67. Dr. Habr's CAPM/Risk Premium median 8.76% and 8.92% confirms the validity of his DCF results because they provide upper limits not to be exceeded. OCA St. 3 at 24.
68. Dr. Habr demonstrated that Mr. D'Ascendis' DCF model is flawed in that he does not consider making any adjustment to his DCF analysis to take into account the impact on his results of analysts' short-term forecasts that exceed the expected long-term GDP growth because these growth rates are not sustainable, their use results in the DCF cost rates being over estimated. OCA St. 3 at 33.

VIII. Taxes

A. EDIT

69. On December 22, 2017, the Tax Cuts and Jobs Act was signed into law. OCA St. 2 at 9.
70. A provision of the TCJA was the reduction of the Federal Income Tax rate from 35 percent to 21 percent. OCA St. 2 at 9.
71. The reduction in the Federal Income tax rate created Excess Deferred Income Taxes (EDIT). OCA St. 2 at 9.
72. EDIT was created because deferred taxes arising from tax timing differences were recorded at 35 percent on the Company's books, but with the passage of the TCJA, those taxes will be paid at the 21 percent rate. OCA St. 2 at 9.

73. The difference between the 35 percent and the 21 percent represents the EDIT. OCA St. 2 at 9.

74. In the Company's filing, the Company has identified an EDIT balance and proposes to flow back the balance to customers over a 10 year period beginning in 2018. OCA St. 2 at 10.

75. The Company's rates were not changed in 2018 to reflect the flowback of the EDIT. OCA St. 2 at 9; OCA St. 2-SR at 8.

76. According to the Company, in Docket No. R-2018-3000558, the Commission reduced its rates by -0.82 percent to reflect the decrease in the Federal income tax rate. OCA St. 2-SR at 8.

77. Since the rates were not changed to reflect the flowback of the EDIT, there should be an adjustment to reverse the flowback of EDIT that is reflected in the Company's filing and begin the flowback with new rates. OCA St. 2 at 10.

78. An adjustment should be made to increase the EDIT balance by \$17,480 and reduce the rate base by the same amount. OCA St. 2 at 10, Sch. LKM-5.

B. Deferred Regulatory Liability

79. The Company has not provided a reconciliation related to the tax savings associated with the TCJA for the January 1, 2018 through June 30, 2018 time period as required by the Commission's Order at Docket No. M-2018-261242. OCA St. 2 at 10; see, Tax Cuts and Jobs Act of 2017, Docket No. M-2018-261242, Order (May 17, 2018).

80. The Company states that it will provide a final reconciliation of the TCJA Voluntary Surcharge and implement any further customer credits or surcharges within 120 days after proposed new rates take effect. OCA St. 2 at 10.

81. Tax savings collected from January 2018 through June 2018, including accumulated interest, should be returned to customers as soon as possible. OCA St. 2 at 10.

82. The Commission should require the information to be filed sooner rather than 120 days after the rates are determined in this proceeding. OCA St. 2 at 10.

IX. Customer Rate Structure

A. ACCOSS

83. The class cost-of-service studies of the type performed by Company witness Gorman are performed in an attempt to determine the costs that are incurred to provide service to each class of customers. OCA St. 4 at 5.

84. Such studies are referred to as average, embedded cost studies because they attempt to directly assign or allocate to each customer class, actual book plant and related costs, adjusted to test year levels as authorized by the Commission. OCA St. 4 at 5.
85. These cost studies are referred to as “fully allocated” because they require that 100 percent of the allowed total jurisdictional costs of service be allocated among the various classes. OCA St. 4 at 5.
86. In a typical cost study, the costs are first functionalized into broad categories, such as primary and secondary distribution costs. OCA St. 4 at 6.
87. Costs are then classified as to whether they are demand-related, energy-related, customer-related or related to some other factor, such as labor costs or revenue. OCA St. 4 at 6.
88. Costs are then allocated among the customer classes on the basis of the most appropriate measure of demand, energy, or customers, in proportion to each class’ share of the various allocation measures. OCA St. 4 at 6.
89. Company witness Gorman classified 100 percent of primary distribution plant as demand-related, 100 percent of services and meters as customer-related, and a significant portion of secondary distribution plant upstream of meters as customer-related. OCA St. 4 at 8.
90. Company witness Gorman also reflected the completion of a 3 MW solar installation at Bucknell in the cost study. OCA St. 4 at 8.
91. The secondary portion of upstream distribution plant should be classified as 100% demand-related as these costs are incurred to meet the coincident loads of the customers served by the Company. OCA St. 4 at 4, 10.
92. The size and costs of the required plant are a function of the diversity of the customers’ loads that must be served from these facilities as growth occurs on the system. OCA St. 4 at 10.
93. There is no direct relationship between the number of customers and the size or the cost of poles, conductors or transformers. OCA St. 4 at 10.
94. The Companies have previously acknowledged that there is no standard number of customers per transformer. OCA St. 4 at 10.
95. The number, sizes (and therefore the costs) of transformers will depend on the diversity of the loads of the customers in the locality, the mix of customers served from the system in the area, the density of population in the area, and probably the general configuration of the distribution system in that locality. OCA St. 4 at 10.

B. Revenue Allocation

96. The Company's proposal would provide for a rate decrease of \$35,830, or by 3.2 percent, for Rate GLP-3. OCA St. 4 at 20.

97. A rate decrease is inappropriate when others' rates are increasing. OCA St. 4 at 21.

98. The rate increase for Rate GLP-3 should be eliminated and proportionately distributed to the rate classes receiving an increase that is 1.5 times the system average increase. OCA St. 4 at 21.

99. Movement toward the cost of service for a particular rate class can be evaluated by comparing the percentage cost of service contribution of that rate class under present versus proposed rates. OCA St. 4-SR at 7, Table 1-S.

C. Rate Design

100. Citizens' has one residential rate class, Schedule RS. OCA St. 4 at 23.

101. For rate class RS, Citizens' proposes to increase the residential RS customer charge from \$11.24 to \$15.00 per month, or a 33.5 percent increase. OCA St. 4 at 23.

102. Citizens' also proposes to increase the volumetric energy charge from \$0.02184 per kWh to \$0.02658 per kWh energy charge, or a 21.7 percent increase in the energy charge.

103. The customer-related cost component calculated by the Company is based upon the service, meter, customer accounting software investment costs and the related operation and maintenance expenses that have been identified in the Company's cost of service study. OCA St. 4 at 24.

104. The customer-related component is \$12.94. OCA St. 4 at 24.

105. As part of its increase to a residential customer charge of \$15.00 per month, Citizens' also proposes to include a demand-related cost component in addition to the traditional customer-related charge. OCA St. 4 at 24.

106. The Company has not previously included a demand component in residential customer charges, and the OCA does not agree that it is appropriate to do so in this proceeding. OCA St. 4 at 25.

107. Demand charges should not be included in the customer charge. OCA St. 4 at 26.

108. The customer charge does not provide price signals that are relevant to the cost structure. OCA St. 4 at 26.

109. The volumetric energy charge is the primary source of meaningful price signals. OCA St. 4 at 26.

110. The cost structure of the distribution systems of Citizens' largely reflect costs which vary with changes in demand. OCA St. 4 at 26.

111. The monthly customer charges for residential customers should reflect the final authorized increase approved by the Commission. OCA St. 4 at 25.

112. A lower customer charge ensures that a greater portion of costs are recovered through energy charges, is more consistent with the Commonwealth's energy conservation and efficiency goals, and will help minimize electric distribution system costs over the long-term. OCA St. 4 at 26.

PROPOSED CONCLUSIONS OF LAW

1. The Public Utility Commission has jurisdiction over the parties and the subject matter of this proceeding by virtue of the Public Utility Code, 66 Pa. C.S. § 101, *et seq.*
2. Citizens' has the burden of establishing the justness and reasonableness of every element of its requested rate increase. 66 Pa. C.S. § 315(a); Lower Frederick Twp. v. Pa. PUC, 48 Commw. 222, 226-27 (1980).
3. Citizens' has the burden of proving that the rate involved is just and reasonable. 66 Pa. C.S. §§ 315(a), 1301, and 1308(e).
4. Citizens' may satisfy its burden of proof by a preponderance of the evidence. Samuel J. Lansberry, Inc. v. Pa. PUC, 134 Pa. Commw. 218, 221-22 (1989).
5. Citizens' has not met its burden of proof to establish that its cost of equity is reasonable and is otherwise supported by record evidence.
6. Citizens' has not met its burden of proof to establish that its rate of return is reasonable and is otherwise supported by record evidence.
7. Citizens' has not met its burden of proof that its proposed rates contained in Supplement 132 are just, reasonable and otherwise lawful.
8. Citizens' has not met its burden of proof to establish that its rate base is reasonable.
9. Citizens' should be permitted to file a new tariff, proposing rates designed to recover no more than \$359,459 in base revenues.

PROPOSED ORDERING PARAGRAPHS

It is hereby ORDERED THAT:

1. Citizens' Electric Company of Lewisburg, Pa. shall not place into effect the rates contained in Supplement 125, which have been found to be unjust, unreasonable and, therefore, unlawful.
2. Citizens' Electric Company of Lewisburg, Pa. is hereby authorized to file tariffs, tariff supplements, or tariff revisions containing rates, provisions, rules and regulations, consistent with the findings herein, to produce revenues not in excess of \$359,459.
3. The tariffs, tariff supplements, or tariff revisions may be filed upon less than statutory notice, and pursuant to the provisions of 52 Pa. Code §§ 53.31 and 53.101, may be filed to be effective for service rendered on and after the date of entry of this Commission's Opinion and Order.
4. Citizens' Electric Company of Lewisburg, Pa. shall file detailed calculations with its tariff filing, which shall demonstrate to this Commission's satisfaction that the filed rates comply with the proof of revenue, in the form and manner customarily filed in support of compliance tariffs.
5. Citizens' Electric Company of Lewisburg, Pa. shall comply with all directives, conclusions and recommendations contained in this Commission's Opinion and Order that are not the subject of individual ordering paragraphs as fully as if they were the subject of specific ordering paragraphs.
6. Citizens' Electric Company of Lewisburg, Pa. shall allocate the authorized increase in operating revenues to each customer class and rate schedule within each class in the manner set forth in this Order.
7. The Complaints filed by the various parties to this proceeding at Docket Number R-2019-3008212 are granted in part and denied in part, to the extent consistent with this Commission's Opinion and Order.

DATE: _____

Administrative Law Judge Steven K. Haas
Administrative Law Judge Benjamin J. Myers