

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	:	R-2019-3010958
Office of Consumer Advocate	:	C-2019-3011845
Irene Blanchard	:	C-2019-3011969
Jeffrey Shatt	:	C-2019-3012087
Ciro Matrecano	:	C-2019-3012169
Neil and Kathleen Joyce	:	C-2019-3012221
Lisa Celenza	:	C-2019-3012272
Tami DeFrancesco	:	C-2019-3012332
Virginia Pfeiffer	:	C-2019-3012399
Charles Dellert	:	C-2019-3012487
James Gelardi	:	C-2019-3012659
Frank and Shuko Kashimba	:	C-2019-3012667
	:	
v.	:	
	:	
Twin Lakes Utilities, Inc.	:	

RECOMMENDED DECISION

Before
Marta Guhl
Administrative Law Judge

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APPENDIX A

I. INTRODUCTION

This Recommended Decision recommends that the proposed tariff supplement filed by Twin Lakes Utilities, Inc. to increase total annual operating revenue for water service by \$211,793, or 158.63%, be denied because the Company has not met its burden of proving by a preponderance of the evidence the justness and reasonableness of every element of its requested increase. This Decision recommends that the Company be permitted to increase annual operating revenues in the total amount of \$111,776.00, or 83.72%, for the total allowable annual operating revenue of \$245,290.00 as indicated in Appendix A of this Decision. This Decision recommends that the Commission adopt an overall rate of return of 8.12% and not 9.0% as requested by the Company. The suspension date is April 19, 2020.

This Recommended Decision notes that Twin Lakes, I&E and OCA are in agreement with respect to Utility Plant in Service component of Rate Base, including the pro forma adjustment in the amount of \$1,481,061, which is recommended by the Decision. It is also recommended that the Company be allowed a residual \$36,018 acquisition adjustment as of September 30, 2019.¹ When this residual amount is subtracted from the Company's claimed \$54,406, it results in a downward adjustment to rate base of \$18,388. It is recommended a cash working capital adjustment of \$12,423 or a reduction of \$4,752 to the Company's claim be adopted in this matter, which results in a total rate base of \$1,284,570. It is also recommended that the Commission adopt a 39-month normalization period that resulted in the rate case expense claim of \$26,462. It is recommended that the Commission adopt a maintenance supplies allowance of \$4,499 or a reduction of \$5,010 to the Company's claim. This Decision recommends that the Commission adopt and have reduced Twin Lakes' claims for purchased power and chemical expense by \$6,388 to \$4,135.² This Decision also recommends that the Commission adopt a bad debt allowance of \$3,062 or a reduction of \$16,033 to the Company's claim in this matter. This Decision recommends that the Commission adopt I&E's amortization expense adjustment and permit Twin Lakes to include an amortization expense of \$3,572. This

¹ I&E St. No. 3, p. 19.

² This adjustment incorporates both I&E's Price to Compare (purchased power) and Unaccounted for Water (purchased power and chemicals) adjustments, resulting in pro forma purchased power and chemicals expenses of \$2,955 and \$1,180, respectively.

Decision recommends that the Commission adopt a state income tax allowance of \$6,063, which is a \$4,042 reduction to the Company's claim and that the entire federal tax claim should be disallowed.

This Recommended Decision recommends that the Commission adopt a rate of return of 8.12% with a cost of common equity of 9.23%. It is recommended that the Commission adopt the parties' position in terms of capital structure, which is a 50% debt and 50% equity capital structure. Further, the cost of debt of 7.0% should be adopted as the Company has established that it is difficult to obtain credit as a stand-alone entity. Based on the fact that this Decision recommends a rate increase that is less than the full amount requested by the Company, it is recommended that the Commission adopt that the rates should be scaled back proportionally in this matter.

II. HISTORY OF THE PROCEEDING

On July 23, 2019, Twin Lakes Utilities, Inc. (Twin Lakes or the Company) filed Supplement No. 8 to Tariff Water-Pa. P.U.C. No. 4 (Supplement No. 8) with the Pennsylvania Public Utility Commission (Commission), to become effective September 19, 2019. The subject tariff supplement would increase Twin Lakes' total annual operating revenues for water service by approximately \$211,793, or 158.63%. Twin Lakes served a copy of Supplement No. 8 on the Office of Consumer Advocate (OCA), the Office of Small Business Advocate (OSBA), and the Commission's Bureau of Investigation and Enforcement (I&E).

On July 29, 2019, I&E entered the appearance of Erika L. McLain, Esquire.

On July 30, 2019, OCA filed a Formal Complaint and Public Statement. It also entered the appearances of Lauren E. Guerra, Esquire, J.D. Moore, Esquire and Christine M. Hoover, Esquire on its behalf. The Complaint was docketed at Docket No. C-2019-3011845.

On August 5, 2019, Irene Blanchard filed a Formal Complaint with the Commission, alleging that the proposed rate increase was too high. The Complaint was docketed at Docket No. C-2019-3011969.

On August 7, 2019, Jeffrey Shatt filed a Formal Complaint with the Commission, also alleging that the proposed rate increase was too high. The Complaint was docketed at Docket No. C-2019-3012087.

On August 12, 2019, Ciro Matrecano filed a Formal Complaint with the Commission, alleging that the proposed rate increase was too high. The Complaint was docketed at Docket No. C-2019-3012169.

On August 15, 2019, Neil and Kathleen Joyce filed a Formal Complaint with the Commission, alleging that the proposed rate increase was too high. The Complaint was docketed at Docket No. C-2019-3012221.

On August 19, 2019, Lisa Celenza filed a Formal Complaint with the Commission, alleging that the proposed rate increase was too high. The Complaint was docketed at Docket No. C-2019-3012272.

On August 21, 2019, Tami DeFrancesco filed a Formal Complaint with the Commission, alleging that the proposed rate increase was too high. The Complaint was docketed at Docket No. C-2019-3012332.

On August 21, 2019, Virginia Pfeiffer filed a Formal Complaint with the Commission, alleging that the proposed rate increase was too high. The Complaint was docketed at Docket No. C-2019-3012399.

On August 26, 2019, Charles Dellert filed a Formal Complaint with the Commission, alleging that the proposed rate increase was too high. The Complaint was docketed at Docket No. C-2019-3012487.³

Pursuant to the Public Utility Code, 66 Pa. C.S. § 1308(b), by Opinion and Order entered August 29, 2019, the Commission suspended the proceedings until April 19, 2020 and referred this matter to the Office of Administrative Law Judge (OALJ) for evidentiary hearings and a Recommended Decision. This matter was assigned to Administrative Law Judge Marta Guhl.

On September 3, 2019, James Gelardi filed a Formal Complaint with the Commission, alleging that the proposed rate increase was too high. The Complaint was docketed at Docket No. C-2019-3012659.

Also, on September 3, 2019, Frank and Shuko Kashimba filed a Formal Complaint with the Commission, alleging that the proposed rate increase was too high. The Complaint was docketed at Docket No. C-2019-3012667.

Via Notice dated September 4, 2019, a Call-In Telephone Prehearing Conference was scheduled for Monday, September 23, 2019, at 10:00 a.m.

In accordance with a Prehearing Conference Order dated September 5, 2019, Twin Lakes, OCA and I&E submitted prehearing memoranda to the presiding officer on September 19, 2019.

On September 13, 2019, Twin Lakes filed Supplement No. 9 to Tariff Water-Pa. P.U.C. No. 4 to suspend the rates proposed in Supplement No. 8 until April 19, 2020.

The call-in telephonic prehearing conference was held on September 23, 2019. Counsel for Twin Lakes, OCA, and I&E participated; also present were Irene Blanchard,

³ There were also a number of informal oppositions filed with the Secretary's Bureau in this matter.

Lisa Celenza, and Charles Dellert.⁴ Afterwards, I issued Prehearing Order # 1 on September 26, 2019, which laid out the procedural schedule in this matter.

On September 27, 2019, counsel for Twin Lakes filed the direct testimony of three witnesses: A. Bruce O'Connor, TLU Statements No. 1; Michele L. Tilley, TLU Statement No. 2; and Robert K. Fullager, TLU Statement No. 3.

On October 1, 2019, counsel for I&E contacted me via electronic mail indicating that it had not received service of Twin Lakes' testimony, either electronically or by hard copy. Counsel for Twin Lakes acknowledged that it did not send I&E a copy of the testimony electronically on September 27, 2019. Counsel for Twin Lakes also indicated that service of the hard copies of the testimony were made on the Secretary's Bureau on September 27, 2019 and not directly on I&E. I&E requested an additional three days to submit its direct testimony in this matter. I issued Prehearing Order #2 on October 8, 2019 which granted I&E's request.

A total of two Public Input hearings were held in this matter on October 17, 2019. During the Public Input Hearings, nine Twin Lakes customers testified.

On November 1, 2019, OCA submitted the following direct testimony: Aaron L. Rothschild, OCA Statement No. 1; Stacy L Sherwood, OCA Statement No. 2; and Terry L. Fought, OCA Statement No. 3.

On November 4, 2019, I&E submitted the following direct testimony: John Zalesky, I&E Statement No. 1; Christopher M. Henkel, I&E Statement No. 2; and Esyan A. Sakaya, I&E Statement No. 3.

On November 20, 2019, Twin Lakes submitted the following rebuttal testimony: Michele L. Tilley, TLU Statement No. MLT-2R; and Exhibits MLT-A-G and Robert K. Fullager, TLU Statement No. RFK-2R.

⁴ Ms. Blanchard, Ms. Celenza and Mr. Dellert were not represented by counsel and decided to be inactive parties in this matter.

On December 10, 2019, OCA and I&E submitted surrebuttal testimony. OCA submitted the surrebuttal testimony of Aaron L. Rothschild, OCA Statement No. 1-SR. I&E submitted the following surrebuttal testimony: John Zalesky, I&E Statement No. 1-SR; Christopher M. Henkel, I&E Statement No. 2-SR; and Esyan A. Sakaya, I&E Statement No. 3-SR.

On December 12, 2019, I sent the cross-examination matrix to the parties via electronic mail. On the same date, counsel for Twin Lakes contacted me and indicated that the parties agreed to waive cross-examination of witnesses and would be submitting their testimony and exhibits with a Motion and Stipulation. I granted that request via an email dated December 16, 2019.

On December 17, 2019, Twin Lakes, OCA, and I&E filed a Motion for Admission of Testimony and Exhibits, as well as a Stipulation for Admission of Testimony and Exhibits. Each of the Stipulating Parties stipulated to the authenticity of the statements and exhibits listed in the Stipulation and Appendices and requested that they be admitted into the record of this proceeding on the terms and conditions set forth in the Stipulation. The Stipulating Parties also stipulated to certain facts in this proceeding which is attached to the Stipulation as Appendix B. The Stipulating Parties indicated that they waived cross-examination of the witnesses. The Stipulating Parties also requested that the hearings scheduled for December 19 and December 20, 2019 be cancelled. I issued an Order granting the Motion to Stipulate the Record in this matter on December 18, 2019 and cancelled the hearings scheduled on December 19 and 20, 2019.

On December 23, 2019, I issued a Briefing Order in this matter.

In accordance with the Briefing Order, Twin Lakes, OCA and I&E filed Main Briefs on January 7, 2020. On January 15, 2020, Twin Lakes, OCA and I&E filed Reply Briefs.

The record closed on January 15, 2020, upon receipt of the parties' Reply Briefs.

III. FINDINGS OF FACT

1. Twin Lakes Utilities Inc. is a jurisdictional water distribution company providing water service to approximately 114 residential customers in Pike County, Pennsylvania. TLU Statement No. 3 at 21.

2. On July 23, 2019, Twin Lakes Utilities, Inc. filed Supplement No. 8 to Tariff Water – Pa. P.U.C. No. 4 to become effective September 19, 2019.

3. Middlesex Water Company (Middlesex) acquired the Twin Lakes system in 2009. At that time, the Twin Lakes system was subject to frequent boil water advisories issued by the Pennsylvania Department of Environmental Protection (DEP) and water service was frequently suspended due to operational problems. TLU Statement No. 1 ABO-1 at 3.

4. Following the acquisition of Twin Lakes, the condition of the assets was poorer than had been represented by the former owner or had been visible from the inspection and assessment performed by Middlesex professionals. TLU Statement No. 1 at 3.

5. The Company has made investment in utility plant in order to ensure the delivery of a safe and adequate water supply to its customers. Net of retirements, utility plant in service increased by \$476,008, or 49.2% to \$1,443,561 as of March 31, 2019. TLU Statement No 2.

6. The Twin Lakes system is comprised of one functional well (Well No.2) , one non-functional well (Well No.1), a small treatment/pumping station including an atmospheric 20,000 gallon storage tank integral to the station, and approximately 3.7 miles of water main of various diameter and approximately 120 active and inactive services combined. TLU Statement No. 3 at 5.

7. The Twin Lakes system has unaccounted for water loss, ranging from 50% to 87%, due to leaks in the system. The leaks are the result of a combination of factors including

age and quality of the original pipe material and poor-quality workmanship associated with leak repairs prior to the acquisition by Middlesex. TLU Statement No. 3 at 2.

8. The over pumping due to the excessive leak rate in the system causes the wells to constantly over-pump which in turn, stresses the wells to the point where their operational viability is at risk. TLU Statement No. 3 at 2.

9. The over-pumping due to the excessive leak rate in the distribution system was a contributing factor in the collapse of well No.1 rendering it non-usable. TLU Statement No. 3 at 2.

10. Consequently, the collapse of Well No. 1 and over-pumping has increased the stress of Well No. 2, the only remaining well serving Twin Lakes customers. TLU Statement No.3 at 2.

11. Twin Lakes has developed a \$4.8 million five-year capital improvement plan. TLU Statement No. 3 at 3.

12. All of the projects in Twin Lakes five-year capital improvement project are necessary, prudent and reasonable in order to provide safe, adequate and proper service to the Twin Lakes' customers. TLU Statement No. 3 at 4.

13. The debt cost rate of 7% for Twin Lakes represents a stated interest rate on a \$1,000,000 Promissory Note held by Middlesex which is payable on demand at the option of the holder. TLU Statement No. 2 at 6.

14. Twin Lakes is unable to establish a credit arrangement at any reasonable cost with any financial institution as a stand-alone entity. TLU Statement No. 2 at 5.

15. The Unaccounted-for Water rate continues to increase. The entire system needs replaced. TLU Statement RKF-2R at 3.

16. Shohola Township has an ordinance that prohibits the installation and use of private wells on parcels of property smaller than one acre. TLU Statement No. RKF-2R at 7.

17. The Company considered the installation of individual private wells in Sagamore estates and concluded that such an installation would present too high a public health risk for its customers because of the Township ordinance. TLU Statement No. RKF-2R at 7.

18. The Company has included an acquisition adjustment in each of its two previous base rate filings. TLU Statement No. MLT-2R at 2.

19. Twin Lakes' parent company, Middlesex, has access to capital markets and has extended credit to Twin Lakes in order to maintain service for the Twin Lakes customers. TLU Statement No. 2 at 5.

20. In addition to providing equity capital, Middlesex, has acted as Twin Lakes' financial institution. TLU Statement No. 2 at 5.

21. A repayment guarantee from Middlesex would be required to establish a more favorable credit arrangement with any independent financial institution. TLU Statement No. 2 at 6.

22. The amount of bad debt expense included in rates should be reflective of what the Company will experience during the time period those rates will be in effect. TLU Statement No. MLT 2-R at 5.

23. Many customers are concerned about high water rates. Tr. 83, 86, 99, and 106.

24. Twin Lakes unaccounted-for water levels ranged from 78.7%-82.9% in 2015-2018. I&E St. No. 3, pp. 5-6.

25. On November 13, 2019, the Pennsylvania Department of Environmental Protection issued a notice detailing elevated levels of lead found in drinking water tap samples taken from the Twin Lakes’ system. I&E St. No. 2, pp. 9-10.

26. The current average monthly bill for a Twin Lakes customer is 1.79% of the median household income for Pike County residents. I&E St. No. 2, p. 26.

IV. PUBLIC INPUT HEARINGS

A. Introduction

At the time of the prehearing conference, ten consumer formal Complaints had been filed in this base rate proceeding. These Complaints coupled with multiple protests filed with the Secretary’s Bureau indicated sufficient public interest in Twin Lakes’ requested rate increase. Accordingly, two public input hearings were held in one location in Twin Lakes’ service territory. In total, 11 people testified⁵ on the following dates, times, and location:

<u>Date/Location</u>	<u>Number of Witnesses Testifying</u>
<u>Thursday, October 17, 2019</u> Shohola Township Building 159 Twin Lakes Road Shohola, PA 18458 <i>1:00 p.m.</i>	3
<u>Thursday, October 17, 2019</u> Shohola Township Building 159 Twin Lakes Road Shohola, PA 18458 <i>6:00 p.m.</i>	8

⁵ Two people offered off-the-record statements—one at each hearing.

The majority of the Twin Lakes customers who testified at the public input hearings offered testimony regarding water service affordability and issues with water service. Frank Perez recounted that he received a raise in his salary of only 3.75 percent and would not be able to absorb the proposed rate increase.⁶

Virginia Pfeiffer, an inactive party in this matter, testified that the rate increase will place a burden on Twin Lakes' customers who are mostly low to middle income people. Ms. Pfeiffer further testified that the rate increase will affect her property value. She also indicated that Twin Lakes' customers are paying more for water than the state or national average. Ms. Pfeiffer requested that OCA and I&E investigate Middlesex and determine whether the company is treating Twin Lakes' customers fairly. Ms. Pfeiffer testified that Twin Lakes' customers are being forced to bear more of a burden due to the parent company's lack of due diligence.⁷

Donna Hersca testified that Twin Lakes customers are paying more for water service than the state and national average. She explained that the proposed rate increase should be denied, and current rates should be reduced. She also testified that if the rates are increased, she would not be able to afford water service. She indicated that this would violate the Fifth Amendment of the Constitution as it would be tantamount to a confiscation of her property, as without water service, she would not be able to live at the property.⁸

Helen Miller testified that the proposed increase would be a financial hardship for her. She also indicated that her water meter was broken and not registering usage for a month. Ms. Miller indicated that she was a senior citizen, living alone and stated that the rates have been a hardship for her.⁹

⁶ Tr. 46.
⁷ Tr. 48-50.
⁸ Tr. 72-75.
⁹ Tr. 83-84.

Jeffrey Shatt testified that the level of service was not commensurable with the proposed rate increase. Mr. Shatt indicated that service was out in the summer of 2019 and that they had three or five water boil advisories.¹⁰

Gerasimos Xenatos testified that service has gone downhill while the rates have increased. Mr. Xenatos testified that the customer service was unhelpful and did not solve his issues with service. He believed that the rate increase requested by the Company is too high.¹¹

Stacy DeFrancesco testified that she rents her property and the rate increase would make it harder for her to find renters. She indicated that if she was unable to rent the property, it would be a financial hardship for her family. She also indicated that she needed to be able to provide adequate water service to any tenant who rented her property.¹²

Grzegorz Nieczaj testified in opposition to Twin Lakes' proposed rate increase. Mr. Nieczaj offered his concerns about being able to afford the proposed rate increase. He also indicated that residents serviced by Twin Lakes do not have any other options to get water service at their residences. He believes that upper management should take a pay cut and cut dividends to shareholders. He was also aware of the boil water advisories and service interruptions in the area.¹³

Jeremy Monz testified that he cannot afford another rate increase. Mr. Monz testified that he is struggling to pay the current rates that Twin Lakes charges.¹⁴

Tami DeFrancesco testified that a rate increase would be a burden on many people in the community. She was also concerned that a rate increase would force people from their homes.¹⁵

¹⁰ Tr. 86.

¹¹ Tr. 90-92.

¹² Tr. 95-96.

¹³ Tr. 99-101.

¹⁴ Tr. 104.

¹⁵ Tr. 106-107.

V. BURDEN OF PROOF

The public utility bears the burden of proof to establish the justness and reasonableness of its requested rate increase. As set forth in Section 315(a) of the Public Utility Code, 66 Pa.C.S. § 315(a):

(a) 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 the 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 stated:

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. Pub. Util. Comm'n, 48 Pa. Commw. 222, 226-27, 409 A.2d 505, 507 (1980) (citations omitted). *See also, Brockway Glass v. Pa. Pub. Util. Comm'n*, 63 Pa. Commw. 238, 437 A.2d 1067 (1981).

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 of proof must establish that “the elements of that cause of action are proven with substantial evidence which enables the party asserting the cause of action to prevail, precluding all reasonable inferences to the contrary.” *Burleson v. Pa. Pub. Util. Comm'n*, 461 A.2d 1234, 1236 (Pa. 1983). Furthermore, it is well-established that the “degree of proof before administrative tribunals as well as before most civil proceedings is satisfied by establishing a preponderance of the evidence.” *Lansberry v. Pa. Pub. Util. Comm'n*, 578 A.2d 600, 602 (Pa.Cmwlth. 1990).

Additionally, the evidence must be substantial and legally credible, and cannot be mere “suspicion” or a “scintilla” of evidence. *Lansberry*, 578 A.2d at 602. Thus, a utility has an affirmative burden to establish the justness and reasonableness of its rate request.

However, as the Commonwealth Court has explained: “While it is axiomatic that a utility has the burden of proving the justness and reasonableness of its proposed rates, it cannot be called upon to account for every action absent prior notice that such action is to be challenged.” *Allegheny Center Assocs. v. Pa. Pub. Util. Comm’n*, 570 A.2d 149, 153 (Pa.Cmwlth. 1990). Therefore, while the ultimate burden of proof does not shift from the utility, a party proposing an adjustment to a ratemaking claim bears the burden of presenting some evidence or analysis tending to demonstrate the reasonableness of the adjustment. *See, e.g., Pa. Pub. Util. Comm’n v. PECO Energy Co.*, Docket No. R-891364, 1990 Pa. PUC LEXIS 155 (Order entered May 16, 1990); *Pa. Pub. Util. Comm’n v. Brezewood Telephone Co.*, Docket No. R-901666, 1991 Pa. PUC LEXIS 45 (Order entered January 31, 1991). Furthermore, a party that raises an issue that is not included in a public utility’s general rate case filing bears the burden of proof regarding that issue. *Pa. Pub. Util. Comm’n v. Columbia Gas of Pennsylvania, Inc.*, R-2010-2215623 at 28 (Opinion and Order dated October 14, 2011).

VI. DISCUSSION OF ISSUES

A. Rate Base

1. Utility Plant in Service

Twin Lakes, I&E and OCA are in agreement with respect to the Utility Plant in Service component of Rate Base, including the pro forma adjustment in the amount of \$1,481,061.¹⁶ (TLU MB at 5) (I&E MB at 5) (OCA MB at 7).

¹⁶ *See* Twin Lakes Short Form Filing, Exhibit E.

2. Depreciation Reserve

I&E did not propose a depreciation reserve adjustment to rate base. (I&E MB at 6). OCA also did not propose any adjustments to depreciation reserve. (OCA MB at 7).

3. Acquisition Adjustment

a. Party Positions

Twin Lakes asserts that it is entitled to an acquisition adjustment of \$54,406. Twin Lakes contends that OCA's proposed exclusion of the full claimed Acquisition Adjustment of \$54,406 is unreasonable. Twin Lakes maintains that OCA's position rests on the point that the Commission has never approved such an acquisition adjustment in any of the Company's previous filings.¹⁷ Twin Lakes states that the lack of Commission approval was a direct result of parties in previous Twin Lakes rate cases reaching a settlement without the Commission determining the ratemaking treatment of the Acquisition Adjustment claimed by Twin Lakes in either of the prior base rate matters.¹⁸ (TLU MB at 5-6).

Twin Lakes states that OCA's witness, Ms. Sherwood, incorrectly states that an acquisition adjustment must be determined and receive Commission approval in the first rate case following an acquisition or the opportunity for this adjustment is lost forever.¹⁹ Twin Lakes argues that this is a mischaracterization of 66 Pa.C.S. § 1327 and 52 Pa.Code § 69.721. Twin Lakes asserts that nowhere in this statute or this regulation exists any prohibition on the Commission from considering or approving an acquisition adjustment request after a first-rate case following acquisition of a utility system. (TLU MB at 6).

Twin Lakes argues that by agreeing to enter into a settlement in prior rate cases that did not require the Commission to make a determination on the treatment of the acquisition

¹⁷ See TLU Statement No. 2R at 2.

¹⁸ *Id.* at 3.

¹⁹ See OCA Statement No. 1 at 4.

adjustment in those cases, it did not by statute or regulation forswear from seeking an acquisition adjustment in the future. Twin Lakes argues that OCA's position is inconsistent with the plain language of the Commission statutes and regulations. Twin Lakes asserts that this would place ratemaking principles and concepts of basic, fairness and fundamental good faith and fair dealing on its head. (TLU MB at 6).

Twin Lakes also asserts that I&E's proposed reduction in the acquisition adjustment is unreasonable and against basic ratemaking principles. Twin Lakes notes that I&E's justification for this reduction is that ten years have passed since Twin Lakes' acquisition of the system and therefore any acquisition adjustment should be reduced by accumulated amortizations over a ten-year period. The Company states that it has never amortized the claimed acquisition adjustment. Twin Lakes contends that I&E assumes that the inclusion of the acquisition adjustment in Twin Lake's rate base was approved ten years ago and that the Company has been amortizing an adjustment in rates for the accumulated amortization. Twin Lakes also maintains that I&E failed to propose a corresponding adjustment to operations and maintenance (O&M) expense to account for the annual amortization of the acquisition adjustment. Twin Lakes asserts that I&E's acquisition adjustment as proposed does not adhere to the "matching principle." Twin Lakes also argues that I&E's recommendation constitutes impermissible retroactive ratemaking.²⁰ (TLU MB at 6-7).

I&E noted that an acquisition adjustment is the ratemaking treatment of the difference between the purchase price of the acquired system and the value of the depreciated original cost of the system being acquired.²¹ I&E states that a positive acquisition adjustment occurs when the depreciated original cost of the acquired facilities is less than the purchase price for the facilities. I&E asserts that the acquisition adjustment is amortized over a specific period of time, as an expense, thus reducing the difference. I&E maintains that Section 1327(a) of the Code establishes nine criteria that must be met before a utility can claim an acquisition adjustment in rate base.²² (I&E MB at 6).

²⁰ See TLU Statement No. 2R at 3.

²¹ I&E St. No. 3 at 13.

²² 66 Pa.C.S. § 1327.

I&E notes that when Middlesex acquired Twin Lakes Water, LLC in November 2009, the purchase price was \$99,410, while the net book value was \$79,726. I&E states that because the purchase price was \$19,684 above net plant value, it results in a positive acquisition adjustment. I&E maintains that the Commission, while approving the acquisition itself, never specifically approved any acquisition adjustment.²³ In this proceeding, I&E did not challenge the validity of the acquisition adjustment, but merely the amount of the adjustment. (I&E MB at 7).

I&E recommends that the positive acquisition adjustment be reduced by \$18,388, from \$54,406 to \$36,018.²⁴ I&E notes that in its 2011 rate proceeding, the Company claimed a positive acquisition adjustment of \$71,440 and in its 2015 base rate proceeding, Twin Lakes claimed a positive acquisition adjustment amount of \$54,406. I&E asserts that the Company is continuing to claim a positive acquisition amount of \$54,406 in the instant proceeding, reflecting no reduction to this amount since 2015.²⁵ I&E argues that it would be improper not to reflect a reduction to the value of the acquisition adjustment because to do so would necessarily allow the Company to earn a return on the overpayment for this system into perpetuity.²⁶ (I&E MB at 7 8).

I&E calculates its reduction in the acquisition adjustment by using the amortization schedules established in 2015. I&E states that the accumulated amortization amount of \$35,422 was subtracted from the corrected acquisition adjustment amount of \$71,440. Then, I&E asserts that using the 2015 amortization schedules where the \$71,440 acquisition adjustment amount would be paid over a 20-year period resulted in an annual amortization expense of \$3,572. I&E notes that amortizations should have accumulated over approximately ten years at this point, resulting in a total of \$35,422 for this ten-year period. I&E contends that this results in a residual \$36,018 acquisition adjustment as of September 30, 2019.²⁷ I&E argues that when this residual amount is subtracted from the Company's claimed \$54,406, it results in a downward adjustment to rate base of \$18,388. (I&E MB at 8).

²³ I&E St. No. 3, p. 14, and OCA St. No. 1, p. 4.

²⁴ I&E St. No. 3, p. 18.

²⁵ I&E St. No. 3-SR, p. 6.

²⁶ I&E St. No. 3-SR, p. 9.

²⁷ I&E St. No. 3, p. 19.

While I&E does not dispute that the system was in poor condition when it was acquired, I&E maintains that this does not justify the Company continuing to earn a return on its overpayment in perpetuity.²⁸ I&E asserts that ratemaking principles require that this amount be amortized over time. (I&E MB at 9).

Further, I&E disputes the Company's contentions that its adjustment would constitute retroactive ratemaking. First, I&E states that it appears the Company did recognize that an amortization was required as it was reflected in the interim between the Company's 2011 and 2015 rate cases.²⁹ Second, as its witness Mr. Sakaya explained, this adjustment is similar to the way plant depreciates over time since the difference is the result of the level of net plant compared to the purchase price.³⁰ (I&E MB at 8-9; I&E RB at 4).

I&E also asserts that the Company's "matching principle" argument is incorrect. I&E notes that its witness Mr. Sakaya in direct testimony states that the acquisition adjustment results "in an annual amortization expense of \$3,572."³¹ I&E maintains that the annual amortization expense is also properly reflected under operation and maintenance expense adjustments in I&E's recommendation tables in Appendix D of I&E's Main Brief.³² (I&E RB at 5).

OCA argues that acquisition adjustments are an exception to the use of depreciated original cost used to develop rate base. OCA asserts that for water and wastewater acquisitions, a positive acquisition adjustment, when the purchase price exceeds the depreciated original cost, is permitted only when the criteria in Section 1327 are met.³³ OCA contends that whether an acquisition adjustment meets the statutory criteria should be determined in the first base rate case following proposed acquisition.³⁴ OCA argues that an acquisition adjustment

²⁸ I&E St. No. 3-SR, p. 9.

²⁹ I&E St. No. 3-SR, p. 11.

³⁰ I&E St. No. 3, p. 19.

³¹ *Id.*

³² I&E MB, Appendix D.

³³ 66 Pa.C.S. § 1327.

³⁴ *See* 52 Pa.Code § 69.721 ("After the approval of an acquisition . . . an acquiring utility may request the inclusion of the value of the used and useful assets of the acquired system in its rate base. A request will be considered during the acquiring utility's next filed rate case proceeding.").

should thus not be included as part of a utility's claimed rate base unless the acquisition adjustment is approved by the Commission in the base rate proceeding immediately following the approved acquisition. (OCA MB at 7).

OCA maintains that the Company included an acquisition adjustment claim of \$54,406 in its 2011 base rate proceeding.³⁵ OCA notes that the Commission approved a Settlement that did not include a provision for the acquisition adjustment claimed by Twin Lakes.³⁶ OCA states that there is no specific Commission approval of an acquisition adjustment in this matter.³⁷ (OCA MB at 7-8).

OCA argues that the Company's proposed acquisition adjustment should be denied. OCA asserts that the Company's proposed acquisition adjustment has already been claimed in the base rate proceeding immediately following the acquisition. OCA maintains that allowing the Company's proposed acquisition adjustment in this proceeding, eight years after the Company first claimed the adjustment, would contradict the requirements of Section 1327 of the Public Utility Code and Section 69.721 of the Commission's regulations.³⁸ (OCA MB at 8).

b. Recommendation

None of the parties assert that the Company does not meet the criteria laid out in 66 Pa.C.S. § 1327. In fact, I&E and OCA implicitly agree that Twin Lakes meets the criteria in Section 1327 and would be entitled to an acquisition adjustment. However, OCA argues that the Company was only entitled to make that claim in the first-rate proceeding following the acquisition. OCA asserts that since the Commission did not explicitly approve an acquisition adjustment in the settlement proceedings in the first-rate case in 2011, it is not entitled at any point thereafter. However, as the Company correctly notes, there is nothing in the statute or the

³⁵ OCA St. 1 at 4; *see Pa. Pub. Util. Comm'n. v. Twin Lakes Utilities, Inc.*, Docket No. R-2011-2246415 (Order entered March 1, 2012).

³⁶ *Pa. Pub. Util. Comm'n v. Twin Lakes Utilities, Inc.*, Docket No. R-2011-2246415 (Opinion and Order entered March 1, 2012).

³⁷ OCA St. 1 at 4 (quoting Twin Lakes' response to OCA-I-6); OCA St. 1SR at 3.

³⁸ OCA argues, in the alternative, that if the acquisition adjustment is allowed, it should be amortized over time. (OCA MB at 8).

regulation which prohibits the Commission from considering or approving an acquisition adjustment request after a first-rate case following acquisition of a utility system. There is nothing in the regulation that prohibits a utility seeking an acquisition adjustment in a future rate case or restricts the Commission from considering or approving such an adjustment in future rate cases beyond the first post-acquisition rate case. *See* 52 Pa.Code § 69.721. It would tie the Commission's hands in the event there is a black box settlement which does not specifically address the issue of an acquisition adjustment.

However, the Company should not be allowed to continue to claim an acquisition adjustment in perpetuity. First, and as noted by I&E, in its 2011 rate proceeding, the Company claimed a positive acquisition adjustment of \$71,440 and in its 2015 base rate proceeding, Twin Lakes claimed a positive acquisition adjustment amount of \$54,406. It would be improper not to reflect a reduction to the value of the acquisition adjustment because to do so would necessarily allow the Company to earn a return on the overpayment for this system in perpetuity. It appears the Company did recognize that an amortization was required as it was reflected in the interim between the Company's 2011 and 2015 rate cases.³⁹ Second, as I&E's witness Mr. Sakaya explained, this adjustment is similar to the way plant depreciates over time since the difference is the result of the level of net plant compared to the purchase price. Further, the acquisition adjustment results "in an annual amortization expense of \$3,572." The annual amortization expense is also properly reflected under operation and maintenance expense adjustments in I&E's recommendation. As such, it is recommended that the Company be allowed a residual \$36,018 acquisition adjustment as of September 30, 2019.⁴⁰ When this residual amount is subtracted from the Company's claimed \$54,406, it results in a downward adjustment to rate base of \$18,388.

³⁹ I&E St. No. 3-SR, p. 11.

⁴⁰ I&E St. No. 3, p. 19.

4. Cash Working Capital

a. Party Positions

Twin Lakes makes a claimed adjustment for cash working capital (CWC) methodology in Exhibit MLT-5. I&E responds that depreciation and bad debt expense are non-cash items and should be excluded from the calculation of CWC. However, Twin Lakes' witness, Ms. Tilley, explains that inclusion of both depreciation and bad debt in the calculation of CWC is a long-held and widely accepted basic principle of public utility accounting as set forth in a highly regarded text for understanding public utility ratemaking concepts and applications.⁴¹ (TLU MB at 7; TLU RB at 6).

I&E presents an adjustment to Twin Lakes claim for CWC. I&E notes that CWC is a measure of liquidity necessary to cover expenses as they are incurred and payable while recovering revenues as they are due and receivable. For ratemaking purposes, I&E states that CWC is the amount of capital a utility requires to cover the lag between the dates for the payment of operating expenses and taxes and the utility's receipt of revenues from ratepayers. While the Company has claimed CWC as an addition to rate base,⁴² in this instance, I&E maintains that there should be a downward adjustment to CWC, thus necessitating a reduction to rate base. (I&E MB at 10).

I&E notes that Twin Lakes' total CWC claim is \$17,175 using the one-eighth method.⁴³ I&E maintains that the one-eighth method uses a net O&M expense amount, which is the total O&M expense claim reduced by any non-cash O&M expense items.⁴⁴ I&E contends that the net O&M expense amount is multiplied by 1/8 to produce a CWC allowance to be included in rate base.⁴⁵ I&E agrees with the Company that the one-eighth method is appropriate but disagrees with the Company's inclusion of non-cash items such as bad debt expense and

⁴¹ See TLU Statement No. 2R at 7-9.

⁴² I&E St. No. 3, p. 11.

⁴³ I&E Exhibit No. 1, Schedule 1, p. 2.

⁴⁴ I&E St. No. 1, pp. 23-24.

⁴⁵ I&E St. No. 1, p. 24.

depreciation expense in calculating the Company's CWC claim.⁴⁶ I&E argues that non-cash items should not be included in the calculation of CWC because these expenses do not require cash, and therefore should not be included in CWC. Therefore, I&E recommends an allowance of \$12,423 or a reduction of \$4,752 to the Company's claim.⁴⁷ (I&E MB at 10-11).

I&E notes that Twin Lakes includes the depreciation and bad debt expense in its calculation of CWC.⁴⁸ I&E states the Company wants that the depreciation to be included in CWC based on the belief it would compensate for revenue lag.⁴⁹ I&E maintains that the Company's argument fails because expense lags only pertain to the lead-lag study method of calculating CWC, and not the one-eighth method utilized in this case.⁵⁰ Further, I&E argues that CWC should only include cash expenses to cover the delay of cash revenues. (I&E MB at 11).

I&E also asserts that bad debt expense should not be included in the calculation for CWC.⁵¹ I&E contends that this is incorrect as bad debt expense, calculated as a function of revenue, is accounted for in the ratemaking formula as an expense in which the Company receives dollar for dollar recovery of its bad debt expense allowance.⁵² I&E states that the Company ignores the fact that revenue lag pertains to the lead-lag study of computing CWC and not to the one-eighth method. I&E asserts that both depreciation and bad debt expense are properly excluded from the CWC. Therefore, I&E argues that its CWC recommendation of \$12,423 or a reduction of \$4,752 to the Company's claim should be accepted.⁵³ (I&E MB at 11 12).

Further, I&E states that the Commission has long recognized that non-cash items, such as depreciation and uncollectibles, are not appropriate in the determination of cash working

⁴⁶ *Id.*

⁴⁷ I&E St. No. 1, p. 25.

⁴⁸ Twin Lakes St. MLT-R, p. 6.

⁴⁹ Twin Lakes St. MLT-R, p. 8.

⁵⁰ I&E St. No. 1-SR, p. 13.

⁵¹ Twin Lakes St. MLT-R, p. 8.

⁵² I&E St. No. 1-SR, p. 13.

⁵³ I&E St. No. 1-SR, p. 14.

capital requirements.⁵⁴ I&E notes that in *Pa. Pub. Util. Comm'n v. Metropolitan Edison* and *Pa. Pub. Util. Comm'n v. Pennsylvania Electric Company*, the Commission held:

Our review of the record evidence leads us to conclude that the ALJs recommendation relative to the treatment of "non-cash" items within the cash working capital analysis is reasonable and consistent with Commission precedent. We find that the OCA's position that depreciation, amortization, deferred income taxes and uncollectibles are not cash expenses for which a payment must be made at a specified date is correct. Therefore, these expenses are not properly included in the lead-lag study analysis to determine cash working capital. We are not persuaded by the Companies' arguments to deviate from our prior decisions on this issue and will continue to follow Commission precedent.⁵⁵

(I&E MB at 12).

Additionally, I&E indicates that it is important to highlight the Commission has disallowed the inclusion of non-cash items in the CWC calculation regardless of the utility's size. Specifically, in the *Emporium Water Company* Order, the Commission expressly disallowed uncollectible expenses from the CWC calculation and was not persuaded by Emporium Water's claim that it should be permitted due to the small size of the company.⁵⁶ In that proceeding, I&E maintains that the Commission reaffirmed its long-standing position that only cash items should be included in the calculation regardless of the utility's size. (I&E MB at 13).

⁵⁴ *Pa. Pub. Util. Comm'n v. Philadelphia Suburban Water Co.*, 58 Pa. P.U.C. 668, 674 (1984) ("we consider uncollectible accounts expense to be a non-cash expense and, as such; no return allowance will be granted"); *Pa. Pub. Util. Comm'n v. Mechanicsburg Water Co.*, 80 Pa. P.U.C. 212, 226 (1993) (the Commission adopted the OCA's adjustment to eliminate non-cash items, such as amortization and written-off uncollectibles from the cash working capital calculation); *Pa. Pub. Util. Comm'n v. Dauphin Consolidated Water Supply Company*, 71 Pa. P.U.C. 555, 563-564 (1989)(the Commission determined that non-cash items such as uncollectible expense do not require the utility to use cash funds and are already recovered as expenses.) *Pa. Pub. Util. Comm'n v. Columbia Gas of Pa, Inc.*, 74 Pa. P.U.C. 282, 300 (1990) ("any expense which does not require the utility to utilize cash funds does not require a CWC allowance").

⁵⁵ *Pa. Pub. Util. Comm'n v. Metropolitan Edison Company*, Docket No. R- 00061366, p. 32 (Order entered January 11, 2007); *Pa. Pub. Util. Comm'n v. Pennsylvania Electric Company*, Docket No. R-00061367, p. 32 (Order entered January 11, 2007).

⁵⁶ *Pa. Pub. Util. Comm'n v. Emporium Water Company*, Docket No. R-2014-2402324, pp. 10-11 (Order entered January 28, 2015).

Based on the above, I&E recommends a CWC downward adjustment of \$4,752. This results in a total I&E recommended allowed rate base of \$1,284,570. (I&E MB at 14).

OCA also uses the one-eighth method in calculating its CWC adjustment in this matter. OCA notes that its witness, Ms. Sherwood, used the one-eighth method to calculate her cash working capital adjustment based on her proposed level of O&M expenses, excluding bad debt expense, depreciation expense, and taxes.⁵⁷ OCA indicates that Ms. Sherwood adjusted cash working capital to \$11,885, or an adjustment of \$4,879.⁵⁸ (OCA MB at 9).

OCA notes that Ms. Sherwood explained why she excluded bad debt and depreciation expense items:

CWC allows for the company to earn a return on the capital that is required to fund the day-to-day operating costs in advance of receiving revenues. Both bad debt expense and depreciation expense are considered non-cash items, and therefore, should not be included in the calculation of CWC.⁵⁹

OCA contends that its approach is supported by the recently reissued *A Guide to Utility Ratemaking*, James H. Cawley and Norman J. Kennard, *A Guide to Utility Ratemaking*, 2018 Edition, prepared for the Pennsylvania Public Utilities Commission, © 1983, http://www.puc.pa.gov/General/publications_reports/pdf/Ratemaking_Guide2018.pdf (Guide). OCA asserts that this approach is consistent with the description of the one-eighth method provided in the Guide:

The Guide defines this CWC calculation as the average net lag (45 days) “multiplied by the total operating and maintenance expense, less purchased gas, water, or electric (depending on utility filing type); non-cash items such as depreciation and uncollectibles; and taxes, since the taxes are collected prior to payments being made.”⁶⁰

⁵⁷ OCA St. 1 at 9; Sch. SLS-9.

⁵⁸ Table II; Sch. SLS-9.

⁵⁹ OCA St. 1SR at 4.

⁶⁰ OCA St. 1SR at 4, citing The Guide at 123.

OCA argues that its calculations of CWC is consistent with the Guide and reasonable for ratemaking purposes. OCA also maintains that the same calculation for the one-eighth method should be adopted once the final level of operation and maintenance expense is known. (OCA MB at 9-10).

b. Recommendation

All the parties agree that the one-eighth method is the proper method to calculate the CWC. However, the parties disagree as to what should be included in the CWC calculation. Twin Lakes' total CWC claim is \$17,175. It is clear from Commission precedent that the Commission has long recognized that non-cash items, such as depreciation and uncollectibles, are not appropriate in the determination of cash working capital requirements.⁶¹ The Commission has also rejected uncollectibles expenses from the CWC calculation and was not persuaded by a small water company's claim that it should be permitted due to the size of the company.⁶² Accordingly, I&E's position is the most reasonable and on this issue, includes OCA's position. It is recommended that I&E's CWC of \$12,423 or a reduction of \$4,752 to the Company's claim be adopted in this matter. Based on the above, this results in a total rate base of \$1,284,570.

⁶¹ *Pa. Pub. Util. Comm'n. v. Philadelphia Suburban Water Co.*, 58 Pa. P.U.C. 668, 674 (1984) ("we consider uncollectible accounts expense to be a non-cash expense and, as such; no return allowance will be granted"); *Pa. Pub. Util. Comm'n v. Mechanicsburg Water Co.*, 80 Pa. P.U.C. 212, 226 (1993) (the Commission adopted the OCA's adjustment to eliminate non-cash items, such as amortization and written-off uncollectibles from the cash working capital calculation); *Pa. Pub. Util. Comm'n v. Dauphin Consolidated Water Supply Company*, 71 Pa. P.U.C. 555, 563-564 (1989)(the Commission determined that non-cash items such as uncollectible expense do not require the utility to use cash funds and are already recovered as expenses.) *Pa. Pub. Util. Comm'n v. Columbia Gas of Pa, Inc.*, 74 Pa. P.U.C. 282, 300 (1990) ("any expense which does not require the utility to utilize cash funds does not require a CWC allowance").

⁶² *Pa. Pub. Util. Comm'n v. Emporium Water Company*, Docket No. R-2014-2402324, pp. 10-11 (Order entered January 28, 2015).

B. Revenues

1. Party Positions

Twin Lakes notes that it made no revenue adjustment claim to its Test Year revenues. Twin Lakes also asserts that none of the parties offered any objections to claimed Test Year revenues. Accordingly, Twin Lakes requests that the Commission adopt the revenue recommendation of its witness, Michele L. Tilley, for a proposed revenue requirement of \$345,307 which is \$211,793 or 158.63% above present revenues. (TLU MB at 8).

Twin Lakes reported its revenues as of March 31, 2019, or the end of the historic test year, as \$133,514.⁶³ I&E notes that if granted the full increase, Twin Lakes would earn approximately \$211,793 in annual revenue as a result of this filing.⁶⁴ As explained further below, I&E recommends that if less than the full increase is granted, rates should be scaled back proportionally.⁶⁵ Apart from this recommendation, I&E made no further adjustments to revenues. (I&E MB at 14).

OCA did not propose any adjustments to present revenues. (OCA MB at 11).

2. Recommendation

It is recommended that Twin Lakes shall be permitted to increase annual operating revenues in the total amount of \$111,776.00 for total allowable revenues of \$245,290.00, in accordance with the rest of this Decision.

⁶³ I&E St. No. 3, p. 25.

⁶⁴ I&E St. No. 3, p. 26.

⁶⁵ I&E St. No. 3, p. 26.

C. Expenses

1. Rate Case Expense

a. Party Positions

Twin Lakes argues that the Commission should adopt Twin Lakes' recommendation related to expenses. Twin Lakes maintains its intention to file its next water rate case in two years, if not sooner, and the normalization period for the rate case expense should remain at two (2) years so that the cost of this case will be recovered before the next rate increase. Twin Lakes' two-year filing time frame is not speculative as indicated by I&E and OCA. Twin Lakes asserts that its three planned capital projects totaling \$4,800,000 over the next five years is in addition to the increase in normal operating costs. These projects are outlined in the Twin Lakes 5-year Master Plan.⁶⁶ (TLU MB at 8).

Twin Lakes asserts that it has adequately presented a five-year timeline for future infrastructure improvements that will cause it to file for another rate increase well ahead of a five-year time frame. Twin Lakes maintains that the record evidence in this proceeding supports the adoption of Twin Lakes' Expense Adjustment recommendations as I&E and OCA have failed to produce any credible evidence to suggest that its recommendation of a two-year normalization period should not be adopted. (TLU MB at 8).

I&E notes that the estimated costs that comprise a company's allowable claim for rate case expense are those that are prudently incurred to compile, present, and defend a request to increase base rates.⁶⁷ I&E states that these estimated costs typically include legal fees for outside counsel, outside consultants and the costs of printing, collating and postal expenses.⁶⁸ In this proceeding, the Company has estimated a fully litigated rate case expense of \$86,000 to be

⁶⁶ See TLU St. No. 3.

⁶⁷ I&E St. No. 1 at 4.

⁶⁸ I&E St. No. 1 at 4; *Butler Township Water Company v. Pa. Pub. Util. Comm'n*, 473 A.2d 219 (Pa.Cmwlt. 1984).

amortized over 18 months for an annual expense of \$57,333.⁶⁹ I&E, instead, recommends a rate case expense allowance of \$26,462 or a reduction of \$30,871 from the Company's claim.⁷⁰ I&E notes that this is the result of two adjustments. First, I&E adjusts the Company's proposed amortization period to a normalization period. Second, I&E recommends that the expense be normalized over 39 months to reflect Twin Lakes historical filing history. (I&E MB at 14-15).

I&E contends that the Commission consistently considers prudently incurred rate case expense as an ongoing expense, recurring at irregular intervals; therefore, the expense is routinely normalized and not amortized.⁷¹ I&E argues that normalization is a ratemaking concept that transforms an operating expense that recurs at irregular intervals into a "normal" annual test year expense allowance. Normalization specifically addresses the prospective recovery of an ongoing expense that recurs sporadically. I&E asserts that allowed normalized expenses are no different than any other O&M expense in that the company is given the opportunity to achieve full recovery, with the prospect for an over or under recovery dependent upon the timing of when a company's next base rate case change will become effective. I&E maintains that unlike expenses that are amortized, a claim for an unrecovered normalized expense would be disallowed if requested in a subsequent base rate case because the rate case gives the opportunity to reevaluate and represent the normalized level of expense. I&E argues that the Company's position contradicts the Commission's well settled position that such expenses are routinely normalized.⁷² As stated in the Commission's recent *Guide to Utility Ratemaking*: "The Commission's practice is to recognize all prudently-incurred rate case expense and set a normalization period based upon historic filing frequency."⁷³ (I&E MB at 15-16).

⁶⁹ TLU Exhibit MLT-2 and I&E Exhibit No. 1, Schedule 2.

⁷⁰ I&E St. No. 1-SR at 5.

⁷¹ I&E St. 2 at 11; *Pa. P.U.C. v. Apollo Gas Co.*, 54 Pa. P.U.C. 358, 373 (1980); *See also Pa. P.U.C. v. Carnegie Natural Gas Co.*, 54 Pa. P.U.C. 381 (1980); *Pa. P.U.C. v. National Fuel Gas Distribution Corp.*, 54 Pa. P.U.C. 401, 416-417 (1980); *Pa. P.U.C. v. Philadelphia Electric Co.*, 56 Pa. P.U.C. 155, 176 (1982); *Pa. P.U.C. v. West Penn Power Company*, 73 Pa. P.U.C. 454 (1990); *Pa. P.U.C. v. National Fuel Gas Distribution Corp.*, 73 Pa. P.U.C. 552 (1990).

⁷² *A Guide to Utility Ratemaking*, James H. Cawley and Norman J. Kennard (2018 Edition) p. 86.

⁷³ *Id.* at 112.

I&E indicates that the next area of disagreement is the appropriate normalization period with respect to the period over which to normalize this expense. I&E argues for a 39-month normalization period that resulted in the rate case expense recommendation of \$26,462.⁷⁴ I&E witness Mr. Zalesky calculated the 39-month average as follows:

DOCKET NUMBER	DATE FILED	NO. OF MONTHS BETWEEN CASES
R-2019-3010958	July 19, 2019	44
R-2015-2506337	November 16, 2015	53
R-2011-2246415	June 10, 2011	19
A-2008-2050089	November 9, 2009 (effective date)	

$[(44 + 53 + 19) \div 3 \text{ intervals}]$.⁷⁵ (I&E MB at 16-17).

I&E argues that the Company's requested 18-month amortization of \$86,000, resulting in an annual expense of \$57,333, is inappropriate as it is unsupported by the Company's historic filing frequency. I&E notes that the Commission has historically utilized a company's historic frequency of rate case filings, as determined by computing the average number of months between rate cases, to be an essential element in determining an appropriate normalized level of rate case expense.⁷⁶ I&E agrees that the determination of an appropriate period is important and must highlight that choosing an inappropriately short normalization period is imprudent as it will allow the Company to over recover this expense. I&E contends that this demonstrates that ratemaking is not an exact science and there is no guarantee that the Company will collect expenses incurred dollar for dollar. Instead, I&E maintains the Commission has recognized that normalization is a tool to help the parties and the Commission

⁷⁴ I&E St. No. 1-SR, p. 5.

⁷⁵ *Id.*

⁷⁶ *Pa. Pub. Util. Comm'n. v. Borough of Quakertown*, Docket R-2011-2251181, p. 37 (Order entered September 13, 2012); see also, inter alia, *Popowsky v. Pa. Pub. Util. Comm'n.*, 674 A.2d 1149 (Pa.Cmwlth. 1996); *Pa. Pub. Util. Comm'n. v. National Fuel Gas Distribution Corp.*, 84 Pa. P.U.C. 134, 175 (1995); *Pa. Pub. Util. Comm'n. v. West Penn Power Company*, 119 PUR 4th 110, 149 (Pa. P.U.C. 1990).

make the test year expense representative of normal operations.⁷⁷ Accordingly, I&E submits that its recommended rate case expense allowance of \$26,462, or a reduction of \$30,871 to the Company's claim should be adopted. (I&E MB at 18).

OCA notes that the Company claims legal expenses of \$1,001, which is 155%, or \$608, more than the expense reported for the 12-month period ended March 31, 2018.⁷⁸ OCA asserts that as the majority of the increase in the test year expense is related to outside counsel expenses not experienced in the prior 12-month periods ended 2017 and 2018 and do not appear to be reoccurring, OCA's witness, Ms. Sherwood recommends to remove the nonrecurring expense to reflect a reasonable, ongoing level of legal expense. OCA argues for an adjustment to legal expense of \$596.⁷⁹ (OCA MB at 12).

OCA asserts that a 48.5-month normalization period is consistent with Commission precedent.⁸⁰ OCA notes that the Commission has consistently held that rate case expenses are normal operating expenses, and therefore, normalization should be based on the historical frequency of the utility's rate filings.⁸¹ In *Popowsky*, the Commonwealth Court considered the "time period in between rate filings" in determining the frequency of the utility's rate filings.⁸² OCA asserts that the 19-month time period between the acquisition of Twin Lakes and its first rate filing should not be included in the normalization period calculation because it is not a period between rate filings. (OCA MB at 17-18).

⁷⁷ *Pa. Pub. Util. Comm'n v. Emporium Water Company*, Docket No. R-2014-2402324, p. 48 (Order entered January 28, 2015).

⁷⁸ Twin Lakes Supplement No. 8 to Tariff Water Pa. P.U.C. No. 4, Schedule D; OCA St. 1 at 5.

⁷⁹ Table II; OCA St. 1 at 5; Sch. SLS-5.

⁸⁰ OCA St. 1SR at 7.

⁸¹ *Popowsky v. Pa. Pub. Util. Comm'n*, 674 A.2d 1149, 1154 (Pa. Cmwlth. 1996) (*Popowsky*); *Pa. Pub. Util. Comm'n v. Columbia Water Co.*, 2009 Pa. PUC LEXIS 1423 (2009); *Pa. Pub. Util. Comm'n v. Lancaster Sewer*, 2005 Pa. PUC LEXIS 44 (2005); *Pa. Pub. Util. Comm'n v. National Fuel Gas Distribution Corp.*, 84 Pa. PUC 134, 175 (1995); *Pa. Pub. Util. Comm'n v. Roaring Creek Water Co.*, 73 Pa. PUC 373, 400 (1990); *Pa. Pub. Util. Comm'n v. West Penn Power Co.*, 119 PUR4th 110, 149 (Pa. PUC 1990); *Pa. Pub. Util. Comm'n v. City of Dubois*, Docket No. R-2016-2554150, Order (March 28, 2017) (Petition for Reconsideration denied on this issue).

⁸² *Popowsky*, 674 A.2d at 1154; OCA St. 1SR at 6.

b. Recommendation

While the parties disagree as to whether amortization or normalization apply to rate case expenses, the Commission precedent clearly demonstrates that normalization applies to rate case expenses. Normalization is a ratemaking concept that transforms an operating expense that recurs at irregular intervals into a “normal” annual test year expense allowance. Normalization specifically addresses the prospective recovery of an ongoing expense that recurs sporadically. Allowed normalized expenses are no different than any other O&M expense in that the company is given the opportunity to achieve full recovery, with the prospect for an over or under recovery dependent upon the timing of when a company’s next base rate case change will become effective.

Further, the period of normalization is disputed. Each party has a different normalization period. In this matter, I&E’s position is that the normalization period should be a 39-month period. This period includes the time period between the acquisition and first base rate case after the acquisition in 2011. The determination of an appropriate period is important and choosing an inappropriately short normalization period is imprudent as it will allow the Company to over recover this expense. While OCA recommends that the Commission adopt a 48.5-month normalization period, ratemaking is not an exact science. With this longer period, it would not accurately represent the rate case expense in this matter because it would possibly cause an under collection. While there is no guarantee that the Company will collect expenses incurred dollar for dollar, the recommendation should reflect the expense as accurately as possible. Instead, the Commission has recognized that normalization is a tool to help the parties and the Commission make the test year expense representative of normal operations. Therefore, it is recommended that the Commission adopt the position of I&E and allow for a 39-month normalization period in this case, which results in the rate case expense recommendation of \$26,462 or a reduction of \$30,871.

2. Maintenance Supplies

a. Party Positions

I&E notes that maintenance supplies expense includes labor and supplies used to maintain utility service. I&E indicates that the Company's claim for maintenance supplies is \$9,509 and is based on its expense for the historic test year.⁸³ In that year, I&E also notes that the Company repaired two main breaks in July 2018 in the amounts of \$4,712 and \$4,797 for a total of \$9,509.⁸⁴ (I&E MB at 19).

I&E indicates through its witness Mr. Zalesky, that it disagrees with the Company and recommends an allowance of \$4,499 or a reduction of \$5,010 to the Company's claim.⁸⁵ I&E notes that its recommendation is based on an average of the Company's maintenance supplies expense for the most recent three years: \$3,558 for the twelve months ended March 31, 2017; \$430 for twelve months ended March 31, 2018; and \$9,509 for the historic test year (HTY), producing the average of \$4,499.⁸⁶ I&E maintains that this normalizes the two water main repair expenses experienced in the HTY, each of which was more than maintenance supplies expense for the previous two years. I&E contends that the three-year historic average is a more reliable estimate for a future projection because it is short enough to disregard any irrelevant older data but long enough to smooth out any anomalies such as the two main breaks that occurred in the HTY. It should be noted that Twin Lakes did not respond to Mr. Zalesky's recommendation in Rebuttal Testimony; therefore, I&E argues that its position should be accepted. (I&E MB at 19-20).

OCA states that the Company claims \$9,509 in maintenance supplies expense, which is 2,111%, or \$9,079, more than the \$430 maintenance supplies expense reported for the 12-month period ended March 31, 2018.⁸⁷ OCA notes that the Company claims the expense is related to two main breaks which were not experienced during the 12-month period ended

⁸³ Twin Lakes filing, Schedule D, column 6.

⁸⁴ I&E Exhibit No. 1, Schedule 4, pp. 1-3.

⁸⁵ I&E St. No. 1, p. 11.

⁸⁶ *Id.*

⁸⁷ OCA St. No. 1 at 6.

March 31, 2018.⁸⁸ OCA maintains that the test year expense is also 2.5 times higher than for the 12-month period ended March 31, 2017.⁸⁹ As such, OCA submits that normalizing the maintenance supplies expense over three years, the 12-month periods ended 2017-2019.⁹⁰ (OCA MB at 13).

b. Recommendation

The Company's claim for maintenance supplies is \$9,509 and is based on its expense for the HTY, which included two water main breaks during that time period. It is more reasonable to base the amount of maintenance supplies on an average of the Company's maintenance supplies expense for the most recent three years which includes \$3,558 for the twelve months ended March 31, 2017; \$430 for twelve months ended March 31, 2018; and \$9,509 for the HTY, producing the average of \$4,499. This normalizes the two water main repair expenses experienced in the HTY, each of which was more than maintenance supplies expense for the previous two years. The three-year historic average is a more reliable estimate for a future projection because it is short enough to disregard any irrelevant older data but long enough to smooth out any anomalies such as the two main breaks that occurred in the HTY. As such, it is recommended that the Commission adopt I&E's recommendation of an allowance of \$4,499 or a reduction of \$5,010 to the Company's claim.

3. Purchased Power and Chemical Expenses

a. Party Positions

Twin Lakes requests recovery of a purchased power expense of \$10,524 and a chemical expense of \$3,003. Twin Lakes argues that I&E and OCA's adjustments to these expenses disregard record evidence detailing the condition of the Twin Lakes system prior to its acquisition by Middlesex. Twin Lakes states that its system has experienced and continues to

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ Table II; OCA St. No. 1 at 6.

experience a high level of unaccounted for water (UFW) loss. Twin Lakes notes that the leaks are the result of a combination of factors including age and quality of the original pipe material, and poor quality workmanship associated with leak repairs that all took place prior to the acquisition of this system by Middlesex.⁹¹ (TLU RB at 7).

Twin Lakes contends that the UFW rate continues to increase in spite of the Company's replacement and repair work. Twin Lakes maintains that this is a clear indication that the entire system is in need of replacement and is incapable of being pressurized without a large amount of leakage.⁹² Therefore, Twin Lakes asserts that the only means possible for maintaining water quality in the system and avoiding potential illness to customers is to keep the water chlorinated and the mains under pressure, which cannot happen without adequate purchased power and chemical cost recovery.⁹³ (TLU RB at 7-8).

Twin Lakes argues that until the entire Twin Lakes system is replaced, issues will remain for Twin Lakes' customers. Twin Lakes contends that it will not be able to operate and maintain its infrastructure and deliver water to its customers in a safe and reliable manner, if I&E and OCA's recommendations are adopted. (TLU RB at 8).

I&E indicates that its adjustment to the Company's purchased power and chemical expenses is related to the Company paying more than the Price to Compare for generation and transmission charges and also reflects an adjustment related to the extremely high levels of unaccounted-for water experienced by the Company. I&E notes that the Company is claiming \$10,524 for purchased power based on the HTY.⁹⁴ I&E disagrees with the Company's claim and recommends an allowance of \$7,520 or a reduction of \$3,004 to the Company's claim.⁹⁵ (I&E MB at 20).

⁹¹ TLU St. No.3 P-2.

⁹² TLU St. No.2-R P-3.

⁹³ TLU St. No. 2-R P-3.

⁹⁴ Twin Lakes Filing, Schedule D, column 6.

⁹⁵ I&E St. No. 1, p. 12.

I&E states that its witness, Mr. Zalesky, examined the Company's electric bills from April 2016 to August 2019 in determining his recommendation.⁹⁶ I&E maintains that the bills indicated the Company paid more than the Price to Compare (PTC) for generation and transmission charges in all months but one (May 2016). In the twelve months ended March 31, 2017, I&E contends that the Company overpaid by \$872 and incurred a late charge of \$21 for the bill due September 30, 2016. Further, I&E asserts that the Company overpaid for generation and transmission charges by \$912 for the twelve months ended March 31, 2018 and paid a late payment charge of \$22 for the bill due October 2, 2017. Finally, I&E maintains that the Company overpaid for generation and transmission charges by \$2,975 and incurred a late payment charge of \$29 for the bill due March 1, 2019 for a total of \$3,004.⁹⁷ (I&E MB at 20-21).

I&E argues that a fundamental ratemaking principle is that a public utility is entitled to recover all reasonable and normal operating and maintenance expenses incurred by providing regulated service.⁹⁸ However, I&E maintains that to the extent that expenses are not incurred, imprudently incurred, or abnormally overstated during the test year, they should be disallowed and not recoverable through rates. Here, I&E notes that the Company paid more than the PTC in all, but one of the 39 months analyzed by I&E, resulting in approximately \$3,000 additional generation and transmission charges in the HTY. I&E asserts that Twin Lakes should not be permitted to recover this imprudent expense from its customers. I&E also argues that going forward, the Company should take whatever actions necessary to ensure it does not pay more for electric supply than PPL's currently effective PTC as ratepayers should not be required to pay electric supply rates higher than the PTC. (I&E MB at 21-22).

Moreover, I&E states that unaccounted-for water is the amount of water lost when comparing the total system output, with the volume of water sold, the amount estimated to be used in areas such as fire service, testing, flushing and company use water. I&E indicates that the amount in excess of the total system output and those amounts a company can account for the

⁹⁶ I&E St. No. 1, p. 13.

⁹⁷ *Id.*

⁹⁸ *Western Pennsylvania Water Company v. Pa. Pub. Util. Comm'n*, 422 A.2d 906 (Pa.Cmwlth. 1980).

use of in other areas is considered lost and unaccounted-for. In general, I&E asserts that the main causes that contribute to unaccounted for water are leaks in mains, hydrants and services, theft, inaccurate meter reading, and natural losses. I&E notes that the Commission considers levels above 20% as excessive.⁹⁹ I&E maintains that it is important to reduce unaccounted-for water to reasonable levels because it reduces the amount of water that ultimately needs to be pumped, treated and sent to customers, while increasing the amounts available during peak demand and improving overall service quality.¹⁰⁰ (I&E MB at 22-23).

In the instant proceeding, I&E asserts that the Company reported that for the years ended December 31, 2015 through December 31, 2018, unaccounted-for water percentages averaged 80.5%.¹⁰¹ I&E maintains that this amount is excessive and therefore, I&E witness Mr. Sakaya recommended that claims for Purchased Power related to Water Treatment Expense and Chemicals be reduced from \$10,523 by \$6,388 to \$4,135 because it is not reasonable for ratepayers to pay for the cost to treat and pump excessive levels of water that is ultimately lost and not used to serve customers.¹⁰² (I&E MB at 23).

I&E notes that excessive unaccounted-for water has been an ongoing problem in the Company's distribution system. I&E indicates that in the 2011 base rate proceeding, as part of the Joint Petition for Settlement, the Company agreed that it would reduce its then 55% unaccounted for water level by 10% by September 3, 2013.¹⁰³ It further agreed that over the subsequent 4-year period, it would continue to reduce unaccounted-for water levels by 10% each year.¹⁰⁴ Yet, instead of decreasing, I&E contends that the unaccounted-for water levels continued to rise ranging from 78.7% to 82.9% in 2015-2018.¹⁰⁵ Once again, as part of the Joint Settlement of the 2015 base rate proceeding, I&E maintains that the Company agreed to certain measures that would help remedy the unaccounted-for water levels. As part of that Settlement, the Company agreed to a 3-year phase-in of rates. The triggering event for the year 3 rate

⁹⁹ 52 Pa.Code § 65.20(4).

¹⁰⁰ I&E St. No. 3, pp. 3-4.

¹⁰¹ I&E St. No. 3, p. 4.

¹⁰² I&E St. No. 3, p. 9.

¹⁰³ *Pa. Pub. Util. Comm'n v. Twin Lakes Utilities, Inc.*, Docket No. R-2011-2246415, pp. 10, 20-21 (Recommended Decision dated January 18, 2012).

¹⁰⁴ *Id.*

¹⁰⁵ I&E St. No. 3, pp. 5-6.

increase was the replacement of certain older service lines.¹⁰⁶ Of the 4,000 feet of mains the Company agreed to replace in the 2015 proceeding, I&E notes that the Company has only replaced 2,790 feet.¹⁰⁷ I&E argues that the replacement of these older service lines has not had a material impact on the high levels of unaccounted-for water given that the lost water was 82.9% in 2015, 79.1% in 2016, 78.7% in 2017 and 81.3% in 2018.¹⁰⁸ While Twin Lakes blames the condition of the system before its acquisition for the excessive unaccounted for water, I&E asserts that the current owner is required to provide safe and reliable service to its customers. I&E contends that lines that leak over 80% of the water passed through them are neither safe, nor reliable. Moreover, as I&E points out, the current owner made commitments in both the 2011 and 2015 rate case settlements to address the excessive unaccounted-for water issue and it failed to adhere to those commitments. (I&E MB at 23-24).

Further, I&E indicates that of the water treated and passed through this system 19.5% makes it to the end user. Therefore, I&E contends that it is unacceptable to ask those same customers to pay for treatment and pumping expenses of water that they will never see. I&E argues that its recommendation is consistent with the Commission's policy statement on water conservation, which established criteria to encourage cost-effective water conservation and expressly states that the Company's failure to satisfy the criteria may impact the determination of just and reasonable rates:

In rate proceedings of water utilities, the Commission intends to examine specific factors regarding the action or failure to act to encourage cost-effective conservation by their customers. Specifically, the Commission will review utilities' efforts to meet the criteria in this section when determining just and reasonable rates and may consider those efforts in other proceedings instituted by the Commission.

* * *

¹⁰⁶ *Pa. Pub. Util. Comm'n v. Twin Lakes Utilities, Inc.*, Docket No. R-2015-2506337, pp. 9-11, 20-22 (Recommended Decision dated April 21, 2016).

¹⁰⁷ I&E St. No. 3, p. 7.

¹⁰⁸ I&E St. No. 3, p. 6.

(4) *Unaccounted-for water*. Levels of unaccounted-for water should be kept within reasonable amounts. Levels above 20% have been considered by the Commission to be excessive.^[109]

I&E notes that the Commission has disallowed recovery of these expenses in far less extreme circumstances than presented here.¹¹⁰ In *Emporium*, the Commission determined that it was not just or reasonable to require customers to pay for the additional cost to treat and pump the lost water:

Though the Company's system is old, the obligation to maintain the system must be met and it has not presented us with technical evidence of any mitigating factors in this regard. (R.D. at 34-35). We note that the Company's ratepayers have been paying for leak detection and system repairs on an ongoing basis, and we consider that it would be unfair to add to their rates by including the costs of a high level of unaccounted-for water.^[111]

(I&E MB at 24-26).

Moreover, I&E asserts that the Commission has required water companies with unaccounted for water levels in excess of the 20% benchmark to demonstrate by way of substantial evidence that their experience is both normal and reasonable by providing evidence (i.e., engineering, operations or historical testimony) to support the argument that these levels are reasonable.¹¹² I&E argues that companies which are unable to support with substantial evidence that the excessive levels of unaccounted-for water they are experiencing are normal and reasonable have been subjected to a downward adjustment in operating and maintenance expenses.¹¹³ Here, I&E maintains that the Company failed to provide substantial evidence that its extreme losses are normal or reasonable, as the parties have entered into two prior settlements with Twin Lakes with terms that were designed to address the excessive unaccounted-for water in its system and those settlements failed to remedy the problem. (I&E MB at 26-27).

¹⁰⁹ 52 Pa.Code § 65.20(4).

¹¹⁰ *Pa. Pub. Util. Comm'n v. Emporium Water Company*, Docket No. R-00061297, p. 31 (Order entered Dec. 28, 2006). (The Commission disallowed the recovery of pumping and treatment expenses due to the company's unaccounted-for water range of 29.41% to 37.7% in the test year).

¹¹¹ *Pa. P.U.C. v. Emporium Water Company*, Docket No. R-00061297, p. 34 (Order entered Dec. 28, 2006).

¹¹² *Pa. Pub. Util. Comm'n v. Dauphin Consolidated Water Supply Company*, 55 Pa. P.U.C. 202, 203 (1981).

¹¹³ *Pa. Pub. Util. Comm'n v. Emporium Water Company*, Docket No. R-00061297, pp. 31-32 (Order entered Dec. 28, 2006).

I&E, through its witness, Mr. Sakaya, first accepted the Company's claim for chemical expense of \$3,003. This resulted in a total of \$10,523 related to the cost of water production. I&E argues that any cost related to producing water above the Commission's threshold of 20% unaccounted-for water should not be borne by ratepayers.¹¹⁴ The excess gallons above the 20% threshold amount to 10,004,450 gallons.¹¹⁵ Therefore, to arrive at the amount by which the costs associated with the production of water must be reduced, its witness Sakaya multiplied the excess gallons (those above the 20% threshold) by the incremental cost of water production of \$0.6385 per thousand gallons to arrive at \$6,388.¹¹⁶ (I&E MB at 27).

In 2018, I&E notes that the Company's unaccounted-for water totaled 15,813,000 gallons.¹¹⁷ I&E argues that requiring ratepayers to pay a large amount per 1,000 gallons used and to also pay for the chemicals and power that treat 15,813,000 gallons of water that is lost in the distribution system is contrary to sound ratemaking principles and the public interest. Further, as explained by Mr. Sakaya, I&E asserts that by reducing levels of unaccounted-for water, the Company reduces the amount of water it needs to treat and pump to end users. I&E maintains that by taking measures to reduce the amount of unaccounted-for water the Company will actually be mitigating the impact of I&E's recommendation. I&E requests that Twin Lakes reduce their claims for purchased power and chemical expense by \$6,388 to \$4,135 to account for the excessive levels of unaccounted-for water. (I&E MB at 27-28).

OCA recommends that the purchased power expense be adjusted downward by \$6,335 and chemical expense be adjusted downward by \$1,808 because of the Company's excessive unaccounted for water.¹¹⁸ Again, OCA also notes that the Commission's policy regarding unaccounted for water states that levels should be kept within reasonable amounts and that the Commission considers levels exceeding 20% to be excessive.¹¹⁹ OCA indicates that the

¹¹⁴ I&E St. No. 3, p. 7.

¹¹⁵ I&E St. No. 3, p. 9, and I&E Ex. No. 3, Sch. 3, p. 2, line 6, col. F.

¹¹⁶ *Id.*

¹¹⁷ I&E St. No. 3, p. 7.

¹¹⁸ *See* Table II; Sch. SLS-7.

¹¹⁹ 52 Pa.Code § 65.20 (4).

Company's UFW data obtained from 2011-2018 Annual Reports shows the following amounts of unaccounted for water¹²⁰ :

Year	UFW
2011	82.9%
2012	83.0%
2013	86.3%
2014	86.7%
2015	82.3%
2016	78.4%
2017	78.9%
2018	81.5%

(OCA MB at 13-14).

OCA argues that unaccounted for water of 81.5% indicates that customers are paying for water loss that is 61.5% in excess of amounts identified by the Commission to be reasonable.¹²¹ As a result, OCA submits that an adjustment to purchased power of \$6,335 is necessary to remove costs associated with treating unaccounted for water above the levels deemed to be reasonable under the Commission's regulations.¹²² OCA also recommends an adjustment to chemical expense of \$1,808 for the same reason.¹²³ (OCA MB at 14).

Further, through its witness, Ms. Sherwood, OCA indicates that:

The method of operation is not considered efficient, which is required under Section 1501, especially as the level of unaccounted-for-water is above the 20 percent level that the Commission deems excessive. Furthermore, ratepayers funding operations that require and/or result in 80 percent

¹²⁰ OCA St. No. 3 at 7; Exhibit TLF-3.

¹²¹ OCA St. No. 1 at 7.

¹²² Table II; OCA St. No. 1, Sch. SLS-7.

¹²³ *Id.*

of the water being unaccounted for is not reasonable or adequate.^[124]

As such, OCA asserts that the Company's purchased power expense and chemical expense should be adjusted downward by \$6,335 and \$1,808, respectively. (OCA MB at 15).

b. Recommendation

Twin Lakes requests recovery of a purchased power expense of \$10,524 and a chemical expense of \$3,003. However, both I&E and OCA argue that this amount should be reduced.

A fundamental ratemaking principle is that a public utility is entitled to recover all reasonable and normal operating and maintenance expenses incurred when providing regulated service. However, to the extent that expenses are not incurred, imprudently incurred, or abnormally overstated during the test year, they should be disallowed and not recoverable through rates. Here, I&E notes that the Company paid more than the PTC in all, but one of the 39 months analyzed by I&E, resulting in approximately \$3,000 additional generation and transmission charges in the HTY. It is clear that Twin Lakes should not be permitted to recover this imprudent expense from its customers. In fact, going forward, the Company should take whatever actions necessary to ensure it does not pay more for electric supply than PPL's currently effective PTC as ratepayers should not be required to pay electric supply rates higher than the Price to Compare.

Further, the Commission considers levels above 20% as excessive.¹²⁵ It is important to reduce unaccounted-for water to reasonable levels because it reduces the amount of water that ultimately needs to be pumped, treated and sent to customers, while increasing the amounts available during peak demand and improving overall service quality. The unaccounted-for water levels of Twin Lakes continued to rise ranging from 78.7% to 82.9% in 2015-2018. The Commission requires the current owner is required to provide safe and reliable service to its

¹²⁴ OCA St. No. 1SR at 8.

¹²⁵ 52 Pa.Code § 65.20(4).

customers. *See* 66 Pa.C.S. § 1501. As I&E notes, lines that leak over 80% of the water passed through them are neither safe, nor reliable. Moreover, as I&E points out, the current owner made commitments in both the 2011 and 2015 rate case settlements to address the excessive unaccounted-for water issue and it failed to adhere to those commitments. The Commission's policy statement on water conservation, which established criteria to encourage cost-effective water conservation, expressly states that the Company's failure to satisfy the criteria may impact the determination of just and reasonable rates.

Lastly, the Commission has required water companies with unaccounted for water levels in excess of the 20% benchmark to demonstrate by way of substantial evidence that their experience is both normal and reasonable by providing evidence (i.e., engineering, operations or historical testimony) to support the argument that these levels are reasonable.¹²⁶ Twin Lakes has failed to provide substantial evidence that its losses are normal or reasonable, as the parties have entered into two prior settlements with Twin Lakes with terms that were designed to address the excessive unaccounted-for water in its system and those settlements failed to remedy the problem. Therefore, it is recommended that the Commission adopt the recommendation of I&E and have Twin Lakes reduce their claims for purchased power and chemical expense by \$9,392 to \$4,135.¹²⁷

4. Bad Debt Expense

a. Party Positions

I&E indicates that uncollectible accounts, or what the Company refers to as bad debt expense, are specific receivables that are determined to be uncollectable in whole or in part, either because the debtors do not pay or because the creditor finds it impracticable to enforce payment.¹²⁸ I&E states that those accounts deemed uncollectable are charged against income.¹²⁹

¹²⁶ *Pa. Pub. Util. Comm'n v. Dauphin Consolidated Water Supply Company*, 55 Pa. P.U.C. 202, 203 (1981).

¹²⁷ This adjustment incorporates both I&E's Price to Compare (purchased power) and Unaccounted for Water (purchased power and chemicals) adjustments, resulting in pro forma purchased power and chemicals expenses of \$2,955 and \$1,180, respectively.

¹²⁸ I&E St. No. 1, p. 15.

¹²⁹ *Id.*

I&E argues that for ratemaking purposes, utilities compute uncollectible accounts expense on an annual prospective basis. While the uncollectible accounts expense is a prospective claim, I&E asserts that the proper calculation begins with an historic analysis of actual net write-offs to gross write-offs less recoveries of amounts previously written off.¹³⁰ I&E maintains that this ratio is then applied to projected revenues to determine the proper prospective allowance, and normally, the historic analysis is based on several years of data. (I&E MB at 29-30).

I&E states that the Company's claim for bad debt expense is \$19,095, which was based on its amount of bad debt expense for the twelve months ended March 31, 2019 of \$7,384 and increased by the proposed rate increase of 158.6% ($\$7,384 \times [1 + 1.586] = \$19,095$).¹³¹ However, I&E, through its witness Mr. Zalesky, recommends an allowance of \$3,062 or a reduction of \$16,033 to the Company's claim.¹³² I&E states that it bases its claim on an average percentage of the net write-offs to gross revenues for the three historic twelve-month periods ended March 31, 2017, 2018, and 2019. The average percentage of the net write-offs was 2.35%. I&E indicates that Mr. Zalesky then multiplied the percentage by HTY Present Rate Revenues of \$130,279 to calculate the bad debt expense of \$3,062.¹³³ (I&E MB at 30).

Going forward, I&E believes that the 2.35% should be employed to determine the final bad debt expense allowance once the final revenue requirement is approved by the Commission. Thus, I&E's recommended net write-off percentage will adjust correspondingly to the revenue increase approved in this case.¹³⁴ (I&E MB at 31).

OCA submits that the bad debt expense must be adjusted by \$15,034.¹³⁵ OCA notes that Twin Lakes filed to increase rates in 2015, effective in 2016, when it experienced an increase in bad debt expense.¹³⁶ However, OCA also indicates that the Company reported a bad debt expense of \$2,400 for 2017 and 2018.¹³⁷ Therefore, the OCA submits that the bad debt

¹³⁰ I&E St. No. 1, p. 15.

¹³¹ Twin Lakes filing, Schedule D, column 6; TLU St. No. 2, p. 7.

¹³² I&E St. No. 1, p. 16.

¹³³ I&E St. No. 1, p. 17.

¹³⁴ I&E St. No. 1-SR. pp. 9-10.

¹³⁵ Table II; OCA Schedule SLS-8.

¹³⁶ OCA St. No. 1 at 8.

¹³⁷ *Id.*

expense should be adjusted to \$4,061, or the equivalent of the normalized bad debt expense for 2017 through 2019.¹³⁸ (OCA MB at 15).

OCA states, through its witness, Ms. Sherwood, that there can be a correlation between higher rates and an increase in the amount of bad debt expense, but there are other factors that must be considered, including that increased rates may lead to increased efficiency or reduced usage.¹³⁹ OCA notes that the Company's last rate increase went into effect in 2016, and its bad debt expense in 2016 and 2017 remained at \$2,400 each year, not increasing to \$7,384 until 2019.¹⁴⁰ OCA asserts that the level of bad debt expense the Company is now requesting, \$19,095, is 259% more than the highest amount it has reported in the last three years.¹⁴¹ OCA argues that it is unreasonable to assume that the Company will experience such a high level of bad debt expense if rates are increased. (OCA MB at 16).

In *Pa. Pub. Util. Comm'n v. Pennsylvania Power Company*, OCA asserts that the Commission agreed with the ALJ's determination that a significant increase in the Company's bad debt expense during the test year was abnormal and that a three-year average of the actual write-off charged to reserve for uncollectible accounts would be more representative of normal operations than indicated by the test year.¹⁴² OCA maintains that a utility must be able to justify its bad debt expense accurately.¹⁴³ OCA notes that Twin Lakes is assuming that its bad debt expense will increase because of an increase in rates but it has not justified its recommendation based upon an average of actual write-offs. Therefore, OCA argues that the Company's bad debt expense should be adjusted from the Company's claim of \$19,095 to \$4,061. (OCA MB at 16-17).

¹³⁸ Table II; Schedule SLS-8.

¹³⁹ OCA St. No. 1SR at 5.

¹⁴⁰ *Id.*

¹⁴¹ *Id.*

¹⁴² *Pa. Pub. Util. Comm'n v. Pennsylvania Power Company*, 1978 Pa. PUC LEXIS 78 *34 (1978).

¹⁴³ See, e.g., *Pa. Pub. Util. Comm'n, v. City of Bethlehem*, 1995 Pa. PUC LEXIS 38 *42 (1995).

b. Recommendation

The Company's claim for bad debt expense is \$19,095, is based on its amount of bad debt expense for the twelve months ended March 31, 2019 of \$7,384 and increased by the proposed rate increase of 158.6% ($\$7,384 \times [1 + 1.586] = \$19,095$). In *Pa. Pub. Util. Comm'n v. Pennsylvania Power Company*, the Commission agreed with the ALJ's determination that a significant increase in the Company's bad debt expense during the test year was abnormal and that a three-year average of the actual write-off charged to reserve for uncollectible accounts would be more representative of normal operations than indicated by the test year. A utility must be able to justify its bad debt expense accurately. Twin Lakes is assuming that its bad debt expense will increase because of an increase in rates but it has not justified its recommendation based upon an average of actual write-offs. However, I&E bases its recommendation on an average percentage of the net write-offs to gross revenues for the three historic twelve-month periods ended March 31, 2017, 2018, and 2019. The average percentage of the net write-offs was 2.35%. I&E's witness Mr. Zalesky then multiplied the percentage by HTY Present Rate Revenues of \$130,279 to calculate the bad debt expense of \$3,062, which is in accordance with Commission precedent. Therefore, this Decision recommends that the Commission adopt I&E's recommendation of an allowance of \$3,062 or a reduction of \$16,033 to the Company's claim in this matter.

D. Taxes

1. Party Positions

Twin Lakes does not address the issue of taxes in either its Main Brief or Reply Brief. Twin Lakes forecasted \$19,119 in federal income taxes and \$10,105 in state income taxes. (Twin Lakes Filing).

I&E witness Zalesky made adjustments to both state and federal taxes as explained in detail below. However, as stated in the footnote on page 2 of witness Zalesky's Direct Testimony, these adjustments would only apply in the situation in which the Commission

grants a return on equity to Twin Lakes.¹⁴⁴ Should the Commission order that Twin Lakes be granted no return on equity, which is I&E's primary position, state and federal income taxes would already be zero and, thus, no adjustment would be warranted.¹⁴⁵ (I&E MB at 32).

I&E's witness Mr. Zalesky proposes a state income tax allowance of \$6,063, which is a \$4,042 reduction to the Company's claim.¹⁴⁶ I&E argues that the primary basis for Mr. Zalesky's adjustment is his recognition that the Company has net operating losses (NOL) in excess of its net income. I&E maintains that companies with net operating losses available must use them in calculating Pennsylvania Corporate Net Income Tax.¹⁴⁷ Specifically, I&E asserts that for tax years beginning after December 31, 2018, companies are limited to an NOL deduction of the lesser of NOLs available or 40% of net income.¹⁴⁸ I&E notes that the Company's test year begins prior to December 31, 2018 and therefore the NOL limit of 40% should apply because rates will go into effect after that date and the next tax return period will be after that date.¹⁴⁹ (I&E MB at 32-33).

To determine the appropriate state income tax allowance, I&E notes that Mr. Zalesky analyzed the Company's 2017 state tax form and found that the Company had \$559,930 of NOL available for Pennsylvania corporate net income (PA CNI) tax through the 2017 tax year. Next, I&E states that Mr. Zalesky looked to the Company's amount of taxable income of \$101,148 as provided in its filing. I&E contends that the taxable income is less than the cumulative NOL meaning that the maximum NOL allowed is 40% of net income. Twin Lakes' taxable income for PA CNI is \$60,689 and when multiplied by the tax rate of 9.99% leaves I&E's recommended allowance for PA CNI at \$6,063.¹⁵⁰ In addition, I&E argues that the Company should reflect its NOLs in future base rate filings to appropriately share this reduction

¹⁴⁴ I&E St. No. 1, p. 2, fn 1.

¹⁴⁵ I&E St. No. 1, p. 3.

¹⁴⁶ I&E St. No. 1, p. 18.

¹⁴⁷ *Id.*

¹⁴⁸ PA Corporate Net Income Tax 2018 REV-1200 CT-1 Instructions, p. 16, accessed September 18, 2019: https://www.revenue.pa.gov/FormsandPublications/FormsforBusinesses/CorporationTax/Documents/2017/2017_rev-1200.pdf.

¹⁴⁹ I&E St. No. 1, p. 19.

¹⁵⁰ I&E St. No. 1, pp. 19-20.

in income taxes with ratepayers.¹⁵¹ I&E notes that Twin Lakes, in rebuttal testimony, did not respond to Mr. Zalesky's recommendation. (I&E MB at 32-33).

I&E asserts that to determine the appropriate federal income tax allowance, its witness, Mr. Zalesky, calculated the amount of NOLs available to the Company by analyzing its pro forma Federal Form 1120 its required to file as part of the Pennsylvania state income tax filing. Witness Zalesky constructed a summary between the years of 2009 to 2017 of the Company's NOLs using the base rate filing and responses to data requests.¹⁵² According to the NOL summary, the Company has at least \$458,183 of federal NOLs available. He then considered the portion of net income subject to NOLs as set forth in the Tax Cuts and Jobs Act of 2017 (TCJA) which allows NOLs earned before the 2018 tax year to cover up to 100% of net income. NOLs earned after the 2017 tax year are eligible to cover up to 80% of net income in any given future year. Here, the Company's NOLs are eligible to cover 100% of net income because they were earned before the 2018 tax year.¹⁵³ (I&E MB at 33-34).

I&E contends that the Federal taxable income of \$95,085 is equal to net income before federal and state income tax of \$101,148 less Pennsylvania state income tax of \$6,063. I&E argues that because the amount of federal NOL is greater at \$458,183 than the federal taxable income at \$95,085, the Company's entire federal income tax expense claim should be disallowed for ratemaking.¹⁵⁴ Again, I&E notes that Twin Lakes, in rebuttal testimony, did not respond to Mr. Zalesky's recommendation. (I&E MB at 33-34).

Through its witness, Ms. Sherwood, OCA recommends an adjustment to the federal income tax claim to reflect the level of rate base and expenses that she recommended in her testimony and used the 21% tax rate as claimed by the Company.¹⁵⁵ Her federal tax adjustment reduces the Company's claim by \$9,943.¹⁵⁶ (OCA MB at 19).

¹⁵¹ I&E St. No. 1. p. 21.

¹⁵² I&E St. No. 1, p. 22.

¹⁵³ I&E St. No. 1, p. 23.

¹⁵⁴ *Id.*

¹⁵⁵ *Id.*

¹⁵⁶ Table II; Exh. SLS-10 C.

OCA also asserts that none of the state income taxes be included in the Company's revenue requirement.¹⁵⁷ OCA notes that Ms. Sherwood explained that the Company, as of March 31, 2019, has a \$72,087 carry-forward net operating loss that will be applied to future state income taxes.¹⁵⁸ Further, Ms. Sherwood noted that net operating losses generated from 1998 onward can be carried forward for up to 20 years.¹⁵⁹ OCA argues that Ms. Sherwood's adjustment to remove the Company's claim of \$10,105 for state taxes should be adopted.¹⁶⁰ (OCA MB at 19).

2. Recommendation

Based on all of the above, I find the testimony of I&E's witness to be more persuasive. As such, it is recommended that the Commission adopt the position of I&E on the issue of taxes. I&E's witness, Mr. Zalesky, proposes a state income tax allowance of \$6,063, which is a \$4,042 reduction to the Company's claim. This adjustment is based on the fact that the Company's net operating loss is greater than its taxable income. Under Pennsylvania law, when the taxable income is less than the cumulative net operating loss, it means that the maximum net operating loss allowed is 40% of net income. According to I&E's calculations, Twin Lakes' taxable income is \$60,689 and when multiplied by the tax rate of 9.99% leaves the recommended allowance for PA CNI at \$6,063. I&E states that the Company's entire federal income tax expense claim should be disallowed for ratemaking. Because the Company's net operating loss is greater than its taxable income, I agree with I&E that the entire federal tax claim should be disallowed.

¹⁵⁷ OCA St. 1 at 10.

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

¹⁶⁰ Table I; Table II; Exh. SLS-10 C.

E. Rate of Return

1. Introduction

In utility ratemaking, the concept of rate of return is the revenue an investment generates in the form of net income and is generally expressed as a percentage of the amount of capital invested over a given period of time.

A fair and reasonable overall rate of return allows the utility the opportunity to recover those costs prudently incurred by all classes of capital used to finance the rate base during the prospective period in which its rates will be in effect. *Bluefield Water Works & Improvements Co. v. Public Service Comm. of West Virginia*, 292 U.S. 679, 692-93 (1923) (*Bluefield*), and *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944) (*Hope Natural Gas*) are the seminal cases that present the legal standards applicable to regulators calculating utility rates of return.

In *Bluefield*, the Supreme Court stated:

A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.^[161]

¹⁶¹ *Bluefield*, 262 U.S. at 692-93.

Twenty years later, in *Hope Natural Gas*, the Supreme Court reiterated:

From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.^{162]}

The general principles accepted by state and federal regulators as the appropriate criteria for measuring a fair rate of return are:

- A utility is entitled to a return similar to that being earned by other enterprises with corresponding risks and uncertainties, but not as high as those earned by highly profitable or speculative ventures;
- A utility is entitled to a return level reasonably sufficient to assure financial soundness;
- A utility is entitled to a return sufficient to maintain and support its credit and raise necessary capital;
- A fair return can change (increase or decrease) along with economic conditions and capital markets.¹⁶³

The primary area of disagreement in this proceeding is the determination of the appropriate cost of common equity. The Company is claiming the following rate of return:

Type of Capital	Ratio	Cost Rate	Weighted Cost
Long-Term Debt	50.00%	7.00%	3.50%
Common Equity	50.00%	11.00%	5.50%
Total	100.00%		9.00%

¹⁶² *Hope Natural Gas*, 320 U.S. at 603 (citation omitted).

¹⁶³ See *Pennsylvania Gas & Water Company v. Pa. Pub. Util. Comm'n.*, 341 A.2d 239 (Pa.Cmwlth. 1975).

Both I&E and OCA suggest that the rate of return should be adjusted, specifically, the cost of common equity should be reduced, which will be explained in more detail below.

2. Company Position

Twin Lakes requests that the Commission authorize the Company the opportunity to earn an overall rate of return of 9.0%, based upon the proposed capital structure estimated at March 31, 2019, consisting of 50.00% debt and 50.00% equity at a debt cost rate of 7.0% and 11.0% for return on equity, respectively, before being adjusted for taxes.¹⁶⁴ Twin Lakes notes that the 7.0% debt cost represents the stated interest on a \$1,000,000 Promissory Note held by Middlesex, the sole shareholder of Twin Lakes, which is payable on demand at the option of the holder.¹⁶⁵ Twin Lakes argues that the 7.0% rate is a below-market rate concession by Middlesex to Twin Lakes given the high level risk of non-payment by Twin Lakes.¹⁶⁶ Twin Lakes asserts that a repayment guarantee from Middlesex would be required to establish a more favorable credit arrangement with an independent financial institution, which the Company indicates that Middlesex is unwilling to provide a guarantee.¹⁶⁷ (TLU MB at 10).

Twin Lakes notes that it did not engage an expert to assist with the development of a proposed fair Rate of Return on Equity (ROE) due to the high cost of such expert services and their impact on the total cost of this proceeding, which would thereby add additional cost to Twin Lakes' customers. Twin Lakes asserts that given the small size of Twin Lakes, coupled with the most recently published authorized ROE ranging between 8.02-10.58% for a Pennsylvania water utility, a recommendation of a 11.00% ROE is a fair and reasonable expected return.¹⁶⁸ (TLU MB at 11).

Twin Lakes argues that its recommendations meet the legal standards of *Hope Natural Gas* and *Bluefield* and will help the Twin Lakes to run efficiently and continue to

¹⁶⁴ See TLU Statement No. 2 at 6-7.

¹⁶⁵ Id.

¹⁶⁶ Id.

¹⁶⁷ Id.

¹⁶⁸ TLU St. No. 2 at 6.

provide safe and reliable water service. In addition, Twin Lakes also argues that it is important that it be awarded a fair rate of return on its total pro forma rate base of \$1,307,710 including its investment in utility plant of \$513,508 as of September 30, 2019. Twin Lakes notes that it has a Five-Year Master Plan which includes \$4.8 million of capital improvements that will need to take place in the near term. Twin Lakes maintains that it needs to make these improvements to upgrade the water system all to help ensure safe and reliable service to the Company's customers. Twin Lakes asserts that in order to be able to attract capital for these projects, Twin Lakes' rate of return should reflect the use of a capital structure that results in its debt and equity ratios being comparable to those of similar water utilities. (TLU MB at 11).

Twin Lakes asserts that I&E and OCA's recommendations are unreasonable and inappropriate given the physical condition of the system and the continued efforts by Twin Lakes to work toward ensuring safe and reliable service for its customers. (TLU MB at 12; TLU RB at 9-11).

Twin Lakes maintains that these proposed returns on equity by I&E and OCA will have a significant negative impact on the Company and its customers. Twin Lakes asserts that these returns on common equity would place Twin Lakes at a significant disadvantage in the ability to raise capital thereby making it extraordinarily difficult, if not impossible, to finance improvements to maintain safe and reliable service. Twin Lake also maintains that OCA's and I&E's positions will cause regulatory uncertainty rendering it impossible for a water utility to plan for future investments in infrastructure. (TLU MB at 12).

Further, Twin Lakes argues that it is also possible that the recommendations by I&E and OCA will cause the Company and other water utilities in Pennsylvania to experience a credit downgrade because credit rating agencies consider, as a significant factor in determining creditworthiness, the political and regulatory environment in which a utility operates. The Company notes that Twin Lakes' ability to access capital should be strictly based on its assets, earnings and cash flow. An unreasonably low authorized ROE will jeopardize Twin Lakes' ability to attract capital and dramatically impair its ability to obtain a reasonable credit rating. Twin Lakes indicates the level of an authorized return on equity provides an indication or lack

thereof of regulatory support for the utilities that the Commission regulates. Twin Lakes maintains that to retain existing capital and to attract new capital, the authorized rate of return on common equity must be high enough to satisfy investors' requirements at all times, including periods of economic uncertainty. (TLU MB at 12-13).

Lastly, Twin Lakes argues that financial capital can flow from one company to another company, from one region to another region, but when a rate decision that departs from prior rulings, particularly where there is no rational support for the departure, injects regulatory uncertainty into the marketplace. Twin Lakes asserts that a company can lose its investors as a result of a situation when a commission's decision breaks from past rulings. Moreover, Twin Lakes contends that a lack of regulatory clarity may also result in seemingly unrelated companies to lose their investors as well. Twin Lakes also argues that this uncertainty can happen in local economies as a result of controversial decisions; financial capital leave cities, counties, states and countries just to avoid taxes and a similar occurrence may result if I&E and, OCA's low return on equity is authorized in these proceedings.¹⁶⁹ (TLU MB at 13).

2. I&E and OCA Primary Recommendations

I&E and OCA, as their primary recommendations, request that the Commission assess a cost of common equity of 0% to Twin Lakes. Both parties cite to a number of reasons for their positions. I&E indicates that the Company should receive a cost of common equity of 0% because it has failed to provide reliable service to its customers. I&E also notes that the Company has failed to follow through with prior settlement agreements in the 2011 and 2015 base rate cases. I&E maintains that Twin Lakes failed to conduct its due diligence when it acquired the system in 2009. I&E also asserts that Twin Lakes has restricted access to capital funding due to its size. Further, I&E argues that the Company has delayed its application for the Pennsylvania Infrastructure Investment Authority (PENNVEST) grants and loans to the detriment of the system. Moreover, I&E states that the Company's requested rate increase will result in unreasonably high rates, while the Company has failed to make inroads in the high unaccounted-for water losses of the system. Lastly, I&E asserts that the Company has already

¹⁶⁹ See TLU Statement No. 1R, at 10-11.

tried to abandon the system with no alternative in place. OCA also argues for the 0% cost of common equity in this matter for similar reasons as I&E put forth. However, for the reasons indicated in the next Recommendation Section of this Decision, this position is not recommended for adoption by the Commission.

3. I&E and OCA Secondary Recommendations

a. I&E Alternative Recommendation

As mentioned previously, it is I&E's primary recommendation that Twin Lakes receive 0% return on equity due to its failure to provide adequate and reasonable service. However, as an alternative, I&E also recommends that, should the Commission determine Twin Lakes is entitled to a return on equity, its recommendation would be 9.23% and an overall rate of return of 8.12%. (I&E MB at 41).

I&E notes that as a public utility, Twin Lakes, is bound by the requirements of the Public Utility Code. One such provision of the Code, 66 Pa. C.S. § 1501, states:

Every public utility shall furnish and maintain adequate, efficient, safe, and reasonable service and facilities, and shall make all such repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public. Such service shall be reasonably continuous and without unreasonable interruptions or delay. Such service and facilities shall be in conformity with the regulations and orders of the commission.

I&E states that the Code places the burden on the public utility to remedy any deficiencies in its system to ensure that its customers receive "adequate, efficient, safe, and reasonable service." Further, under Section 66 Pa.C.S. § 523(a), I&E indicates that it requires the Commission to consider the efficiency, effectiveness, and adequacy of service of each utility when determining just and reasonable rates. I&E also notes that if service is inadequate, the Commission has the authority to disallow a rate increase under 66 Pa.C.S. § 526(a):

The Commission may reject, in whole or in part, a public utility's request to increase its rates where the commission concludes, after hearing, that the service rendered by the public utility is inadequate in that it fails to meet quantity or quality for the type of service provided.

(I&E MB at 41-42).

First, I&E created a proxy group to support its calculations. I&E notes that a proxy (or barometer) group is a group of companies that act as a benchmark for determining the utility's rate of return in a base rate case. I&E indicates that a proxy group is used as a benchmark to satisfy the long-established guideline of utility regulation that seeks to provide the subject utility with the opportunity to earn a return equal to that of similar risk enterprises. (I&E MB at 38).

I&E maintains that a proxy group is typically utilized since the use of data exclusively from one company may be less reliable than using data from a group of companies. I&E notes that the use of a proxy group has the effect of smoothing out potential anomalies associated with a single company. I&E's witness, Mr. Henkel, selected his proxy group based on the following criteria:

1. 50% or more of the company's revenues must be generated from the regulated water/wastewater utility industry;
2. The company's stock must be publicly traded;
3. Investment information for the company must be available from more than one source, including Value Line;
4. The company must not be involved in an announced merger or the target of an announced acquisition when I&E conducts its analysis to determine a fair and reasonable rate of return for the subject utility; and
5. The company must have five consecutive years of historic earnings data.

I&E indicates that Mr. Henkel's proxy group comprises of American Water Works, American States Water Co., California Water Service Group, Middlesex Water Co., and York Water Company. (I&E MB at 38-39).

Second, I&E indicates that to arrive at the alternate recommendation for cost of common equity, I&E witness Henkel employed the Discounted Cash Flow method (DCF) and utilized the Capital Asset Pricing Model (CAPM) as a check to the DCF results. I&E notes that although there are four generally recognizable methods for determining the cost of equity, the DCF, CAPM, Risk Premium (RP), and Comparable Earnings (CE), the Commission historically has used the DCF as the primary methodology to determine a utility's cost of equity.¹⁷⁰ (I&E MB at 59).

I&E states that the DCF is “the ‘dividend discount model’ of financial theory, which maintains that the value (price) of any security or commodity is the discounted present value of all future cash flows. The DCF model assumes that investors evaluate stocks in the classical economic framework, which maintains that the value of a financial asset is determined by its earning power, or its ability to generate future cash flows.”¹⁷¹ (I&E MB at 60).

I&E notes that it confirms the reasonableness of its DCF calculation with a comparison to the CAPM results because the Commission has expressed an interest in having results from another methodology as a point of comparison. While the CAPM is also forward-looking, has wide-spread regulatory acceptance, and is based on the concept of risk and return, it and the other methodologies have flaws that should discount their use as primary determinants. Further, the DCF has greater regulatory acceptance than any other methodology. (I&E MB at 60).

I&E indicates that based upon its witness' analysis, it recommends an alternate cost of common equity of 9.23%. Mr. Henkel's analysis uses a spot dividend yield and a 52-week dividend yield, and earnings growth forecasts. Mr. Henkel employs the standard DCF model formula, $k = D1/P0 + g$, where k = the cost of equity, $D1$ = the dividend expected during

¹⁷⁰ The Commission has a long history of determining the cost of common equity by primarily by using the DCF method and informed judgment. See *Pa. P.U.C. v. PECO Energy Co.*, 87 Pa. P.U.C. 184, 212 (1997); *Pa. P.U.C. v. City of Bethlehem*, 84 Pa. P.U.C. 275, 304-05 (1995); *Pa. P.U.C. v. Media Borough*, 77 Pa. P.U.C. 446, 481 (1992); *Pa. P.U.C. v. Philadelphia Suburban Water Co.*, 71 Pa. P.U.C. 593, 623-32 (1989); *Pa. P.U.C. v. Western Pennsylvania Water Co.*, 67 Pa. P.U.C. 529, 559-70 (1988); *Pa. P.U.C. v. Consumers Pennsylvania Water Company – Roaring Creek Division*, 87 Pa. P.U.C. 826 (1997).

¹⁷¹ I&E St. No. 2, p. 11.

the year; P_0 = the current price of the stock; and g = the expected growth rate. When a forecast of D_1 is not available, D_0 (the current dividend) must be adjusted by $\frac{1}{2}$ the expected growth rate in order to account for changes in the dividend paid in period one. Since forecasts for each company in his proxy group were available from Value Line, no dividends were adjusted for the analysis. I&E notes that using his recommended dividend yield of 1.70% and his recommended growth rate of 7.53%, Mr. Henkel calculates an appropriate alternate return on common equity for Twin Lakes to be 9.23%. (I&E MB at 60-61).

I&E asserts that a representative yield must be calculated over a time frame sufficient to avoid short-term anomalies and stale data. Mr. Henkel's dividend yield calculation places equal emphasis on the most recent spot (1.58%) and 52-week average (1.82%) dividend yields resulting in an average dividend yield of 1.70%. (I&E MB at 61).

I&E notes that its witness, Mr. Henkel examined the earnings growth forecasts and used five-year projected growth rate estimates from Value Line, Yahoo! Finance, Zacks, and Morningstar. The expected growth rates for the five-company proxy group ranged from 2.70% to 10.00% with an overall average of 7.53%. (I&E MB at 61-62).

I&E indicates that its witness Henkel's analysis of a return on equity using the CAPM methodology uses the standard CAPM formula $K = R_f + \beta(R_m - R_f)$, where K = the cost of equity, R_f = the risk-free rate of return; β = beta, which measures the systematic risk of an asset, and R_m = the expected rate of return on the overall stock. The CAPM formula is actually a form of the more general risk premium approach and is based on modern portfolio theory. (I&E MB at 62).

I&E maintains that for his CAPM analysis, Mr. Henkel, chose the risk-free rate of return (R_f) from the projected yield on 10-year Treasury Notes as the most stable risk-free measure. I&E argues that with this choice, Mr. Henkel balanced out issues related to use of long-term bonds and short-term Treasury Bills. I&E notes that for his Beta, Mr. Henkel used the average of the betas from Value Line. I&E asserts that to arrive at a representative expected return on the overall stock market, Mr. Henkel surveyed Value Line's 1700 Stocks and the S&P

500 Index. The result of this overall stock market return based on Mr. Henkel's forecasted CAPM analysis is 11.46%. This, in turn, yields a cost of equity result of 8.68%. (I&E MB at 62).

I&E asserts that its witness Mr. Henkel gave no specific weight to his CAPM results because of his concerns that unlike the DCF, which measures the cost of equity directly by measuring the discounted present value of future cash flows, the CAPM measures the cost of equity indirectly and can be manipulated by the time period used. However, I&E submits that for purposes of providing another point of comparison, the 8.68% equity result confirms the reasonableness of Mr. Henkel's 9.23% return on common equity under his DCF calculation. I&E argues that its proposed overall rate of return of 8.12% should be adopted in lieu of the Company's claimed 11.00%. (I&E MB at 62-63).

In making its primary recommendation, I&E relied on a number of factors to support its contention that Twin Lakes should receive 0% cost on common equity. However, these factors also come into play with respect to its reduced rate of return in its alternative position.

First, I&E asserts that water supply to Twin Lakes' customers remains a major concern as the Company currently has only one functioning well. Twin Lakes has not replaced or repaired Well No.1; therefore, Well No.2 is the sole source by which customers receive water service.¹⁷² I&E states that if Well No.2 were to collapse or fail, Twin Lakes' customers will be without water service which poses a severe threat and creates serious concern regarding the Company's ability to provide reasonable and adequate water service to its customers going forward. (I&E MB at 43).

I&E argues that the evidence has shown that Twin Lakes has not made the necessary improvements to provide safe and reasonable service to its customers. I&E maintains that if Twin Lakes did make these necessary improvements such as installing and placing into service a new well, then it would not have addressed the leak rate and stress on Twin Lakes' only

¹⁷² I&E St. No. 3, p. 21.

functioning well. I&E maintains that Twin Lakes' failure to ensure customers have an alternate source of water other than Well No.2 disregards its obligation under the Code to provide adequate, efficient, safe, and reasonable service and facilities for its customers.¹⁷³ (I&E MB at 44).

Next, I&E notes that it raised its concerns about the Company's service in two prior rate cases and attempted to resolve those concerns through settlements in both the 2011 and 2015 base rate proceedings. However, I&E contends that the Company failed to adhere to the commitments made in both the 2011 and 2015 Settlements and the reliability of its water service has deteriorated. (I&E MB at 44).

I&E indicates that in the 2011 Settlement, at Docket No. R-2011-2246415 (Order entered March 1, 2012), Twin Lakes agreed to reduce its current level of unaccounted-for water of 55% by 10% within 18 months from the effective date of rates in that proceeding, or by September 3, 2013. Further, I&E argues that over the subsequent 48-month period, the Company agreed to reduce the unaccounted-for water levels by 10% each year; however, those levels did not go down to as specified in that agreement.¹⁷⁴ I&E asserts that the Company's reported unaccounted-for water was 86.2% in 2013 and 86.6% in 2014, which is not a decrease from the baseline of 55% established in the 2011 Settlement.¹⁷⁵ I&E maintains that the unaccounted-for water problem persists as it has remained consistently high, ranging from 78.7% to 82.9% in 2015-2018, and in no way demonstrates an annual 10% decrease per year as agreed in the 2011 Settlement. (I&E MB at 45).

Then I&E indicates in the Company's 2015 rate case settlement, at Docket No. R-2015-2506337, the parties agreed to a total 164.54% increase to be phased in over a three-year period with specific triggering events related to the replacement of Well No.1.¹⁷⁶ However, Well No.1 has not been replaced as contemplated in the 2015 Settlement. Additionally, I&E

¹⁷³ 66 Pa.C.S. § 1501.

¹⁷⁴ I&E St. No. 3, pp. 5-6.

¹⁷⁵ I&E Ex. No. 3, Sch. 3, p. 3.

¹⁷⁶ *Pennsylvania Public Utility Commission v. Twin Lakes Utilities, Inc.*, Docket No. R-2015-2506337, pp. 9-11, 20-22 (Recommended Decision dated April 21, 2016).

notes that under the third phase of the rate increase, the Company agreed to the following: install a new supply main to connect to the replacement Well No.1 to the distribution system; replace 4,000 feet of main; replace Twin Lakes owned service lines in conjunction with the main installations, and install a new air relief valve; and, after replacement of Well No.1, Twin Lakes committed to increase pressure by 1 psi every two (2) months during warmer months.¹⁷⁷ Again, I&E states that to date, none of these commitments have been completed. Specifically, I&E indicates that the Settlement required the replacement of 4,000 feet of main, however, according to information received through discovery, 1,210 feet still need replaced.¹⁷⁸ (I&E MB at 45-46).

Moreover, I&E believes that if Middlesex, the Company's parent, had performed its due diligence, the level of capital expenditures needed to make system improvements would have been evident.¹⁷⁹ First, I&E argues that it should have been apparent that Twin Lakes' small customer base of 114 customers limits its ability to dilute large capital expenditures. Second, I&E also argues the fact that capital expenditures would be required was evident when Middlesex acquired Twin Lakes given that the DEP had indicated the system is very aged, poorly maintained and cannot hold pressure in the distribution lines; and the storage tank is very fragile. DEP also noted that between the months of September 2008 and January 2009, there were many leaks and system breakdowns resulting in water outages and boil water advisories.¹⁸⁰ (I&E MB at 47-48).

I&E notes that a thorough inspection of the system would have revealed the absence of a fully functioning master meter on the well pump.¹⁸¹ Moreover, Twin Lakes' witness Ms. Tilley acknowledged that at the time of acquisition the DEP indicated that the system was very aged, poorly maintained, unable to hold pressure, had a fragile storage tank, and was plagued by leaks, breakdowns, outages and boil water advisories.¹⁸² (I&E MB at 49).

¹⁷⁷ I&E St. No. 3, pp. 23-24. I&E Ex. No. 3, Sch. 9.

¹⁷⁸ I&E Exhibit No. 2, Schedule 7.

¹⁷⁹ I&E St. No. 2, p. 21.

¹⁸⁰ *Joint application of Middlesex Water Company (Middlesex) and Twin Lakes Water Services, LLC (Twin Lakes) for approval of: 1) the transfer by sale of Twin Lakes to Middlesex; 2) the right of Middlesex to begin to offer, render, furnish and supply water service to the public in the development of Sagamore Estates, Shohola Township, Pike County; and 3) the abandonment of public water service by Twin Lakes*, Docket No. A-2008-2050092, p. 5 (Order entered February 26, 2009).

¹⁸¹ I&E St. No. 2-R, p. 11.

¹⁸² Twin Lakes St. MLT-R, p. 10.

Next, the Company asserts that its parent, Middlesex, cannot continue to provide debt underwriting for Twin Lakes in perpetuity because Middlesex is subject to the cross-subsidization policy of the New Jersey Board of Public Utilities (NJBPU).¹⁸³ Middlesex interprets this policy as prohibiting it from providing any type of guarantee of debt repayment for any of Middlesex’s wholly-owned subsidiaries in any regulatory jurisdiction, including Twin Lakes.¹⁸⁴ However, I&E asserts that Middlesex’s interpretation of the cross-subsidization policy of the NJBPU is flawed because it is clear that it does not apply to water providers but instead applies to electric and gas industries.¹⁸⁵ I&E argues that this misinterpretation by Middlesex restricts Twin Lakes’ access to capital that is needed for vital system improvements because Middlesex’s financial institutions require a repayment guarantee from Middlesex in order to grant debt capital to Twin Lakes.¹⁸⁶ Additionally, this interpretation is contrary to the benefits claimed by Middlesex in 2009 when it sought Commission approval to acquire the system because its President and CEO, Dennis Doll, stated, “The residents will benefit from additional capital investments we will make to improve overall service quality and with our further focus on keeping rates affordable.”¹⁸⁷ (I&E MB at 51).

I&E asserts that Twin Lakes’ customers are being unfairly burdened by higher rates related to the Company’s high cost of debt and a misinterpretation of the NJBPU cross-subsidization policy. I&E argues that Middlesex appears to use this cross-subsidization policy to its benefit to avoid providing any financial help to its wholly owned subsidiary in desperate need for system improvements. (I&E MB at 51).

Despite being aware of the ongoing service issues and committing to system upgrades in the 2015 Settlement, I&E asserts the Company waited until August 2019 to apply for a PENNVEST loan and grant¹⁸⁸ to fund system improvements needed to fulfill its obligations under Section 1501.¹⁸⁹ I&E finds the delay in applying for PENNVEST financing subsequent to

¹⁸³ *Application to Abandon Service to its Customers in Sagamore Estates*, Docket No. A-2018-3005590, pp. 4-5.

¹⁸⁴ *Id.*

¹⁸⁵ I&E Exhibit No. 2-SR, Schedule 2.

¹⁸⁶ I&E St. No. 2-SR, p. 13.

¹⁸⁷ I&E St. No. 2, p. 22; I&E Exhibit No. 2, Schedule 11.

¹⁸⁸ I&E Exhibit No. 2, Schedule 7.

¹⁸⁹ I&E St. No. 2, p. 24.

its agreement to perform system rehabilitations in the 2015 Settlement concerning, and the reasons for the delay are still unknown. I&E maintains that the Company's failure to perform due diligence or to secure funding for necessary improvements on the part of the Company and its Parent does not relieve it of the obligation under 66 Pa.C.S. § 1501.¹⁹⁰ I&E contends that it is unreasonable and unacceptable that the Company waited until August 2019 to apply for a PENNVEST¹⁹¹ loan to fund system improvements needed to fulfill its obligations under Section 1501 and were part of its agreement in the 2015 Settlement. I&E contends the Company was informed that both the OCA and I&E had concerns about the viability of the Twin Lakes system in the 2015 rate proceeding and specifically addressed the improvements in the 2015 Settlement. (I&E MB at 52-53).

The next issue addressed by I&E is the argument that consumers pay rates which are commensurable with the level of service received. I&E argues that the disparity is clear between Twin Lakes' customers rates and the level of water service received. This is especially concerning given that the Company is requesting that the current average monthly bill for Twin Lakes customers increase from \$94.59/month to \$248.34/month, which totals approximately \$3,000 per year for water service.¹⁹² I&E argues that this level of a rate increase is unreasonably high. I&E notes the EPA states that water/wastewater rates greater than 2 percent of median household income may be difficult for consumer affordability based on data across many federal and state programs.¹⁹³ I&E states that Twin Lakes' service area is within Pike County, Pennsylvania and according to the U.S. Census Bureau, the median household income for residents of Pike County in 2017 was \$63,417.¹⁹⁴ Two percent of \$63,417 is \$1,268.34, which results in a monthly amount of \$105.69. The current average monthly water bill of a Twin Lakes' water customer is \$94.59.¹⁹⁵ I&E assert that this means currently an average Twin Lakes' water customer pays 1.79% of the median annual household income for Pike County residents for water service which is close to the 2% threshold set by the EPA as "difficult for the

¹⁹⁰ I&E St. No. 2, p. 24.

¹⁹¹ It should be noted that PENNVEST issued a press release on January 29, 2020 indicating that it was making grants and loans to a series of water systems, but this was after the record had closed in this matter.

¹⁹² I&E St. No. 2, p. 25.

¹⁹³ United States Environmental Protection Agency. "Guidance: Coordinating CSO Long-term Planning with Water Quality Standards Reviews." pp. 31-32. https://www3.epa.gov/npdes/pubs/wqs_guide_final.pdf. July 2001.

¹⁹⁴ I&E St. No. 2, p. 25.

¹⁹⁵ *Id.*

consumer.” However, based on the Company’s filing and the proposed increase, the average monthly water bill would increase to \$248.34.¹⁹⁶ This increase, if approved, is 4.70% of the median household income and 135% above the threshold defined by the EPA as difficult for the consumer.¹⁹⁷ I&E argues that even if only a portion of the Company’s proposed increase were to be approved by the Commission, it would move Twin Lakes’ customers closer to unaffordability if not making water unaffordable entirely. (I&E MB at 53-54).

Additionally, I&E notes that Twin Lakes customers made it clear that the bills were unaffordable at the two public input hearings held in the service territory on October 17, 2019. At these hearings, customers testified about Twin Lakes’ high water rates, especially since many customers are retirees surviving on a limited, fixed income.¹⁹⁸ Specifically, Ms. Helen Miller testified, “[m]y feeling is that this price is a hardship as it is, and it will be an increased hardship when the rates go up or if they go up substantially or any amount.”¹⁹⁹ This sentiment was echoed by Mr. Grzegorz Nieczaj who stated, “this would be devastating for me if this [rate increase] were to go through.”²⁰⁰ Mr. Nieczaj testified that if the rate increase were to be granted by the Commission he would have to rent or sell his home due to the level of rates.²⁰¹ Ms. Tami DeFrancesco testified, “I do feel that the increase is just unjust and would really be a hardship for many people.” Lastly, Mr. Jeffrey Shatt, testified that his level of service is disproportionate to the amount Twin Lakes’ charges.²⁰² I&E also asserts that high water bills can harm ratepayers by placing downward pressure on property values.²⁰³ In addition to driving property values down, I&E indicates that high water bills make it difficult to rent properties within the Twin Lakes service area. These issues were not overlooked as they were also addressed by customers at the public input hearings.²⁰⁴ (I&E MB at 54-55).

¹⁹⁶

Id.

¹⁹⁷ I&E St. No. 2, p. 26.

¹⁹⁸ I&E St. No. 2, p. 26.

¹⁹⁹ Tr. 83, lines 16-18.

²⁰⁰ Tr. 101, lines 12-13.

²⁰¹ Tr. 100, lines 7-8.

²⁰² Tr. 86, lines 1-5.

²⁰³ I&E St. No. 2, pp. 26-27.

²⁰⁴ Tr. 100, lines 8-11; Tr. 95, lines 14-19.

I&E notes that unaccounted-for water was previously discussed in the rate base section concerning the adjustment to purchased power. Again I&E indicates that it is important to point out that based on Commission policy set forth in 52 Pa.Code § 65.20(4) unaccounted-for water must be kept within reasonable amounts and unaccounted-for water levels above 20% are considered excessive. Twin Lakes reported that its unaccounted-for water between December 31, 2015 to December 31, 2018 averaged 80.5%,²⁰⁵ which is approximately 300% higher than acceptable levels set forth by the Commission. I&E maintains that excessive unaccounted-for water levels increase expenses incurred by a utility for pumping, treating, and sending out water into its distribution system.²⁰⁶ Further, I&E contends that excessive unaccounted-for water decreases the amount of water available to customers, especially during peak demand periods, and diminishes overall quality of service. (I&E MB at 56).

Lastly, I&E states that on October 23, 2018, the Company filed an application to abandon service to its customers.²⁰⁷ In its Abandonment Application, the Company explained that it was concerned about its continued ability to operate and maintain its water system because of the constraints of its small customer base, which limits Twin Lakes' ability to dilute the large capital expenditures needed to improve its system.²⁰⁸ I&E notes that the Abandonment Application was filed without providing any plan for continued water service to Twin Lakes customers. Ultimately, I&E states the Twin Lakes' Abandonment Application was rejected by the Commission because the Company did not provide evidence of an alternative buyer or receiver and it also failed to provide a process whereby its customers may obtain water service via conversion to an alternative source such as individual wells.²⁰⁹ I&E notes that the Company references its inability to generate sufficient revenue and disavows any intention of Middlesex to assist with capital needed to improve the system; however, it does not appear to fully appreciate its obligation under Section 1501 to provide safe and reliable service. (I&E MB at 57-58).

²⁰⁵ I&E Exhibit No. 3, Schedule 3, p. 2.

²⁰⁶ I&E St. No. 3, p. 4.

²⁰⁷ *Application to Abandon Service to its Customers in Sagamore Estates*, Docket No. A-2018-3005590.

²⁰⁸ *Id.*, p. 2.

²⁰⁹ I&E Exhibit No. 2, Schedule 8, pp. 1-9.

b. OCA Alternative Recommendation

As opposed to the 11.0% cost of equity requested by the Company, OCA recommends an 8.78% cost of equity based on the Discounted Cash Flow Model (DCF), including a Constant Growth and a Non-Constant Growth method applied to the Water Proxy Group using data available through August 31, 2019.²¹⁰ OCA notes that a Capital Asset Pricing Model (CAPM) was used as a check by OCA witness Rothschild on the reasonableness of the DCF indicated results.²¹¹ OCA indicates that its witness, Mr. Rothschild, determined that the cost of equity for the average company in the Water Proxy Group is 8.78%.²¹² OCA states that this is towards the high-end of the range of his Constant Growth and Non-Constant Growth DCF results, which are between 6.38% and 9.13%.²¹³ (OCA MB at 24).

OCA asserts that Mr. Rothschild's DCF evaluation, which is consistent with the Commission's approach for determining cost of capital, shows a cost of capital between 6.38% and 9.13%.²¹⁴ OCA notes that Mr. Rothschild used the constant growth form of the DCF model.²¹⁵ OCA maintains that the constant growth form of the DCF model can be used in determining the cost of equity when investors can reasonably expect that the growth of retained earnings and dividends will be constant.²¹⁶ The model is described by this equation: $k = D/P + g$.²¹⁷

²¹⁰ OCA St. 2 at 2.

²¹¹ *Id.*

²¹² *Id.* at 3.

²¹³ *Id.*

²¹⁴ OCA St. 2 at 3.

²¹⁵ *Id.* at 24.

²¹⁶ *Id.*

²¹⁷ k=cost of equity;

D=Dividend

P=Market price of stock at time of the analysis.

g=growth rate, where $g = br + sy$;

b=the earnings retention rate

r=return on common equity investment (referred to below as "book equity");

y=the fraction of funds raised by the sale of stock that increases the book value of the existing shareholders' common equity; and

s=the rate of continuous new stock financing. OCA St. No. 2 at 24.

OCA notes that the cost of equity demanded by investors is the sum of two factors, dividend yield and growth (dividends and stock price).²¹⁸ OCA states that the dividend yield is calculated based on current dividend payments, the growth of which indicates what future dividends and stock price will be.²¹⁹ (OCA MB at 25-26).

OCA indicates that Mr. Rothschild obtained the values to input into the constant growth form of the DCF method by using the dividend expected over the next year.²²⁰ OCA argues that a reasonable way to estimate next year's dividend rate is to increase the quarterly dividend rate by ½ of the current actual quarterly dividend rate, which provides an appropriate approximation of the rate that would be obtained if the full prior year's dividend were escalated by the entire growth rate.²²¹ OCA notes that Mr. Rothschild obtained the stock Price, "P", from the closing prices of the stocks on August 31, 2019.²²² It should also be noted that he calculated the average stock price for the 12 months ending August 31, 2019 by averaging the high and low stock prices for the year.²²³ (OCA MB at 26).

Further, OCA states that Mr. Rothschild based the future expected return on equity, "r", on the average return on book equity expected by Value Line, adjusted in consideration of recent returns.²²⁴ Mr. Rothchild also made a computation based on a review of both the earned return on equity consistent with analysts' consensus earnings growth rate expectation and on the actual earned returns on equity.²²⁵ In a stable industry such as public utilities, OCA argues that investors will typically look at actual earned returns on equity as one indication of what can be expected for future earned returns on book equity.²²⁶ (OCA MB at 26-27).

²¹⁸ *Id.* at 25.

²¹⁹ *Id.*

²²⁰ OCA St. 2 at 28.

²²¹ *Id.*

²²² *Id.*

²²³ *Id.* at 29.

²²⁴ *Id.*

²²⁵ *Id.*

²²⁶ *See* OCA St. 2, Schedule ALR 4, page 1.

OCA contends that in addition to growth caused by retention of earnings, utility companies also experience growth through sale of new common stock.²²⁷ OCA's witness, Mr. Rothschild, 320 U.S. at 603 quantified this growth by multiplying the amount that the actual market-to-book ratio exceeds 1.0 by the compound annual growth rate of stock that Value Line forecasts, the results of which are shown on Schedule ALR 4, page 1. OCA notes that pure financial theory focuses on results from the most current price of stock because investors cannot purchase stock at historical prices.²²⁸ As using a single price could lead to distortion, Mr. Rothschild has presented both so that the Commission can apply the approach it deems appropriate. Schedule ALR 2 shows the DCF result, applied to the Water Proxy Group companies, based on stock prices measured at a point in time and at an average.²²⁹ (OCA MB at 27).

OCA states that the appropriate value for "r" is the value anticipated by investors to be maintained on average in the future.²³⁰ OCA indicates that Footnote [C] of Schedule ALR 4, page 1A and B shows that the average future return on equity forecast by Value Line for the Water Proxy Group for 2019-2022-2024 is 13.00%. It further shows that the future expected return on equity derived from the Zacks consensus forecast is 10.71%, and that the actual returns on equity earned on average by the Water Proxy Group companies are 10.57% in 2016, 10.59% in 2017 and 10.50% in 2018. Based on the combination of the forecast return on equity derived from the Zacks consensus, recent historical actual earned returns and Value Line's forecast, the DCF growth computation using an 11.50% value of "r" was made.²³¹ (OCA MB at 27-28).

OCA contends that the result of the DCF analysis as outlined above is a cost of equity range between 8.42% and 9.13% for the Water Proxy Group.²³² As these results use analysts' forecasts to derive sustainable growth, in part, and analysts' forecasts of dividend growth and book value growth in the non-constant form of the DCF method, OCA asserts the

²²⁷ OCA St. 2 at 29.

²²⁸ *Id.* at 30.

²²⁹ OCA St. 2, Schedule ALR 2.

²³⁰ *Id.* at 30.

²³¹ OCA St. 2 at 30-31.

²³² *Id.* at 31.

results should be considered conservatively high.²³³ OCA argues that this is because analysts' forecasts of such growth have been known to be overstated.²³⁴ (OCA MB at 28).

Further, OCA notes that the non-constant growth form of the DCF model is implemented according to the return on investment an investor expects based on an estimate of each separate annual cash flow the investor expects to receive.²³⁵ To determine the specific non-constant growth expectation that an investor who trusts Value Line would expect, Value Line's detailed annual forecasts were incorporated into the computation.²³⁶ Cash flow entry is the cash outflow an investor would experience when buying a share of stock at market price.²³⁷ Subsequent years of cash flow are equal to dividends per share forecast by Value Line.²³⁸ For intermediate years of the forecast period in which Value Line does not provide a specific dividend, annual dividends were obtained by estimating that dividend growth would persist at a compound annual rate.²³⁹ The cash flow at the end of the forecast period consists of both the last year's dividend forecast by Value Line and the proceeds from the sale of the stock.²⁴⁰ OCA asserts that the stock price used to determine the proceeds from selling the stock was obtained by estimating that the stock price would grow at the same rate at which Value Line forecasts book value to grow.²⁴¹ Book value growth is used as it is the net result after the Company produces earnings, pays a dividend and either sells new common stock at market price or repurchases its own common stock at market price.²⁴² (OCA MB at 28).

OCA states that annual expected cash flows were used instead of quarterly, when dividends are paid.²⁴³ OCA argues that modeling cash flows annually, while causing a small overstatement of the cost of equity, results in easier visualization and input of data.²⁴⁴ Further,

233 *Id.*
234 *Id.*
235 *Id.*
236 OCA St. 2 at 31-32.
237 *Id.* at 32.
238 *Id.*
239 *Id.*
240 *Id.*
241 OCA St. No. 2 at 32.
242 *Id.*
243 *Id.* at 33.
244 *Id.*

OCA notes a quarterly model would show dividends being paid sooner and earnings being available sooner, which would allow a company to compound them sooner.²⁴⁵ For example, since revenues are received every day, a company that is expected to receive an annual rate of 9.00% on equity would have to earn only 8.62% if the return were compounded daily.²⁴⁶ The reduction from 9.00% to 8.62% would then be partially offset by the impact of the quarterly dividend payment to bring the result of switching from the simplifying annual model a bit below 9.00%.²⁴⁷ (OCA MB at 29).

OCA states that the DCF model still relies on earnings even though it uses cash flow expectations as the valuation parameter.²⁴⁸ The model relies on an expectation of future cash flows, which come from dividends during the period the stock is owned and capital gains from the sale of the stock.²⁴⁹ As earnings impact both dividends and stock price, the non-constant DCF model still relies on earnings.²⁵⁰ OCA asserts that a major strength of the DCF model is its recognition of the difference between earnings paid out as a dividend and earnings retained in the business.²⁵¹ OCA maintains that return on earnings retained in the business that are reinvested in needed used and useful assets have the potential to earn at the return consistent with ratemaking principles.²⁵² OCA indicates that when an investor receives a dividend, he can either reinvest it in the same or another company or use it for other purposes, such as paying debt or living expenses.²⁵³ If the investor purchases more stock in the same company, the transaction occurs at market price, or earns at the rate “k”.²⁵⁴ OCA maintains that when the same investor sees the value of his investment increase because earnings are retained rather than paid as dividends, the reinvestment occurs at book value, or earns at the rate “r”.²⁵⁵ OCA states that when market price exceeds book value (i.e., the market-to book ratio exceeds 1.0), retained earnings are worth more than earnings paid out as dividends because “r” will be higher than “k”.

²⁴⁵

Id.

²⁴⁶

Id.

²⁴⁷

Id.

²⁴⁸

OCA St. No. 2 at 33.

²⁴⁹

Id. at 33-34.

²⁵⁰

Id. at 34.

²⁵¹

Id.

²⁵²

Id.

²⁵³

OCA St. No. 2 at 34.

²⁵⁴

Id. at 34-35.

²⁵⁵

Id.

Conversely, when market price is below book value, “k” will be higher than “r”, meaning that earnings paid out as dividends earn at a higher rate than retained earnings.²⁵⁶ (OCA MB at 29-30).

OCA states that under the non-constant DCF model, it is not necessary for earnings and dividends to grow at a constant rate for the model to accurately determine the cost of equity because the non-constant form of the DCF model separately discounts each and every future expected cash flow and does not rely on any assumptions of constant growth.²⁵⁷ *Id.* OCA indicates that Mr. Rothschild’s non-constant growth DCF method indicates a cost of equity of between 7.57% and 9.41%.²⁵⁸ (OCA MB at 30).

OCA also notes that Mr. Rothschild implemented the Capital Asset Pricing Model (CAPM), as a check of his DCF analysis. OCA maintains that CAPM relates return to risk.²⁵⁹ Specifically, OCA states that it relates the expected return on an investment in a security to the risk of investing in that security.²⁶⁰ OCA indicates the riskier the investment, the greater the return.²⁶¹ OCA contends that investors in a firm’s equity face both firm-specific risk, such as management performance, and market risk, including impacts from the overall market such as recession.²⁶² OCA asserts that the CAPM predicts that for a given equity security, the cost of equity has a positive linear relationship to the sensitivity of the stock’s returns to movements in the overall market (e.g., S&P 500).²⁶³ OCA argues that a security’s market sensitivity is measured by its beta.²⁶⁴ As shown in Chart 1 on page 37 of OCA St. 2, OCA maintains the higher the beta of a stock, the higher the company’s cost of equity—the return required by the investor to invest in the stock.²⁶⁵ (OCA MB at 30).

²⁵⁶ OCA St. 2 at 35.

²⁵⁷ *Id.*

²⁵⁸ *Id.*

²⁵⁹ OCA St. No. 2 at 36.

²⁶⁰ *Id.*

²⁶¹ *Id.*

²⁶² *Id.*

²⁶³ *Id.*

²⁶⁴ OCA St. No. 2 at 37.

²⁶⁵ *Id.*

OCA notes that the standard CAPM formula is as follows: $K = R_f + \beta_i * (R_m - R_f)$ ²⁶⁶ To implement the CAPM, the appropriate values were determined for the three model inputs: Risk Free Rate, Beta, and Equity Risk Premium.²⁶⁷ (OCA MB at 30-31).

OCA states that Mr. Rothschild chose to use a risk-free rate of 1.78% based on short-term U.S. Treasury bonds (3-months as of October 2, 2019) because those bonds have a negligible risk of default, and because their value has a relatively low exposure to overall market movement.²⁶⁸ OCA St. 2 at 38. OCA argues that some financial textbooks recommend a risk-free rate based on subtracting the historical spread between long and short-term U.S. Treasury bonds.²⁶⁹ OCA maintains that this method was not used, however, because in the current capital markets it results in an unreasonably low risk-free rate.²⁷⁰ (OCA MB at 31).

As the cost of equity should be based upon investor expectation, OCA states that Mr. Rothschild used two betas based on forward-looking investor expectations of non-diversifiable risk.²⁷¹ OCA indicates that most published betas are based on historical return data, but it is possible to calculate betas based on investor expectation of the probability distribution of future returns.²⁷² Mr. Rothschild chose to use both historical returns and option-implied betas based on investor expectations.²⁷³ OCA asserts that option-implied betas were used because studies have found that betas calculated based on investor expectations (option-implied) provide information regarding future perceived risks and expectations.²⁷⁴²⁷⁵ (OCA MB at 31-32).

²⁶⁶ K is the cost of equity; R_f is the risk-free interest rate; R_m is the expected return on the overall market (e.g., S&P 500); $[R_m - R_f]$ is the premium investors expect to earn above the risk-free rate for investing in the overall market (“equity risk premium” or “market risk premium”); and β_i (Beta) is a measure of non-diversifiable, or systematic, risk. OCA St. 2 at 37.

²⁶⁷ *Id.*

²⁶⁸ OCA St. No. 2 at 38.

²⁶⁹ *Id.*

²⁷⁰ *Id.*

²⁷¹ *Id.*

²⁷² OCA St. No. 2 at 39.

²⁷³ *Id.* at 40.

²⁷⁴ *Id.*

²⁷⁵ Mr. Rothschild used the following two betas in his CAPM analysis:

1. Hybrid beta: 50% Option-Implied Beta (6 months) = 25% Historical Beta (6 months) + 15% Historical Beta (2 years) + 10% Historical Beta (5 years).
2. Forward Beta: 100% Option-Implied Beta (6 months).

OCA St. 2 at 41.

OCA states that historical betas were calculated following the methodology used by Value Line.²⁷⁶ The only major difference between Mr. Rothschild's calculations and Value Line's calculations is that Value Line uses the NYSE Composite Index and Mr. Rothschild used the S&P 500 Index as the market index.²⁷⁷ (OCA MB at 32).

In calculating the Option-Implied Beta, OCA indicates that Mr. Rothschild used publicly-available trading information for all the options for a given security (company or index) for a complete trading day.²⁷⁸ OCA asserts that calculating option-implied betas requires (1) obtaining stock option data for that company and a market index, (2) filtering the stock option data, (3) calculating the option-implied volatility for the company and for the index, (4) calculating the option-implied skewness for the company and for the index, and (5) calculating option-implied betas for the company based on implied volatility and skewness for the company and for the index.²⁷⁹ OCA maintains that Mr. Rothschild used the same methodology used by the Chicago Board of Options Exchange (CBOE) in calculating the Volatility Index (VIX) and SKEW Index.²⁸⁰ (OCA MB at 32).

OCA notes that Mr. Rothschild's equity risk premium is the expected return on the S&P 500 minus the risk-free rate described above.²⁸¹ OCA indicates that he calculated an expected return on the S&P 500 by using stock options traded on this index.²⁸² The implied volatility for options with an expiration period of one year was approximately 0.19, which indicates that the market expects the standard deviation of future annual price movements of the S&P 500 to be 19%.²⁸³ Based on this market expectation, OCA's witness, Mr. Rothschild considered two growth rates in the DCF analysis he used to calculate the equity risk premium component of his CAPM, a base S&P 500 growth of 7.44% and a high S&P 500 growth of

²⁷⁶ OCA St. No. 2 at 41.

²⁷⁷ *Id.* at 42.

²⁷⁸ OCA St. No. 2 at 43

²⁷⁹ *Id.*

²⁸⁰ *Id.*

²⁸¹ OCA St. No. 2 at 45.

²⁸² *Id.*

²⁸³ *Id.*

10.13%.²⁸⁴ OCA states the CAPM result is 8.49%, as indicated on Schedule ALR-2. (OCA MB at 33).

Based on the foregoing, OCA argues that the market-based cost of equity for Twin Lakes is 8.78%, with an overall rate of return recommendation of 7.89%, based on a pro forma capital structure of 50% debt and 50% equity, and Twin Lakes' cost of debt of 7.0% should be considered a market-based cost of capital. (OCA MB at 33).

4. Recommendation

As noted above, in utility ratemaking, the concept of rate of return is the revenue an investment generates in the form of net income and is generally expressed as a percentage of the amount of capital invested over a given period of time. It is well established that a fair and reasonable overall rate of return allows the utility the opportunity to recover those costs prudently incurred by all classes of capital used to finance the rate base during the prospective period in which its rates will be in effect. *Bluefield and Hope Natural Gas Co.*

However, a utility must abide by the Public Utility Code. Specifically, Section 1501 of the Code, 66 Pa. C.S. § 1501, states:

Every public utility shall furnish and maintain adequate, efficient, safe, and reasonable service and facilities, and shall make all such repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public. Such service shall be reasonably continuous and without unreasonable interruptions or delay. Such service and facilities shall be in conformity with the regulations and orders of the commission.

Further, the Code places the burden on the public utility to remedy any deficiencies in its system to ensure that its customers receive “adequate, efficient, safe, and reasonable service.” Moreover, under Section 66 Pa.C.S. § 523(a), the Code requires the

²⁸⁴ *Id.*

Commission to consider the efficiency, effectiveness, and adequacy of service of each utility when determining just and reasonable rates. Lastly, if service is inadequate, the Commission has the authority to disallow a rate increase under 66 Pa.C.S. § 526(a):

The Commission may reject, in whole or in part, a public utility's request to increase its rates where the commission concludes, after hearing, that the service rendered by the public utility is inadequate in that it fails to meet quantity or quality for the type of service provided.

While both I&E and OCA argue that the Company's actions in this matter warrant a return on common equity of 0%, this ignores the realities of the water system at issue in this case. This is clearly a distressed system, as noted by all of the parties. The Company needs revenues to fund at least a portion of the improvements that are needed.

This is not to say that the Company should be allowed a rate of return on equity of 11% because the Company's inaction in this case is to blame for the state of the water system. I&E notes a number of reasons why the Company should not be allowed the full requested rate of return. There are issues with the reliability of service because the system relies on one well and suffers from continued excessive unaccounted for water losses. Further, the Company has failed to comply with the terms of prior settlements in the 2011 and 2015 rate cases which would have addressed the reliability and unaccounted for water issues. The Company had failed to gain access to financing and it is not persuasive that the parent company, Middlesex, cannot continue to provide debt underwriting for Twin Lakes because it is subject to the cross-subsidization policy of the NJBPU. I agree with I&E's assertions that Middlesex's interpretation of the cross-subsidization policy of the NJBPU is flawed because it does not apply to water providers but instead applies to electric and gas industries.²⁸⁵ Further, the Company did not apply for the PENNVEST loan and grant until August 2019, while it has owned the system for almost a decade. Most importantly, the affordability of rates is of great concern to Twin Lakes' customers. As I&E noted, the rates are currently at the high end of affordability for the income

²⁸⁵ I&E Exhibit No. 2-SR, Schedule 2.

level in the community and the Company's full requested amount would push the rates to unaffordable levels.

Based on the above, it is recommended that the Commission adopt the alternative recommendation of I&E in this case for the rate of return. This reduced rate of return takes into account all of the factors listed above, while also allowing the Company to recover some revenue. I&E's calculations are sound and follow general rate making principles. As such, this Decision recommends that the Commission adopt a cost of common equity of 9.23% and an overall rate of return of 8.12%.

F. Capital Structure

1. Party Positions

Twin Lakes recommends using a capital structure of 50% long term debt and 50% common equity in this proceeding. Twin Lakes notes that the proposed pro forma capital structure at September 30, 2019 consisting of 50% long term debt and 50% equity, represents the current commonly accepted water industry practice. Twin Lakes proposes to use Twin Lakes embedded long term debt cost rate of 7.0% at March 31, 2019. (TLU MB at 11-12).

I&E accepts the Company's capital structure of 50.00% long-term debt and 50.00% equity for the historic test year because its claimed capital structure is appropriate as it falls within the range of the proxy group's capital structure ratios.²⁸⁶ (I&E MB at 40).

I&E witness Mr. Henkel does not disagree with Twin Lakes claimed debt cost rate of 7.00%.²⁸⁷ I&E notes that the claimed 7.00% cost of debt is the stated interest rate on a \$1,000,000 Promissory Note held by Middlesex, which is payable upon demand at the option of the holder. I&E contends that this claimed cost of debt exceeds Mr. Henkel's proxy group's debt cost range by 74 basis points, however, the Company has attempted to secure lower-cost debt

²⁸⁶ I&E St. No. 2, p. 9.

²⁸⁷ I&E St. No. 2, p. 10.

from other entities but cannot do so as a stand-alone entity. I&E asserts that Twin Lakes should still be encouraged to seek debt at a lower cost rate, including through channels available to the Middlesex.²⁸⁸ (I&E MB at 40).

OCA states that the Company's proposed capital structure is reasonable because it is similar to the capital structure ratios used by other water utility companies and its parent, Middlesex.²⁸⁹ OCA notes that on average, the Water Proxy Group companies contain 49.3% common equity, while Middlesex has 54.2%.²⁹⁰ OCA argues that because the Company's proposed capital structure is similar to both the Water Proxy Group and its parents' capital structure, it should be accepted. (OCA MB at 22-23).

OCA did not adjust Twin Lakes' 7.0% cost of debt recommendation. However, OCA states that it has concerns that this cost of debt is too high.²⁹¹ OCA notes that Twin Lakes' parent, Middlesex, has a cost of debt of 4.2%, significantly lower than the 7.0% Twin Lakes is requesting.²⁹² Further, OCA maintains that Twin Lakes is currently in the process of applying for a PENNVEST loan which is expected to significantly reduce its cost of debt in the future.²⁹³ OCA asserts that it is willing to accept Twin Lakes' 7.0% cost of debt at this time because of the Company's difficulty in securing credit arrangements with financial institutions as a stand-alone entity.²⁹⁴ In the future, however, OCA argues that Twin Lakes' cost of debt should be set at Middlesex's 4.2% cost of debt if the Company is unable to demonstrate a good faith effort to obtain lower-cost debt financing.²⁹⁵ (OCA MB at 23).

2. Recommendation

Based on the above, it is recommended that the Commission adopt the parties' position in terms of capital structure, which is a 50% debt and 50% equity capital structure. Both

²⁸⁸ I&E St. No. 2, p. 11.

²⁸⁹ OCA St. 2 at 8.

²⁹⁰ *Id.*

²⁹¹ OCA St. 2 at 9.

²⁹² *Id.*

²⁹³ *Id.*

²⁹⁴ Twin Lakes St. No. 2 at 5.

²⁹⁵ OCA. St. 2 at 2.

I&E and OCA note that the capital structure is in line with other entities in the industry. Further, the cost of debt of 7.0% should be adopted as the Company has established that it is difficult to obtain credit as a stand-alone entity. As such, it is recommended that the Commission adopt the parties' position related to this issue.

G. Other Issues

1. Quality of Service

a. Party Positions

Twin Lakes notes that the parties have stipulated to the admission into the record of a Twin Lakes report regarding finding of an elevated lead sample level at one customer location.²⁹⁶ Twin Lakes states that testing was conducted on Well No. 1 and entry point to the system with no finding of lead exceedance levels. However, Twin Lakes has agreed with the parties to a 12-point program in which the Company will conduct various tests annually and report on its findings. (TLU MB at 13).

Twin Lakes contends that I&E and OCA do not take into account the operational reality of the Company. Twin Lakes indicates that adopting I&E and OCA recommendations increases operational risk to the detriment of Twin Lakes' customer base. Twin Lakes acknowledges that the unaccounted-for water rate continues to increase in spite of the Company's replacement and repair work. Twin Lakes maintains that this is an indication that the entire system needs to be replaced.²⁹⁷ Twin Lakes states that the entire system is in need of replacement given that the system is incapable of being pressurized to an acceptable level without an extraordinary amount of leakage.²⁹⁸ Twin Lakes contends that reliable service cannot be maintained without adequate amounts of purchased power and chemicals. The Company

²⁹⁶ See Order dated December 18, 2019, which approved the Stipulation of the parties and the admission of the parties' documents into the record.

²⁹⁷ TLU Statement No. RFK-2R at 3-4.

²⁹⁸ *Id.*

asserts that it has taken various proactive steps to address the unaccounted-for water, all while working to ensure the Company's customers continue to receive service. (TLU MB at 14).

Twin Lakes also notes that the quality of service issues raised by the customers who attended the Public Input Hearings were primarily focused on the Company's dissemination of boil water advisories, primarily in the summers of 2018 and 2019. The Company states that all boil water advisories were issued out of an abundance of caution based on its conservative internal policy to protect public health to the greatest extent possible. (TLU MB at 14).

I&E notes that on November 13, 2019, the DEP issued a notice detailing elevated levels of lead found in drinking water tap samples taken from the Twin Lakes' system. I&E maintains that Twin Lakes' exceedance of the lead action levels is concerning and as a result the Company, I&E, and OCA entered into a Stipulation detailing the events leading up to and the actions taken since the November 13, 2019, notice issued by the DEP.²⁹⁹ I&E notes that the Stipulation outlines reporting requirements Twin Lakes must adhere to going forward, Twin Lakes must inform its customers that it will test for lead levels at an individual's house upon request, and Twin Lakes must provide the November 13, 2019 notice and information regarding available testing to all new customers. I&E states that all items included in the Stipulation are intended to ensure that Twin Lakes will take the necessary steps to address the issue and inform customers and the statutory advocates of the developments with respect to lead in the system. (I&E MB at 66-67).

I&E contends that with Well No.1 non-functioning, and Well No.2 at risk of collapse, continued service to the 114 customers served by Twin Lakes is at major risk. I&E argues that the over-pumping of Well No.2 is concerning because it places increased stress on Well No.2 with no other backup system in place. I&E contends that should Well No.2 collapse, 114 customers served by Twin Lakes are at risk of losing water service. (I&E MB at 64-65).

²⁹⁹ See Order dated December 18, 2019 which approved the Stipulation and the admission of the parties' documents into the record.

I&E maintains that as far back as 2009 when Middlesex acquired the Company, service issues with the Twin Lakes system have been apparent.³⁰⁰ I&E also states that the three-year phase-in of rates in the 2015 rate case was designed to improve service and reliability as the rate increases were predicated on certain system improvements being made. I&E indicates that the Company received 50% of the increase in Phase 1 and Phase 2 was to be implemented when Well No.1 was replaced and placed into service. I&E also notes that Phase 3 was to be implemented when Well No.1 was connected to the distribution system, 4,000 feet of main was replaced, certain Twin Lakes owned service lines were replaced, and a new air relief valve was installed. As I&E notes, Well No.1 has not been replaced as was required by Phase 2 of the rate increase³⁰¹ and is currently approximately 20% complete.³⁰² Further, I&E maintains that the main connecting Well No.1 with the distribution system and the air relief valve installation have not been completed. Lastly, I&E indicates that only 2,790 feet of the agreed upon 4,000 feet of main have been replaced.³⁰³ (I&E MB at 65).

I&E notes that Section 66 Pa.C.S. § 1501 obligates a utility to provide safe and reliable service. I&E asserts that Twin Lakes failure to execute its agreed upon commitments is concerning. I&E argues that since the conclusion of the 2015 rate case it appears that there have not been many improvements to the Twin Lakes system. I&E contends that unaccounted for water levels remain extremely high and the stability of Well No.2 is in question. I&E maintains that Twin Lakes must begin to adhere to its commitments to improve service to these customers. (I&E MB at 66).

OCA also discusses the elevated lead level that were discovered by the DEP in November 2019. OCA notes that these issues were addressed by its witness, Mr. Fought, with a series of recommendations that require the Company to inform its customers of the availability of testing for lead levels at an individual's home, the steps that customers can take to reduce exposure to lead in drinking water, and permit the parties to receive information on testing and other steps that Twin Lakes will take to comply with the DEP regulations regarding the lead

³⁰⁰ I&E St. No. 3 at 21.

³⁰¹ TLU St. No. 3 at 1.

³⁰² I&E Exhibit No. 2, Schedule 7.

³⁰³ I&E St. No. 3 at 23-24.

action level exceedance.³⁰⁴ OCA indicates that these recommendations were reflected in the Stipulation that the parties entered into and was approved on December 18, 2019. (OCA MB at 42).

OCA states that public utilities have an obligation to remedy any deficiencies in their system to ensure that customers receive “adequate, efficient, safe, and reasonable service.”³⁰⁵ OCA also notes that water service does not need to become a public health risk in order to be found unsuitable for all domestic purposes.³⁰⁶ OCA cites to *Pa. Pub. Util. Comm’n v. Pa. Gas & Water Co.*, 68 Pa. PUC 191, 1988 Pa. PUC LEXIS 457 (Sept. 30, 1988), where the Commission explained what is required to support claims of inadequate and unreasonable water service:

In reaching a determination as to whether a utility has provided adequate and reasonable service, we note that *every* customer is entitled to water that is fit for the basic, domestic purposes (e.g., cooking, drinking, washing and bathing). Although a few isolated or sporadic instances or complaints of water received by customers . . . that is unfit for the aforementioned basic, domestic purposes would not warrant a finding that a utility has failed in its provision of adequate and reasonable service, we believe that probative evidence in a particular case showing a *significant* failure on the part of a utility to provide adequate and reasonable service would provide a basis for a conclusion that a utility has provided inadequate service. Finally, we point out that customers are entitled to adequate and reasonable service at the time they are paying their bills, not some optimistic point in the future.^[307]

OCA indicates that Section 523 of the Public Utility Code requires the Commission to “consider . . . the efficiency, effectiveness and adequacy of service of each utility when determining just

³⁰⁴ OCA St. No. 3SR at 4-5.

³⁰⁵ 66 Pa.C.S. § 1501.

³⁰⁶ *Pa. Pub. Util. Comm’n v. Lake Latonka Water Co.*, 71 Pa. PUC 507, 522 (1989) (holding that a utility provides inadequate water service even when the water “has non-health, aesthetic quality problems”); *see Kessler v. Shickshinny Water Co.*, 64 Pa. PUC 290, 296-97 (1987) (holding that ground debris in pipes resulting in “dirty, smelly water which was unsatisfactory for virtually every purpose except toilet flushing” violated 66 Pa. C.S. § 1501).

³⁰⁷ *Id.* at 416.

and reasonable rates. . . .”³⁰⁸ Lastly, OCA maintains that the Commission has authority to deny a proposed rate increase, in whole or in part, if the Commission finds “that the service rendered by the public utility is inadequate.”³⁰⁹ (OCA MB at 34-35).

OCA contends that high levels of unaccounted for water have been a long-standing problem with the Twin Lakes system. OCA’s witness, Mr. Fought, indicates that Twin Lakes’ unaccounted for water percentages from 2011-2018 range from 78.4% to 86.7% during that time frame.³¹⁰ Over the same time frame, OCA notes that the parties have tried to address the high levels of unaccounted for water in the 2011 and 2015 Settlements. OCA maintains in the 2011 Settlement, Twin Lakes agreed to reduce UFW by 10% of the then current level and had 18 months to comply.³¹¹ OCA also contends that in the 2015 Settlement, the parties agreed that Twin Lakes would receive an additional \$31,250 or 25% of the total increased revenue requirement agreed to by the parties when Twin Lakes completed certain distribution system projects.³¹² OCA asserts that the projects were not completed.³¹³ (OCA MB at 37-38).

OCA maintains that Twin Lakes has failed to improve UFW during this time period. Specifically, OCA notes that the highest level of UFW (86.7%) was in 2014.³¹⁴ Further, the level reported in 2018 (81.5%) was only 1.4% lower than the 2011 level (82.9%) and the 2018 level was part of a three-year upward trend.³¹⁵ (OCA MB at 39).

Moreover, OCA notes that the Company’s water supply source consists of Well No.2 with a safe yield of approximately 50 gallons per minute (gpm) or 72,000 gallons per day (gpd).³¹⁶ OCA indicates that a second well, Well No.1, is no longer usable because the well hole collapsed.³¹⁷ While Twin Lakes agreed to replace Well No.1 as part of the settlement of the

308 66 Pa.C.S. § 523.

309 66 Pa.C.S. § 526(a).

310 OCA St. No. 3 at 6-7; Exhibit TLF-3.

311 2011 Settlement at ¶ 7.c.

312 2015 Settlement Petition at ¶ 7.c.2.

313 OCA St. No. 3 at 4.

314 *See* OCA St. No. 3 at 7.

315 *Id.*

316 OCA St. 3 at 2.

317 *Id.*

2015 base rate case, the Company has failed to replace the well or replace the mains also agreed to in the 2015 settlement.³¹⁸ (OCA MB at 40).

OCA argues that the water supply situation presents a clear, immediate problem regarding the reliability of the water supply due to the overpumping of Well No.2 because of Well No.1 being permanently out of service. OCA asserts that Well No.2 is in a precarious situation and will need to be rehabilitated after Well No.1 is replaced. OCA maintains that it is not reasonable for the customers to be subject to the proposed rate increase that will do nothing to resolve the water supply situation. OCA contends that Twin Lakes' customers are entitled to safe, adequate and reliable service at their current rates. OCA also argues that the absence of any back up water supply is not providing adequate service to those customers. OCA indicates that if Well No.2 were to fail, then the customers would be without any source of water that could be distributed to their homes. (OCA MB at 41-42).

b. Recommendation

While Twin Lakes indicates that it is not possible for it to undertake the needed improvement to the system without the full proposed rate increase in this matter, there is evidence in the record which establishes the Company has failed to take advantage of rate increase related to the 2015 Settlement. Twin Lakes did not replace Well No.1 and Phase 2 of the 2015 Settlement rates did not go into effect. In addition, Twin Lakes did not replace the specific mains required to trigger Phase 3 of the 2015 Settlement rates. Twin Lakes acknowledges that the system needs to be replaced but has failed to take any measure to improve the conditions. While there has been some replacement of mains in the system, it clearly has not improved the unaccounted-for water levels which exceed 80% in some years. The Company should not be rewarded for its inaction in this case. The customers of Twin Lakes are in danger of having no water if the only well in the system fails. Further, the lead levels in the system have triggered DEP action and the parties have addressed this through Stipulation. The Company has

³¹⁸ Joint Petition for Settlement of Rate Investigation (2015 Settlement) at ¶ 7.b. *Pa. Pub. Util. Comm'n v. Twin Lakes Utilities*, Docket No. R-2015-2506337 Recommended Decision at 27 (May 9, 2016). See also OCA St. 3 at 3-4; Exhibit TLF-1.

failed to provide adequate and reasonable service in the matter in accordance with Section 1501 of the Public Utility Code. As such, as has been noted above, Twin Lakes is not entitled to its full requested rate increase.

2. Affordability of Rates

a. Party Positions

Twin Lakes argues that the circumstances of this rate proceeding highlight the classic small water company challenges faced by many similar-sized utilities across the nation. Twin Lakes states that with significant capital and operating costs required to sustain service for a relatively small customer base, the issue of affordability takes on increased prominence. Twin Lakes notes that affordability is a subjective word which the Company acknowledges is a social concern. However, Twin Lakes asserts that the regulatory compact requires that the true cost of service be borne by the customers receiving the service, regardless of the size of the customer base.³¹⁹ Twin Lakes maintains that the concept of affordability is not contemplated in the regulatory compact. Twin Lakes contends that Middlesex has gone beyond what should be reasonably expected of any investor in terms of its ongoing commitment to fund the capital and operating needs of a utility that has no ability to remain viable on its own. Twin Lakes indicates that without an acceptable outcome from this proceeding, Middlesex will no longer be able to make a financial commitment to meeting the Company's capital and operating needs.³²⁰ (TLU MB at 15).

I&E notes that it addressed the issue of affordability in its discussion regarding the rate of return. (I&E MB at 67).

OCA argues that the affordability of rates for the customers is an important consideration in this proceeding. OCA asserts that the Company's proposed rates violate

³¹⁹ See TLU St. No. 1 at 6.

³²⁰ Twin Lakes also questions the qualifications of OCA's witness, Ms. Sherwood, to address issues related to the affordability of rates. I am not persuaded by this argument.

ratemaking principles because increasing rates as the Company has proposed, will result in rate shock that violates the important ratemaking principle of gradualism and it is likely that the average \$155 monthly increase may not be affordable for some customers.³²¹ The following chart³²² shows the impact of the Company’s proposal: (OCA MB at 45).

	Current	Company Proposed
Customer Charge per month	\$60.41	\$158.61
Volumetric Charge per 1,000 gallons	\$14.60	\$38.33
Total monthly charges for customer using 2,400 gallons per month	\$95	\$251
Total annual charges for customer using 2,400 gallons per month	\$1,140	\$3,012
Total monthly charges for customer using 5,000 gallons per month	\$133	\$350
Total annual charges for customer using 5,000 gallons per month	\$1,601	\$4,203

OCA notes that the rate shock would be present not only at the Company’s proposal but also at OCA’s calculated revenue requirement, with the full cost of capital calculated by Mr. Rothschild and at the zero return on equity to reflect inadequate service, as recommended by OCA, as shown on the following table³²³: (OCA MB at 45-46).

³²¹ OCA St. No. 1 at 12.

³²² Compiled from data in OCA St. No. 1 at 10-12.

³²³ Compiled from Exh. SLS-12 C; OCA St. No. 1 at 12-14.

	Current	At OCA Full Revenue Requirement³²⁴	At OCA Revenue Requirement Reflecting Inadequate Service³²⁵
Total monthly charges for customer using 2,400 gallons per month	\$95	\$210	\$170
Total annual charges for customer using 2,400 gallons per month	\$1,145	\$2,520	\$2,042
Total monthly charges for customer using 5,000 gallons per month	\$133	\$295	\$239
Total annual charges for customer using 5,000 gallons per month	\$1,601	\$3,540	\$2,863

Ms. Sherwood also reviewed Twin Lakes’ proposed rates in comparison to the rates of the major water utilities in the Commonwealth and found that the proposed rates are “significantly in excess of the rates assessed by the major water utilities in the Commonwealth.”³²⁶ The chart³²⁷ is reproduced below: (OCA MB at 47).

³²⁴ To determine the rate impact, OCA utilized the Company’s allocation of revenue between metered rate and flat/fixed rate, total annual usage, and number of customers provided on Additional Supporting Information No. 2 – Billing Analysis for Proposed Rates included in the Company’s original filing. To calculate the bill impact based upon OCA’s Full Revenue Requirement, the revenue requirement of \$287,008, provided on Schedule SLS-12 C line 10, was allocated with 63% to flat/fixed rate and 37% to metered rate. To determine the flat/fixed rate, the allocation of \$180,815 is divided by 114 customers and by 12 monthly bills to determine the monthly fixed rate of \$132.17 per customer. To determine the metered rate, the allocation of \$106,193 is divided by the total annual usage of 3,262.9 thousand gallons to determine the volumetric rate of \$32.55 per thousand gallons.

³²⁵ OCA noted that to determine the bill impact for the OCA Revenue Requirement Reflecting Inadequate Service, the revenue would be \$232,202 (reflected on Schedule SLS-1 C line 6). Using the Company’s allocation between flat and metered rates, \$146,287 is allocated to the flat/fixed rate and \$85,915 is allocated to metered rate. When the flat rate revenue allocation is divided by the 114 customers and 12 monthly bills, the flat/fixed rate is \$106.94 per customer per month. For metered rate, the \$85,915 is divided by the total annual usage of 3,262.9 thousand gallons, results in a volumetric rate of \$26.33 per thousand gallons.

³²⁶ OCA St. No. 1 at 11.

³²⁷ *Id.*

<p style="text-align: center;">Table 1 Comparison of Residential Rates of Major Pennsylvania Water Utilities</p>		
Company	Monthly Customer Charge	Consumption Charge (1,000 gallons)
Aqua Pennsylvania, Inc. ^[1]	\$18.00	\$10.949 ^[2] /12.608 ^[3]
Pennsylvania American Water Company	16.50	12.217
Suez Water Pennsylvania, Inc.	14.50	9.0510
York Water Company	16.25	5.012 ^[4] /8.111 ^[5]
Twin Lakes Utilities, Inc. (proposed)	158.61	38.33
<p>[1] Rate Zone 1. [2] Up to 2,000 gallons. [3] Over 2,000 gallons. [4] Gravity System. [5] Repumped System.</p>		

OCA argues that under the Public Utility Code, rates must be set at just and reasonable levels.³²⁸ OCA asserts that if rates are too high, then not only does that violate the basic principles of rate setting, it will result in customers not being able to afford water utility service.³²⁹ OCA’s witness, Ms. Sherwood, found that the proposed rate of \$250 per month for a customer using 2,400 gallons per month would be more than 7% of the median household income (MHI) in Shohola Township.³³⁰ OCA states that its proposed revenue requirement, at full rate of return, the resulting rates would be at 7% of MHI for Shohola Township. At OCA’s revenue requirement reflecting a zero return on equity, the rates would represent 5.5% of MHI in Shohola Township. OCA argues there is no resulting level of revenue requirement that would set rates that are anywhere near the normal ranges of affordability. (OCA MB at 48).

OCA indicates that the concerns of gradualism, rate shock and affordability do not go away after this case. OCA notes that Twin Lakes is projecting more than \$3,100,000 of capital improvements that are not reflected in this rate case.³³¹ OCA also states that the

³²⁸ 66 Pa.C.S. § 1301.

³²⁹ OCA St. 1 at 13-15.

³³⁰ OCA notes that Ms. Sherwood reviewed the MHI indicators as used by the United States Environmental Protection Agency (EPA) and the Pennsylvania Infrastructure Investment Authority (Pennvest). She found that EPA reported that an annual bill of greater than 2% of MHI “may be difficult for the consumer.” OCA St. No. 1 at 13, note 17. Pennvest calculates affordable rates as being between 1% and 2% of Adjusted MHI (adjusted for inflation) based on the socioeconomic condition of the community. *Id.*

³³¹ OCA St. No. 1 at 14.

Company's Pennvest filing requested \$4,825,000 of capital improvements.³³² OCA maintains using the more conservative number of \$3,100,000 its witness, Ms. Sherwood, calculated that rate base would increase by 331% and increase Twin Lakes' cost of service by an additional 173%, using OCA's recommended return on equity. OCA submits that the affordability of the rates resulting from this case should be considered, as well as considering the long-term rate implications, when the Commission makes its determination in this proceeding. Lastly, OCA argues that the situation requires finding a long-term solution and the initiation of a Section 529 proceeding.³³³ (OCA MB at 48-49).

b. Recommendation

There are concerns with the affordability of rate in this case. Both I&E and OCA addressed the issue. While Twin Lakes acknowledges that affordability of rates is a social concern, it indicates that this is part of the problem with small water utilities. It is important that the utility has sufficient revenues in order to undertake improvement projects, but also important to consider the rates that customer will experience. The Public Utility Code requires that rates be set at a just and reasonable level. *See* 66 Pa.C.S. § 1301. As has been noted in the Rate of Return section of this Decision, it is recommended that the Company be denied the full requested rate increase. Part of the reason for this is the concerns with affordability of rates for customers. Rate shock would be present not only at the Company's proposal but also with I&E and OCA's calculated revenue requirement. If rates are too high, then not only does that violate the basic principles of rate setting, it will result in customers not being able to afford water utility service. As such, it is recommended that the Commission adopt the recommendation of I&E in terms of the revenue increase in this matter.

³³² *Id.* at n.18.

³³³ 66 Pa.C.S. § 529. OCA St. No. 1 at 14-15.

H. Rate Structure and Rate Design

1. Party Positions

Twin Lakes states that traditional ratemaking has involved the following three discrete, logical steps:

Step 1. Identify costs and the utility's revenue requirements;

Step 2. Allocate costs to types of water usage; and

Step 3. Design rates for each type of water usage to recover costs from customers.

(TLU MB at 15).

Twin Lakes argues that rate design is the process by which revenues allowed as a result of a rate proceeding are allocated to the various customer classes in a just, reasonable and nondiscriminatory manner based on the costs incurred by the utility to serve the class. Twin Lakes notes that public utility rates should enable the utility to recover its cost of providing service and should allocate this cost among the utility's customers.³³⁴ Twin Lakes' witness, Ms. Tilley, recommends that the Company's proposed rate increase should be applied to existing rates as an across-the-board percentage increase to be applied to the fixed and volumetric rates.³³⁵ However, Twin Lakes does not object to I&E witness Esysan Sakaya's recommendation that, in the event the Commission grants Twin Lakes less than its full rate request, each proposed rate be reduced proportionally so that each rate receives the same percentage increase. (TLU MB at 15).

I&E argues that as its witness Mr. Sakaya recommended that, if less than the full increase is granted, the rates should be reduced proportionally so that each rate receives the same percentage increase.³³⁶ I&E notes that in this proceeding there was no cost of service study

³³⁴ *Pa. Pub. Util. Comm'n v. West Penn Power Company*, 73 Pa. P.U.C. 454, 119 PUR4th 110 (1990).

³³⁵ TLU Statement No. 2 at 7.

³³⁶ I&E St. No. 3, p. 26.

presented on which to base the rates. Therefore, I&E asserts that utilizing a proportional scale back will ensure that the already high customer charge is not being increased disproportionately more than the usage rate, and is the most reasonable method to determine rates should the Commission grant less than the full increase. (I&E MB at 68).

OCA has not made any recommendations regarding rate structure. (OCA MB at 50).

2. Recommendation

Based on the fact that this Decision recommends a rate increase that is less than the full amount requested by the Company, it is recommended that the Commission adopt I&E's position that the rates should be scaled back proportionally in this matter. There are only residential customers served by Twin Lakes. The proportional scale back of rates will ensure that the customer charge is not increased disproportionately as compared to the usage rate.

VII. CONCLUSIONS OF LAW

1. The Commission has jurisdiction over the subject matter and parties in this case. 66 Pa.C.S. § 1308(d).

2. Twin Lakes Utilities, Inc. bears the burden of proving by a preponderance of the evidence the justness and reasonableness of every element of its requested rate increase and that it provides adequate water service to its customers. 66 Pa.C.S. §§ 315(a), 332(a), and 1501.

3. The rates, terms and conditions contained in Twin Lakes Utilities Inc.'s base rate increase filing of July 23, 2019, as modified by this Recommended Decision, are just, reasonable and in the public interest and are in accord with the rules and Regulations of the Commission and the provisions of the Public Utility Code. *See* 66 Pa.C.S. § 315(a); 52 Pa.Code §§ 69.2703(a), (b).

4. The burden of proof in a ratemaking proceeding is on the public utility. See 66 Pa.C.S. § 315(a); *Lower Frederick Twp. v. Pa. Pub. Util. Comm'n.*, 48 Pa. Commw. 222, 226-27, 409 A.2d 505, 507 (1980) (citations omitted). See also, *Brockway Glass v. Pa. Pub. Util. Comm'n.*, 63 Pa. Commw. 238, 437 A.2d 1067 (1981).

5. A party proposing an adjustment to a ratemaking claim bears the burden of presenting some evidence or analysis tending to demonstrate the reasonableness of the adjustment. See, e.g., *Pa. Pub. Util. Comm'n v. PECO Energy Co.*, Docket No. R-891364, 1990 Pa. PUC LEXIS 155 (Order entered May 16, 1990); *Pa. Pub. Util. Comm'n v. Breezewood Telephone Co.*, Docket No. R-901666, 1991 Pa. PUC LEXIS 45 (Order entered January 31, 1991).

6. Every public utility shall furnish and maintain adequate, efficient, safe, and reasonable service and facilities, and shall make all such repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public. 66 Pa.C.S. § 1501.

7. In exchange for customers paying rates for utility service, Twin Lakes Utilities, Inc. is obligated to provide safe, adequate, and reasonable service. 66 Pa. C.S. § 1501.

8. The Commission has the authority to deny a rate increase due to inadequate service. 66 Pa.C.S. § 526(a).

9. Twin Lakes Utilities, Inc. has not met its burden of proving by a preponderance of the evidence every element of its requested rate increase. 66 Pa.C.S. §§ 315(a), 332(a).

VIII. ORDER

THEREFORE,

IT IS RECOMMENDED:

1. That Twin Lakes Utilities, Inc. shall not place into effect the rates contained in its Tariff Water – Pa. P.U.C. No. 4, Supplement No. 8, the same having been found to be unjust, unreasonable, and therefore unlawful.

2. That Twin Lakes Utilities, Inc. shall be permitted to increase annual operating revenues in the total amount of \$111,776.00 for total allowable annual operating revenues of \$245,290.00 consistent with the recommendations of this Recommended Decision as set forth in the tables contained in Appendix A.

3. That upon entry of the Commission’s Final Order approving the Recommended Decision, Twin Lakes Utilities, Inc. shall be permitted to file tariff supplements in the form set forth in Appendix A of this Decision, to become effective upon at least one day’s notice.

4. That the Bureau of Investigation and Enforcement’s proposals are accepted and adopted through this Recommended Decision.

5. That the Office of Consumer Advocate’s proposals are denied.

6. That the following Complaints be sustained consistent with this Recommended Decision:

Irene Blanchard	:	C-2019-3011969
Jeffrey Shatt	:	C-2019-3012087
Ciro Matrecano	:	C-2019-3012169

Neil and Kathleen Joyce	:	C-2019-3012221
Lisa Celenza	:	C-2019-3012272
Tami DeFrancesco	:	C-2019-3012332
Virginia Pfeiffer	:	C-2019-3012399
Charles Dellert	:	C-2019-3012487
James Gelardi	:	C-2019-3012659
Frank and Shuko Kashimba	:	C-2019-3012667

7. That upon acceptance and approval by the Commission of the tariff supplements and proof of revenues filed by Twin Lakes Utilities, Inc. consistent with this Order, this proceeding shall be marked closed.

Date: February 18, 2020

/s/
Marta Guhl
Administrative Law Judge

APPENDIX A

TABLE I
Twin Lakes Utilities, Inc.
INCOME SUMMARY
R-2019-3010958

	Pro Forma Present Rates (1)	Company Adjustments (1)	Pro Forma Present Rates (Revised) (1)	ALJ Adjustments	ALJ Pro Forma Present Rates	ALJ Revenue Increase	Total Allowable Revenues
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	133,514	0	133,514	0	133,514	111,776	245,290
Expenses:							
O & M Expense	107,030	56,725	163,755	(80,895)	82,860	0	82,860
Depreciation	30,368	766	31,134	0	31,134	0	31,134
Taxes, Other	2,178	0	2,178	0	2,178	698	2,876
Income Taxes:							
State	(7,696)	(3,225)	(10,921)	8,162	(2,759)	11,097	8,338
Federal	(24,281)	3,617	(20,664)	15,445	(5,219)	20,996	15,777
Total Expenses	107,601	57,882	165,482	(57,288)	108,194	32,791	140,985
Net Inc. Available for Return	25,914	(57,882)	(31,968)	57,288	25,320	78,987	104,307
Rate Base	1,285,777	21,933	1,307,710	(23,140)	1,284,570		1,284,570
Rate of Return	2.02%		-2.44%		1.97%		8.12000000%
(1) Company Main Brief (Addendum)							

TABLE I(A)
Twin Lakes Utilities, Inc.
RATE OF RETURN
R-2019-3010958

Company Main Brief (Addendum)

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			3.50000000%		
Long-term Debt	50.00%	7.00%	3.50000000%		3.50%
Short-term Debt	0.00%	0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	50.00%	11.00%	5.50000000%	0.711079	7.73%
	100.00%		9.00000000%		11.23%
Pre-Tax Interest Coverage	3.21				
After-Tax Interest Coverage	2.57				

ALJ Recommendation

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			3.50000000%		
Long-term Debt	50.00%	7.00%	3.50000000%		3.50%
Short-term Debt	0.00%	0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	50.00%	9.23%	4.62000000%	0.711079	6.50%
	100.00%		8.12000000%		10.00%
Pre-Tax Interest Coverage	2.86				
After-Tax Interest Coverage	2.32				

TABLE I(B)
Twin Lakes Utilities, Inc.
REVENUE FACTOR
R-2019-3010958

100%				1.00000000
Less:				
Uncollectible Accounts Factor				0.00000000
PUC, OCA, OSBA Assessment Factors				0.00624194
Gross Receipts Tax				0.00000000
Other Tax Factors				0.00000000
				0.99375806
State Income Tax Rate (*)				0.09990000
Effective State Income Tax Rate				0.09930000
Factor After Local and State Taxes				0.89445806
Federal Income Tax Rate (*)				0.21000000
Effective Federal Income Tax Rate				0.18780000
Revenue Factor (100% - Effective Tax Rates)				0.70665806

TABLE II
Twin Lakes Utilities, Inc.
SUMMARY OF ADJUSTMENTS
R-2019-3010958

Adjustment	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	\$	\$	\$	\$	\$	\$	\$
RATE BASE:							
CWC O&M (Table VI)	(4,752)						
Acquisition Adjustment	(18,388)						
REVENUES:							
EXPENSES:							
Rate Case Expense			(30,871)			3,084	5,835
Maintenance Supplies			(5,010)			500	947
Purchased Power			(7,568) (1)			756	1,431
Bad Debt Expense			(16,033)			1,602	3,031
Chemicals			(1,823) (2)			182	345
Amortization Expense			3,572			(357)	(675)
State Income Taxes			(4,042)			404	764
Federal Income Tax			(19,119)			1,910	3,614
TAXES:							
Interest Synchronization (Table III)						81	153
TOTALS	(23,140)	0	(80,895)	0	0	8,162	15,445

(1) Purchased power is first reduced by \$3,004 to incorporate IBE's price to compare adjustment. IBE St. No. 1, p. 13. Purchased power is then reduced by the adjusted incremental purchased power cost ((\$7,52016,480,250 gal/10,004,450 gal=\$4,568) to incorporate IBE's Unaccounted for Water Adjustment. IBE St. No. 3, p. 9.
(2) Chemicals is reduced by the incremental chemicals cost ((\$3,00316,480,250 gal/10,004,450 gal=\$1,823) to incorporate IBE's Unaccounted for Water Adjustment. IBE St. No. 3, p. 9.

TABLE III
Twin Lakes Utilities, Inc.
INTEREST SYNCHRONIZATION
R-2019-3010958

	Amount
	\$
Company Rate Base Claim	1,307,710
ALJ Rate Base Adjustments	(23,140)
ALJ Rate Base	1,284,570
Weighted Cost of Debt	3.50000%
ALJ Interest Expense	44,960
Company Claim (1)	45,770
Total ALJ Adjustment	810
Company Adjustment	0
Net ALJ Interest Adjustment	810
State Income Tax Rate	9.99%
State Income Tax Adjustment	81
Net ALJ Interest Adjustment	810
State Income Tax Adjustment	81
Net ALJ Adjustment for Federal Income Tax	729
Federal Income Tax Rate	21.00%
Federal Income Tax Adjustment	153
(1) Company Main Brief (Addendum)	

TABLE IV
Twin Lakes Utilities, Inc.
CASH WORKING CAPITAL - Interest and Dividends
R-2019-3010958

Accrued Interest				Preferred Stock Dividends	
	Long-Term Debt		Short-Term Debt		
Company Rate Base Claim	\$1,307,710		\$1,307,710	Company Rate Base Claim	\$1,307,710
ALJ Rate Base Adjustments	(\$23,140)		(\$23,140)	ALJ Rate Base Adjustments	(\$23,140)
ALJ Rate Base	\$1,284,570		\$1,284,570	ALJ Rate Base	\$1,284,570
Weighted Cost of Debt	3.50000000%		0.00%	Weighted Cost Pref. Stock	0.00000000%
ALJ Annual Interest Expense	\$44,960		\$0	ALJ Preferred Dividends	\$0
Average Revenue Lag Days	0.0		0.0	Average Revenue Lag Days	0.0
Average Expense Lag Days	0.0		0.0	Average Expense Lag Days	0.0
Net Lag Days	0.0		0.0	Net Lag Days	0.0
Working Capital Adjustment					
ALJ Daily Interest Expense	\$123		\$0	ALJ Daily Dividends	\$0
Net Lag Days	0.0		0.0	Net Lag Days	0.0
ALJ Working Capital	\$0		\$0		\$0
Company Claim	\$0		\$0	Company Claim	\$0
ALJ Adjustment	\$0		\$0		\$0
Total Interest & Dividend Adj.	\$0				

TABLE V
Twin Lakes Utilities, Inc.
CASH WORKING CAPITAL -TAXES
R-2019-3010958

Description	Company Proforma Tax Expense Present Rates	ALJ Adjustments	ALJ Pro forma Tax Expense Present Rates	ALJ Allowance	ALJ Adjusted Taxes at Present Rates	Daily Expense	Net Lead/Lag Days	Accrued Tax Adjustment
PUC Assessment	\$830	\$0	\$830	\$698	\$1,528	\$4.19	0.00	\$0
Public Utility Realty	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
Capital Stock Tax	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tax	\$0	\$8,162	\$8,162	\$11,097	\$19,259	\$52.76	0.00	\$0
Federal Income Tax	\$0	\$15,445	\$15,445	\$20,996	\$36,441	\$99.84	0.00	\$0
	<u>\$830</u>	<u>\$23,607</u>	<u>\$24,437</u>	<u>\$32,791</u>	<u>\$57,228</u>			
(1) Company Main Brief (Addendum)						ALJ Allowance		0
						Company Claim (1)		0
						ALJ Adjustment		0

TABLE VI
Twin Lakes Utilities, Inc.
CASH WORKING CAPITAL – O & M EXPENSE
R-2019-3010358

Description	Company	AJJ		Lag Days	Lag Dollars
	Pro forma F.T.Y. Expense (1)	AIJ	Pro forma Expenses		
Operating Labor	\$8,023	\$0	\$8,023	0.00	\$0
Operating Supplies	\$35	\$0	\$35	0.00	\$0
Maintenance Supplies	\$9,509	(\$5,010)	\$4,499	0.00	\$0
Purchased Power	\$10,524	(\$7,569) (2)	\$2,955	0.00	\$0
Legal	\$1,001	\$0	\$1,001	0.00	\$0
Management Fees	\$26,185	\$0	\$26,185	0.00	\$0
Testing Expenses	\$8,221	\$0	\$8,221	0.00	\$0
Other Maintenance	\$15,902	\$0	\$15,902	0.00	\$0
Chemicals	\$3,003	(\$1,823) (3)	\$1,180	0.00	\$0
Insurance	\$4,925	\$0	\$4,925	0.00	\$0
Rate Case Expense	\$57,333	(\$30,871)	\$26,462	0.00	\$0
Bad Debt Expense	\$19,095	(\$19,095)	\$0	0.00	\$0
Depreciation	\$31,134	(\$31,134)	\$0	0.00	\$0
	\$0	\$0	\$0	0.00	\$0
	\$0	\$0	\$0	0.00	\$0
	\$0	\$0	\$0	0.00	\$0
	<u>\$194,890</u>	<u>(\$95,502)</u>	<u>\$99,388</u>	<u>0.00</u>	<u>\$0</u>
AJJ Average Revenue Lag	0.0				
Less: AJJ Avg. Expense Lag	0.0				
Net Difference	0.0	Days			
AJJ Pro forma O & M Expense per Day	\$272				
AJJ CWC for O & M (4)	\$12,423				
Less: Company Claim (1)	\$17,175				
AJJ Adjustment	<u>(\$4,752)</u>				

(1) Company Main Brief Addendum

(2) Purchased power is first reduced by \$3,004 to incorporate I&E's Price to Compare adjustment. I&E St. No. 1, p. 13. Purchased power is then reduced by the adjusted incremental PP cost ((\$7,520/16,480,250 gal)*10,004,450 gal=\$4,565) to incorporate I&E's Unaccounted for Water Adjustment. I&E St. No. 3, p. 9.

(3) Chemicals is reduced by the incremental chemicals cost ((\$3,003/16,480,250 gal)*10,004,450 gal=\$1,823) to incorporate I&E's Unaccounted for Water Adjustment. I&E St. No. 3, p. 9.

(4) Used one-eighth method (\$99,388/8 = \$12,423).