COMMONWEALTH OF PENNSYLVANIA

OFFICE OF CONSUMER ADVOCATE
555 Walnut Street, 5th Floor, Forum Place
Harrisburg, Pennsylvania 17101-1923
(717) 783-5048
800-684-6560

FAX (717) 783-7152
consumer@paoca.org

August 11, 2017

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

Re: Application of Aqua Pennsylvania Wastewater, Inc. pursuant to Sections 1102 and 1329 of the Public Utility Code for Approval of its Acquisition of the Wastewater System Assets of Limerick Township
Docket No. A-2017-2605434

Dear Secretary Chiavetta:

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

Copies have been served per the attached Certificate of Service.

Respectfully submitted,

/s/ Christine Maloni Hoover
Christine Maloni Hoover
Senior Assistant Consumer Advocate
PA Attorney I.D. # 50026
E-Mail: CHoover@paoca.org

Attachment
cc: Honorable Steven A. Haas
Certificate of Service
*238254

CERTIFICATE OF SERVICE

Re: Application of Aqua Pennsylvania Wastewater, Inc. pursuant to Sections 1102 and 1329 of the Public Utility Code for Approval of the Acquisition by Aqua of the Wastewater System Assets of Limerick Township	:	Docket No. A-2017-2605434

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

Dated this 11th day of August, 2017.

SERVICE BY E-MAIL & FIRST CLASS MAIL, POSTAGE PREPAID

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

Thomas S. Wyatt, Esquire
Dilworth Paxson LLP
1500 Market Street
Suite 3500E
Philadelphia, PA 19102

Thomas T. Niesen, Esquire
Thomas, Niesen, & Thomas, LLC
212 Locust Street, Suite 600
Harrisburg, PA 17101

Alex Stahl, Esquire
Aqua America
762 West Lancaster Avenue
Bryn Mawr, PA 19010

/s/ Erin L. Gannon
Erin L. Gannon
Senior Assistant Consumer Advocate
PA Attorney I.D. #83487
E-mail: EGannon@paoca.org

Christine Maloni Hoover
Senior Assistant Consumer Advocate
PA Attorney I.D. #50026
E-mail: CHoover@paoca.org

Counsel for Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101-1923
Phone: (717)783-5048
Fax: (717)783-7152
Dated: August 11, 2017

*238255

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application of Aqua Pennsylvania Wastewater, Inc. Pursuant to Sections 1102 and 1329 of the Public Utility Code for Approval of its Acquisition of the Wastewater System Assets of Limerick Township	: : : : : :	Docket No. A-2017-2605434

MAIN BRIEF OF THE OFFICE OF CONSUMER ADVOCATE

Christine Maloni Hoover
Senior Assistant Consumer Advocate
PA Attorney I.D. # 50026
E-Mail: CHoover@paoca.org

Erin L. Gannon
Senior Assistant Consumer Advocate
PA Attorney I.D. # 83487
E-Mail: EGannon@paoca.org

Counsel for:
Tanya J. McCloskey
Acting Consumer Advocate

Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101-1923
Phone: (717) 783-5048
Fax: (717) 783-7152

Dated: August 11, 2017

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Page(s)

Cases

Administrative Decisions

Constitution

Statutes

Regulations

I. INTRODUCTION

A. Procedural History

On December 15, 2016, the Applicant, Aqua Pennsylvania Wastewater, Inc. (Aqua), filed an application with the Pennsylvania Public Utility Commission (Commission), under Sections 1102 and 1329 of the Public Utility Code, by which it is seeking approval of: (1) the acquisition, by Aqua, of the wastewater system assets of Limerick Township, (2) the right of Aqua to begin to offer, render, furnish or supply wastewater service to the public in portions of Limerick Township, Montgomery County, Pennsylvania, and (3) an order approving the acquisition that includes the ratemaking rate base of the Limerick Township wastewater system assets pursuant to Section 1329(c)(2) of the Pennsylvania Public Utility Code. This is the second case to be filed under Section 1329.

On June 9, 2017, the Office of Consumer Advocate (OCA) filed a Protest. The Bureau of Investigation and Enforcement (I&E) filed a Notice of Appearance on June 9, 2017. On June 21, 2017, Limerick Township filed a Petition to Intervene. A prehearing conference was held on June 28, 2017. On July 3, 2017, the OCA served the direct testimony of Ashley E. Everette[1] and Glenn A. Watkins.[2] The Applicant served Rebuttal testimony on July 11, 2017, and the OCA served Surrebuttal on July 18, 2017. A hearing was held on July 20-21, 2017, where the

[1] Ms. Everette is a Regulatory Analyst employed by the OCA since 2012. She received a Master's degree in Business Administration and a Bachelor's degree in Economics both from the University of Illinois. She has testified in numerous proceedings before the Commission with a primary specialty in accounting and finance issues. Ms. Everette's qualifications are attached as Appendix A to OCA Statement 1.

[2] Glenn A. Watkins is a Principal and Senior Economist with Technical Associates, Inc., an economics and financial consulting firm. Mr. Watkins conducts marginal and embedded cost of service studies, rate design, cost of capital, revenue requirement, and load forecasting studies involving numerous electric, gas, water/wastewater, and telephone utilities, and has provided expert testimony in Alabama, Arizona, Delaware, Georgia, Illinois, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Vermont, Virginia, South Carolina, Washington, and West Virginia. Mr. Watkins obtained his B.S. in economics and M.B.A. from the Virginia Commonwealth University in 1982 and 1988, respectively. Mr. Watkins' curriculum vitae is attached to his Direct Testimony (OCA St. 2) as Schedule GAW-1.

Company's witnesses provided oral rejoinder testimony and testimony was admitted into the record. Pursuant to the schedule, the OCA files this Main Brief in support of its position that the average appraisal amount is overstated and that the Applicant has failed to meet the legal requirements of Section 1102 absent certain conditions as described below.

B. Overview of the Proposed Transaction

Aqua proposes to acquire the sewer assets of the Limerick Township for $75.1 million. Aqua has chosen to file its application under Section 1329 in addition to Section 1102 of the Public Utility Code. Aqua requests that the purchase price of $75.1 million be approved for ratemaking purposes as it is lower than the average of the two appraisals provided with its application.[3] See 66 Pa. C.S. § 1329(c) (2). In addition, Aqua seeks approval of the Asset Purchase Agreement (APA) with Limerick Township. Aqua Exh. C (hereinafter cited as "APA"); Tr. 23. In the APA, Aqua has agreed to keep rates frozen for Limerick customers for no less than three years after closing. APA, ¶ 7.05(b).

[3] Aqua has also agreed to expend $400,000 to assure the completion of Pending Development Plans to the Limerick system, by Limerick Township. Id., ¶¶3.01(d), 7.10.

II. BURDEN OF PROOF

Under Sections 315(c) and 332 of the Public Utility Code, the burden of proof rests with the Applicant. Section 332 states:

> (a) Burden of proof. - Except as may be otherwise provided in section 315 (relating to burden of proof) or other provisions of this part or other relevant statute, the proponent of a rule or order has the burden of proof.

66 Pa. C.S. § 332. Section 315(c) places the burden of proof upon the Applicant. It states that:

> In any proceeding upon the motion of the commission, involving the service or facilities of any public utility, the burden of proof to show that the service and facilities involved are adequate, efficient, safe, and reasonable shall be upon the public utility.

66 Pa. C.S. § 315(c). Therefore, it is the Applicant that has the burden of demonstrating by a preponderance of the evidence that the proposed acquisition by Aqua meets the requirements of Pennsylvania law. See Lansberry v. Pa. P.U.C., 578 A.2d 600, 602 (Pa. Commw. 1990) (Lansberry). More precisely, the Applicant's case must be more convincing than the case presented by the challenger. Se-Ling Hosiery, Inc. v. Margulies, 413 A.2d 845 (1950).

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. P.U.C., 461 A.2d 1234, 1236 (Pa. 1983). 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.

Finally, the Applicant has the burden of proving that the acquisition will "affirmatively promote the 'service, accommodation, convenience, or safety of the public' in some substantial way." City of York v. Pa. P.U.C., 295 A.2d 825, 828 (1972) (City of York).

III. SUMMARY OF ARGUMENT

The proposed acquisition of the Limerick wastewater system by Aqua was filed under Sections 1102 and 1329 of the Public Utility Code. 66 Pa. C.S. §§ 1102, 1329. Aqua has failed to show that the transaction would provide the affirmative benefits required by Section 1102 because the claimed benefits of the transaction do not outweigh the substantial adverse impacts for Aqua's existing wastewater customers (and, potentially, its water customers) and the Limerick customers after the third year of Aqua ownership. Based on Aqua's schedules, while the number of wastewater customers would increase by 27%, the average rate base cost of Aqua's wastewater customers would increase by <u>60%</u> per customer. The impact of the rate base determination, depreciation expense, and operation and maintenance expense is more than $6 million per year for existing Aqua customers. Moreover, assuming the costs are applied only to Aqua's wastewater customers, the Company anticipates increasing rates by 52%. For all of these reasons and as discussed further herein, the OCA recommends that the Commission deny the transaction as proposed.

With regard to Section 1329, it should be emphasized that the statutory appraisal process is not simply a formulaic mathematical exercise. Review of the appraisals provided by Aqua and Limerick shows that there are judgments made in each type of analysis as well as in how much weight is to be given to each approach. The appraisals submitted by Aqua for the Seller and Buyer must be revised to reflect a number of flaws identified by the OCA. As a result of the corrections, the average of the two appraisals is less than the purchase price of $75.1 million. The appropriate amount for ratemaking purposes should be $60,976,180.

In addition to the necessary adjustments to ratemaking rate base, the OCA has identified several conditions that should be imposed if the Commission approves the proposed transaction.

First, Aqua has proposed to split the ratemaking rate base into two parts so that a portion is treated as a regulatory asset and moved into rate base when Aqua files future base rate cases. The regulatory asset does not depreciate until Aqua amortizes it into rate base. The OCA submits that the regulatory asset should not be approved in this case; a base rate case is the appropriate context to evaluate the harm or benefit to ratepayers. The OCA recommends that, if Aqua proposes the regulatory asset treatment in its next base rate case, the Commission should require Aqua to provide a net present value analysis showing the impact on ratepayers of using a regulatory asset as compared to the impact on ratepayers of depreciating the total rate base.

Second, the Asset Purchase Agreement (APA) contains a provision that freezes rates for Limerick customers for three years, which ensures that increases that would otherwise be borne in whole or in part by Township customers will instead be shifted to Aqua's other wastewater and possibly water customers for at least three years following closing. Aqua projects, however, that its existing customers will continue bearing additional costs caused by the acquisition for 10 to 15 years; and even that is dependent on the Limerick customers' rates increasing by a minimum of 85% in year four. As discussed herein, it should be a condition of the approval that the Commission retains the authority to allocate revenues, if appropriate, to the Limerick Township customers in a manner other than that set forth in the APA. Third, the Commission's approval should be conditioned on Aqua and its shareholders bearing all risk of a shortfall between the revenues Aqua is permitted to recover under its agreement with Limerick and the costs that Aqua will incur with respect to the acquired system; the shortfall should not be spread to other ratepayers.

IV. ARGUMENT

A. Section 1329 Valuation

1. Introduction

Section 1329 was enacted in April 2016 and became effective on June 29, 2016. Act 2016-12 (HB 1326). Section 1329 provides, *inter alia*, that when a regulated water or wastewater utility acquires a municipal water or wastewater provider, the regulated utility can ask for ratemaking treatment of the acquired utility's assets using fair market value. 66 Pa. C.S. § 1329. As set forth in Section 1329(a) and (b), the process for determining the fair market value is based on two separate appraisals each using the cost, market and income approaches. 66 Pa. C.S. § 1329(a)(3). The appraisals are then averaged to determine the fair market value, 66 Pa. C.S. § 1329(g) and the lesser of the purchase price or the fair market value is what the acquiring utility will present as the proposed rate base. 66 Pa. C.S. § 1329(c)(2). This is not a simple mathematical exercise. The appraisals reflect the judgments and choices made by each utility valuation expert as will be discussed below.

In this proceeding, the average of the two appraisals presented by Aqua is $78,493,970. Aqua St. 1 at 12. Aqua has proposed a rate base of $75,100,000 (the purchase price) for the Limerick assets it will acquire because the purchase price is lower than the average of the two appraisals. Using an engineering assessment performed by Pennoni Associates, Gannett Fleming performed an original cost study and found that the Limerick system has an original cost of $63,480,402, accumulated depreciation of $17,326,535, and a net book value of $46,153,867. OCA St. 1 at 3; Aqua Exh. Q at 25.

As discussed below, the OCA submits that Aqua's proposed rate base is overstated due to errors and flaws in the appraisals, and the correct rate base number is $60,976,180 under the

Section 1329 methodology. OCA St. 1 at 19-30; OCA St. 1S at 8-22; OCA St. 2 at 5-28; OCA St. 2S at 1-10.

2. Section 1329 - Legal Issues

This application is the second to be filed under both Section 1102 and Section 1329 of the Public Utility Code. 66 Pa. C.S. §§ 1102, 1329. The Commission issued an Implementation Order which looked at numerous aspects related to Section 1329, including, *inter alia,* the process for becoming a utility valuation expert, a template for the litigation schedule and many other issues. See Implementation of Section 1329 of the Public Utility Code, Docket No. M-2016-254319, Final Implementation Order at 3 (Oct. 27, 2016) (Final Implementation Order). As with any new section added to an existing statute, as the parties and the Commission become familiar with proceedings brought under the new section, issues will arise and need to be addressed. In this case, Aqua, I&E and the OCA each made Motions to Strike testimony. See Tr. 8, 67, 87, 128-29. Generally, these issues center on the procedure and timing of these cases and how Section 1329 fits in with other requirements of the Public Utility Code, such as Section 1102 and Section 1301. The rules of statutory construction require that "Every statute shall be construed, if possible, to give effect to all of its provisions." 1 Pa. C.S. § 1921.

a. Challenges to UVE Appraisals

There is a threshold disagreement as to whether any party can challenge the appraisals that are provided in the Application. In addition, the ratemaking approvals of Section 1329 have to be reconciled with the requirement of Section 1301 of the Public Utility Code, 66 Pa. C.S. § 1301, requiring each rate to be just and reasonable. Many of the same issues arose in the first Sections 1102/1329 proceeding before the Commission, in an application filed by Aqua to acquire the wastewater assets of New Garden Township. Application of Aqua Pennsylvania

Wastewater, Inc., Docket No. A-2016-2580061, Order (June 14, 2017) (New Garden). Aspects of the Commission's Order in that case, however, are pending reconsideration. New Garden, Order (July 20, 2017).

Aqua argues here that the non-applicant parties cannot challenge the appraisals that are presented to support Aqua's request to have $75.1 million approved as the ratemaking rate base in this proceeding. Tr. 87-88. The OCA submits that it would be inconsistent with the requirements of the Public Utility Code to permit Aqua to simply present a rate base number, show that the appraisers chose numbers to fill in all the blanks in the formulas, and not permit any review or challenges of those inputs. The rate impact of the request is not inconsequential. For example, to acquire the 5,434 Limerick customers, the impact of the rate base determination, depreciation expense, and operation and maintenance expense in year two is approximately $6.3 to $7.8 million per year for existing Aqua customers. See Aqua St. 1 at 14, 16, Exhs. C and D. That evidence bears on the Commission's determination whether there are affirmative benefits for existing Aqua customers under Section 1102 and whether the impacts of Aqua's requests on existing customers results in just and reasonable rates under Section 1301 of the Public Utility Code.

The OCA submits Aqua's view of Section 1329 would also violate due process. In Milesburg, the Court determined that customers are entitled to notice and opportunity to be heard before the Commission is permitted to make binding decisions likely to increase customers' rates in a subsequent rate proceeding. Barasch v. Pa. P.U.C., 119 Pa. Commw. 81, 104, 546 A.2d 1296, 1306 (1988) (Milesburg). The Court stated:

> In our view, due process requires that, before the PUC may issue a declaration approving the legality of the terms and conditions of a contract for a utility's purchase of power from a QF that includes payments for capacity, the utility's

> customers must be provided with notice of the proceedings and an opportunity to be heard to challenge the proposed action.

Id. As the determination of ratemaking rate base will impact the calculation of revenue requirement, that determination can only be made by giving due notice[4] and an opportunity to challenge the UVE appraisals.

Regarding an opportunity to be heard, the Commonwealth Court in Milesburg found that the Commission's order was an adjudication because:

> in the present case, final affirmative approval is precisely what West Penn sought, and received, from the PUC. If the commission's order is affirmed by the courts, then the propriety of the contract's capacity cost credit rate will not be subject to later challenge in a complaint proceeding before the commission under section 701; that issue will have been fully adjudicated already in these proceedings.

Milesburg, 119 Pa. Commw. at 103, 546 A.2d at 1306. An adjudication is defined as:

> Any final order, decree, decision, determination or ruling by an agency affecting personal or property rights, privileges, immunities, duties, liabilities or obligations of any or all of the parties to the proceeding in which the adjudication is made.

2 Pa. C.S. § 101. In this case, the Commission's order regarding the valuation is a final order and it affects the property interests and rights of the ratepayers. Specifically, the rates of the Aqua customers will be based in part on this final order for decades into the future. As the Commonwealth Court stated, the question is what process is due. See Milesburg, 119 Pa. Commw. at 104, 546 A.2d at 1307. Accordingly, the Commission's use of a hearing is appropriate. See Id. However, a hearing must be a meaningful opportunity to be heard, not just an opportunity for Aqua to submit its appraisals. See Barasch v. Pa. P.U.C., 130 Pa. Commw. 299, 305, 568 A.2d 276, 279 (1989) (Rivercrest) (there can be no doubt that an opportunity to be heard after due notice must be given to the affected parties before the PUC may enter an order fixing general rates.) The determination of rate base under Section 1329 may increase future

---

[4] The OCA notes that direct notice was not provided to Aqua's existing customers.

rates by as much, or more than, 52%.[5] As such, the opportunity to "challenge" and "be heard" in a Section 1329 proceeding certainly includes the submission of testimony relating to the valuation.

In further support, the OCA notes that the level of rate increase that is projected to result from the ratemaking rate base established in this proceeding would constitute a general rate increase for existing Aqua customers. 66 Pa. C.S. § 1308(d). Yet Aqua's existing wastewater customers received no notice regarding the proposed acquisition and Section 1329 proceeding. Nor did Aqua's existing water customers receive notice, although Aqua proposes to shift costs of the Limerick acquisition (Aqua St. 1 at 14, 16) to those customers. Application of Aqua Pennsylvania, Wastewater, Inc., Docket No. A-2017-2605434, Secretarial Letter (May 31, 2017) (Limerick); Limerick, Aqua Proof of Service and Publication (June 23, 2017). Unless parties have the ability to challenge the appraisals, approval of the proposed ratemaking rate base would violate the due process protections of the Constitution. U.S. Const. amend XIV, § 1.

b. Imposition of a Six-Month (Effectively Five-Month) Deadline

Another issue of statutory construction is the application of the Section 1329 six-month statutory deadline to the affirmative benefits analysis contained in Section 1102. 66 Pa. C.S. §§ 1102, 1329. While Section 1329(d) establishes a six-month statutory deadline for the Section 1329 determination, there is no language in the statute that imposes the same deadline on determinations made under any other provision of the Public Utility Code and, specifically, Section 1102, which contains no statutory deadline. Requiring the Section 1102 statutory

[5] Total operating revenues for Aqua Wastewater on its 12/31/16 income statement were $12,114,548. Assuming the costs are applied only to Aqua's wastewater customers, the estimated increase is at least 52% ($6,311,000 ÷ $12,114,548). Adding the Limerick revenues of $4,771,000 (Aqua's estimated revenues for Limerick in Year 2 after the acquisition) would mean total revenues of $16,885,548. Aqua Exh. D. The estimated increase for Limerick and existing Aqua wastewater customers is at least 37% ($6,311,000 ÷ $16,885,548)).

considerations to be completed in the expedited time frame of Section 1329(d) considerations is not consistent with the plain language of the statute. The OCA submits that Sections 1102 and 1329 could be reconciled and each given full effect, if the Commission and parties address the Section 1329 issues in the six-month time frame, followed by consideration of the Section 1102 issues.

In this proceeding, the imposition of a six-month deadline to Section 1102 and 1329 determinations, applied to the Commission's schedule for Public Meetings, required a Commission Order before November 8, 2017, or merely five months from the accepted filing date of either May 31, 2017 (Aqua's position), or June 6, 2017 (the date the Secretarial Letter was served on Aqua). This compressed the schedule by an additional four weeks. The OCA and I&E filed a Joint Petition on June 16, 2017 requesting that the Commission schedule a special meeting or move the December 7, 2017 meeting up one day.[6] Counsel for Aqua did not object to the request for an additional meeting but proposed that it be held on November 21, 2017. The Joint Petition was not ruled on by the Commission.

Until notice that the Section 1329 Application has been accepted and docketed, the OCA and other interested parties do not have the ability to protest or intervene in the case or the right to begin discovery. As a practical matter, interested parties had 33 days to issue discovery, review responses, and serve written direct testimony from the date that Aqua's filing was docketed (May 31, 2017). Hearings were held 17 days after the testimony was filed. Limerick, Scheduling Order (June 28, 2017). After noting the 33 days to investigate and develop the testimony in this case, compared to 103 days in a recent base rate case, Ms. Everette noted that

[6] In its Answer to the Joint Petition of OCA and I&E, Aqua opposed the request to have the December 7 meeting moved up one day because it was counting the accepted date as May 31, 2017, the date of the Secretarial Letter, not June 6, the date that the Secretarial letter was actually served on Aqua. Aqua Answer at 3.

the OCA's analysis reflects issues it was able to address given the limited time period for review. OCA St. 1S at 20.

As noted above, the question is what process is due. See Milesburg at 104. While the OCA met the scheduling deadlines established in this proceeding, the OCA submits that the parties were not afforded a full and meaningful opportunity to develop and present their case before the Commission. U.S. Const. amend XIV, § 1.

3. Appraisals

The appraisals were prepared by Gannett Fleming (for Aqua) and Herbert, Rowland & Grubic, Inc. (HRG) (for Limerick Township). Aqua Exh. 1 (Exhs. U and V). Neither Gannett Fleming nor HRG provided direct testimony to support the analyses. Section 1329 lists three approaches that must be used by each utility valuation expert: the cost approach, the income approach, and the market approach. 66 Pa. C.S. § 1329(a)(3). Shown below is a summary of the appraisals. Both give equal weight to the Cost, Income, and Market approaches:

Approach	
Cost Approach	$86,086,756
Income Approach	$75,204,407
Market Approach	$79,002,980
Result	$80,097,939
Gannett Fleming recommendation	$80,098,000
Cost Approach	$90,050,000
Income Approach	$77,855,000
Market Approach	$62,760,000
Result	$76,888,333
HRG recommendation	$76,890,000

OCA St. 1 at 19-20.

The results under each approach vary from $2 million to $16 million.

Approach	**Range of Results**	**Difference**
Cost approach	$86,086,756-$90,050,000	$3,963,244
Income approach	$75,204,407-$77,855,000	$2,650,593
Market Approach	$79,002,980-$62,760,000	$16,242,980

It is important to note that the depreciated original cost or book value as determined by Gannett Fleming, using an engineering assessment performed by Pennoni Associates, is $46,153,867. OCA St. 1 at 3; Aqua Exh. Q at 25. Even before reviewing the specifics of each consultant's analyses, it is clear that judgement is involved in the inputs used, the weighting given to each approach and the determinations. That is why two Utility Valuation Engineers (UVEs) have reached different FMV results for the Limerick system.

As such, the OCA submits that the Commission must carefully consider the flaws in the appraisal results identified in the OCA's testimony and must not approach this as a simple mathematical exercise. As discussed below, after reviewing each appraisal report, OCA witness Everette recommended four adjustments be made to HRG's cost approach results (OCA St. 1 at 24-28) and that HRG's market approach analysis be calculated using the actual number of customers and without future capital improvements (OCA St. 1 at 20-23). OCA witness Watkins corrected the calculation of income tax expense and the discount rate in the HRG discounted cash flow analysis under the Income Approach and recommended that adders for "going value" and "erosion of cash flow" be denied for all of the appraisal methodologies. OCA St. 2 at 11-18. He also recommended that no consideration be given to HRG's rate base/rate of return analysis in its Income approach. Id. at 18-22. Mr. Watkins also recommended adjustments to the termination value and discount rates used in Gannett Fleming's DCF model in the Income approach analysis. Id. at 22-29.

After incorporating those adjustments, OCA witness Everette calculated that the Gannett Fleming appraisal result would be \$72,003,612, and the HRG appraisal result would be \$48,676,875. OCA St. 1 at 29; OCA Exh. AEE-1. The recalculated average of the two appraisal results is \$60,976,180, which is what Ms. Everette recommends be used by the Commission for establishing rate base under Section 1329 rather than \$75,100,000 as proposed by Aqua. OCA St. 1S at 23; OCA Exh. AEE-1S.

a. Cost Approach

The OCA did not recommend adjustments to Gannett Fleming's Cost approach valuation. As such, the discussion in this section is limited to the Cost approach valuation conducted by Aqua witness Vicari (HRG).

i. HRG Reproduction Cost

The OCA identified two aberrations in Ms. Vicari's determination of reproduction cost under the Cost approach. Reproduction cost is derived by restating the original cost of depreciable utility plant to a current price level. Aqua Exh. R at 6. Aqua witness Vicari used the original cost from the Pennoni engineering study and used the ENR Index to calculate reproduction cost. Id. at 3, 6; OCA St. 1 at 24. She used the same methodology for all plant except for non-interceptor Collection System Mains. For that item, Ms. Vicari disregarded the ENR result and used "current costs developed from the other regional wastewater systems [specifically, Aqua]." Aqua Exh. R at 6, Sch. C; OCA St. 1 at 25.

Ms. Vicari indicates in her appraisal report that she considered the ENR results to be too low, so she found a different way to calculate the reproduction cost. Aqua Exh. R at 6. She justified this deviation by stating that the original cost amount "represent[s] expenditures made by [Limerick] and may not include the cost of mains contributed by developers." Id. In fact, the engineering study does include contributed mains. Specifically, as OCA witness Everette showed:

> Limerick's 2015 financial statement lists "about $129,000 of sewer lines" under "Capital Contributions." These contributed sewer lines are found in the Pennoni engineering study, Appendix B, asset number 15.0104, Evans Creek sanitary sewer lines in 2015, with a cost of $129,280.

OCA St. 1 at 26. Aqua witness Vicari presented no reasonable basis for treating this plant item differently to increase the overall reproduction cost. Ms. Everette explained that using an index will not reflect the exact trend of cost changes for every type of plant. By using an index that treats every type of plant the same, however, it is likely that the actual reproduction cost for some will be higher while some will be lower. Here, Ms. Vicari identified the results of one part of the analysis and applied a different calculation that inflated the overall cost appraisal.

In rebuttal, Ms. Vicari alleges – without explanation or elaboration – that HRG "suspected" that the value of "a number of units" in the Pennoni engineering report were "not properly stated." Aqua St. 4R at 7; OCA St. 1S at 17-18. Her Schedule C shows that she accepts most of the results of the report, except where she adjusts the result by increasing the valuation for select plant accounts. OCA St. 1S at 18.

Ms. Vicari also alleges that the original cost of plant installed in other counties in a recent year is more accurate or representative of the reproduction cost of installing collection mains in Limerick's system over the last few decades. Aqua St. 4R at 8. There is no reasonable basis, nor is one provided by Ms. Vicari, to conclude that another utility's costs are more accurate than the costs that have been specifically reported for the Limerick system. OCA St. 1S at 18. As stated by OCA witness Everette:

> This deviation from the approach she used for the rest of the analysis simply increases her result.

Id.

Ms. Vicari's arguments are unsupported and OCA witness Everette showed that contributed facilities are reflected in the original cost number utilized by Ms. Vicari for collection mains. Id. When Aqua witness Vicari's analysis is applied uniformly to all types of plant, including collection mains, the reproduction cost is decreased by $19,195,429. OCA St. 1 at 26; OCA Exh. AEE-4 (line 14).

In addition, HRG witness Vicari included land in her reproduction cost analysis. Aqua Exh. R, Sch. C; OCA St. 1 at 26-27. OCA witness Everette explained that this inclusion is faulty for two reasons:

> First, it assumes that land would or could be "reproduced." Land is specific to its location and cannot be recreated or reproduced. Second, as stated above, Ms. Vicari used the Construction Cost Index (CCI) to calculate her trend index. The information Ms. Vicari provided on the ENR Index in response to OCA-III-14 states "The CCI can be used when labor costs are a high proportion of total costs." This is not true of land. Therefore, even if calculating a reproduction cost of land were appropriate, Ms. Vicari's own documentation indicates that this index is inappropriate for the calculation.

Id.

In her rebuttal, Ms. Vicari seems to argue that because she did not do a separate appraisal to determine the current value of the land, she should be able to use the ENR Index to determine the current value of land. Aqua St. 4R at 8-9. As Ms. Everette explained in her direct testimony, however, the ENR Index is a construction index which provides cost trends "when labor costs are a high proportion of costs." OCA St. 1 at 27 (citing the report provided by Ms. Vicari in response to OCA-III-14). Labor costs have no direct relation to the cost of land and land, unlike plant like mains, cannot be reproduced. Id.; OCA St. 1S at 19.

Recognizing that land should not be included in the reproduction cost decreases the market value by $756,159, as shown on line 15 of Exhibit AEE-4.

ii. HRG Future Capital Projects

Aqua witness Vicari added $4.5 million to her cost approach result for "Future Capital Projects." Aqua Exh. R, Sch. C. Future capital projects should not increase the appraisal value or market valuation. OCA St. 1 at 27; OCA St. 1S at 14-15. OCA witness Everette explained that these projects will be paid for by Aqua (and, ultimately, ratepayers) after the Limerick system is owned by Aqua. Accordingly, they do not add value at the time of the acquisition and should not be used to increase the cost of the acquisition, which will also be paid for by Aqua ratepayers. Id.; OCA Exh. AEE-4, line 16. In this regard, Ms. Everette stated:

> If Aqua installs capital additions, Aqua will be compensated for the capital expenditures through the traditional ratemaking methodology. To also include them in the appraisal value would allow Aqua to double recover for the same costs.
>
> From the seller's perspective, any capital expenditures planned by Aqua are an avoided cost for the Township, which is a benefit to the Township, not something for which it should be compensated. Besides the avoided cost, the post-acquisition improvements paid for by the buyer will presumably benefit the citizens of the Township through the service they receive from Aqua.

OCA St. 1S at 14.

In response, Ms. Vicari argues that the post-acquisition improvements are an "integral part of the compensation and a means of getting to an agreement of sale." Aqua St. 4R at 5. Again, Aqua will be compensated for post-acquisition improvements after the improvements are in service and put in rate base. OCA St. 1S at 14-15. Adding the cost of future improvements to the value of rate base and then adding to rate base again, when Aqua makes the improvements, would include the same costs twice, to the detriment of ratepayers.

Ms. Vicari dismisses this concern regarding double-counting, seemingly on the basis that the OCA has the option to recommend adjustments to rate base in future tariff filings. If the Commission approves the acquisition, the ratemaking rate base for the Limerick system will be decided in this application proceeding; not in the next base rate case. 66 Pa. C.S. § 1329. Therefore, errors in the valuation determining that rate base are appropriately decided in this proceeding.

iii. HRG "Going-Value" Adder

Aqua witness Vicari applied one adder to her reproduction cost approach analysis. Her "going-value" adder is $4,000,000. Aqua Exh. R at 11-12, Schs. F, G, I. Mr. Watkins explained that these provisions are not logical, contradictory to Ms. Vicari's analyses, and contain numerous double counts.[7] OCA St. 2 at 14-17; OCA St. 1S at 3-4.

Ms. Vicari claims that there are avoided costs for the buyer of an existing business that should be added to cost value of the physical facilities. Aqua Exh. R at 11-12. This value reflects the cost a new enterprise would incur to acquire a customer base, hire employees, develop an accounting and record keeping process, and develop operating and management policies and procedures. Id.

Mr. Watkins explained that this does not reflect reality. He stated:

> First, with respect to Ms. Vicari's assertion that there should be an additional value added as it relates to the avoided cost of the purchaser not being required to acquire and develop a customer base, Limerick is a regulated monopoly with a captive customer base. Residences, commercial, and industrial entities within Limerick's service area have no other choice than to obtain sewerage service from Limerick. As such, this customer base is known with certainty such that there are no costs required to attract customers to this business.

[7] Mr. Watkin's discussion of the flaws of the Going Value adder are in his testimony which focuses, *inter alia*, on HRG witness Vicari's Income Approach analysis. The flaws that he identifies are applicable in each circumstance where the Going Value adder is used by HRG witness Vicari.

> [Second, with] regard to Ms. Vicari's assertion that there should be an additional value added as it relates to the avoided cost of the purchaser not being required to hire employees, develop an accounting and record keeping process and develop operating and management policies and procedures, it must also be remembered that Aqua is a large established corporation specializing in the services provided by Limerick. As indicated in its Application, Aqua already contains the resources and expertise required to effectively and efficiently operate the Limerick Wastewater System.

OCA St. 2 at 14-15.

In rebuttal, Ms. Vicari appeared to provide a new rationale for her "going-value" adder, that it relates to an additional working capital requirement resulting from the acquisition. Aqua St. 4R at 14. This argument fails because the adder does not relate in any way to expected working capital requirements, net income or cash flows. OCA St. 2S at 4. Moreover, the adder conflicts with Ms. Vicari's own cash flow analysis because she estimated annual revenues, expenses, profits and ultimate cash flows based on her expectations of Limerick's operations. Id. As Mr. Watkins stated:

> With these expectations, she arrived at a present (market) value of what these expected future cash flows are worth. It would be a contradiction for an investor to then be willing to pay more for Limerick than what its required return is. In other words, Ms. Vicari's own analysis indicates that the Company's cash flow in the early years may be somewhat deficient. As a result, and as will be discussed below, she then adds back these deficiencies within her "going value" add-on. To illustrate the illogical and contradictory nature of Ms. Vicari's "going value" add-on, consider a hypothetical example in which an investor is considering entering into a new business enterprise.
>
> As is the case with many new businesses, cash flows and profits are expected to be minimal to non-existent in the early years with expectations that the business will grow in terms of revenues and cost efficiencies as time goes on. Clearly, an investor will consider and recognize the risks and expectations of low profitability and cash flow during the early years when valuing the project or business. It would be illogical and contradictory for this investor to then be willing to pay more for this project or business under the rationale that losses and suboptimal cash flow in the early years should be ignored. In effect, this is exactly what Ms. Vicari has done with her "going value" add-on.

OCA St. 2 at 15-16.

Mr. Watkins explained that even the calculation of the adder itself contains fundamental flaws. First, she assumes that revenue will grow at 20% per year for each year during the first five years. This assumed revenue growth is beyond any range of reasonableness for a public utility. OCA St. 2 at 16. Second, as a matter of arithmetic, Ms. Vicari subtracts her estimated fixed expenses each year (total operating expenses minus total variable expenses) from the annual incremental growth in revenue to develop what she refers to as net income. Mr. Watkins stated in response:

> This calculation defies logic and is meaningless in that on the one hand, she is considering the annual change in revenue while on the other hand, she is evaluating total annual fixed expenses.

OCA St. 2 at 16.

Third, Ms. Vicari calculates the cumulative effect of her "net incomes," *i.e.*, 2019 cumulative net income is equal to 2017 plus 2018 plus 2019 net incomes. She then discounts each cumulative "net income" and then sums each of the cumulative incomes over the course of four years. Mr. Watkins explained this error as follows:

> Again, this defies logic and results in several double counts. To illustrate, her "discounted value of net income" in 2019 is equal to the present value of that year's cumulative "net income" which includes 2017, 2018 and 2019. However, her cumulative value in 2020 already includes her "net incomes" for 2017, 2018 and 2019, which have already been discounted. In essence, the arithmetic of Ms. Vicari's calculations are to count her "net income" for 2017 four times, count her "net income" for 2018 three times, count her "net income" for 2019 two times and count her "net income" for 2020 once. Notwithstanding the illogical nature of Ms. Vicari's overall methodology, it is apparent that she has double, triple, and quadruple counted her "net incomes," which serve as the basis for her "going value."

OCA St. 2 at 16-17. Thus, in addition to the conceptual flaws with a "going-value" adder, Ms. Vicari's calculation should be rejected due to the numerous failures in the calculation of the adder itself.

For all of the reasons discussed above, the OCA submits that Ms. Vicari's adder to her cost approach for "going value" is without merit and should not be considered for any of her appraisals.

iv. Summary of OCA Cost Approach Adjustments

In summary, the OCA recommends the following adjustments to HRG's Cost approach result:

1. A reduction of $19,195,429 to determine the cost of the collection mains in the same way as the rest of the plant.

2. A reduction of $756,159 to remove the inflation of the cost of land.

3. A reduction of $4,533,000 to remove the future capital projects.

4. A reduction of $4,000,000 to remove the unsupported add on for "Going Value."

Together, these adjustments produce a result of $61,565,412 for the HRG cost approach appraisal compared to HRG's recommendation of $90,050,000. OCA Exh. AEE-4. The OCA is not recommending adjustments to Gannett Fleming's Cost Approach result in this case.

b. Income Approach

i. Introduction

OCA witness Watkins reviewed and addressed the Income approach valuations conducted by HRG and Gannett Fleming. He provided a basic summary of the Income approach:

> The conceptual framework underlying virtually all income approaches is to estimate the future cash inflows that will be generated from a business enterprise relative to the investment that will be required to procure or achieve the ability to engage in such business. The mathematics underlying this framework are relatively simple in that upfront investments are typically required to generate future cash inflows. In this regard, there is a time value of money associated with investments, cash expenses, and expected cash revenues.

. . .

> In understanding the mathematics of valuations based on discounted cash flows, it is important to understand and to the extent that future net cash flows are generally positive, the higher is the discount rate, the lower is the valuation (present value). Conversely, the lower is the discount rate, the higher is the valuation. This is because with higher discount rates, positive cash flows well into the future are worth "less" than those in earlier periods. Therefore, the higher is the discount rate, the higher is the discount given to cash flows into the future. As such, if the discount rate were set at zero, the present value of all future cash flows are equal to the nominal values in that there is no discount.

OCA St. 2 at 2-4. Mr. Watkins noted that, in practice, business valuations have additional complications in order to recognize the realities of operating and maintaining a business. Id. at 4. He stated:

> For example, investor-owned businesses typically are subject to income taxes, while municipal and publicly-owned business enterprises are not subject to income taxes. In addition to annual cash operating expenses, business enterprises require the ongoing replacement and renewal of capital investments (also known as plant in service). Furthermore, the expected life of a given investment or enterprise is often uncertain such that the modeling of a long-term investment can introduce complexities within the valuation process.

Id. at 4.

OCA witness Watkins identified several conceptual and computational errors within the HRG income approach valuation conducted on behalf of Limerick Township. OCA St. 2 at 5-25. Mr. Watkins showed that Ms. Vicari's selected discount rate of 2.50% is outside any reasonable range. Mr. Watkins also recommended that Ms. Vicari's additional rate base/rate of return analysis be given no consideration because it contains several fundamental errors and provides no value to the development of a fair market value for the Limerick system. Id. at 18-22. These corrections resulted in a more appropriate HRG income approach valuation of $36,560,000, compared to Ms. Vicari's $77,855,000. Id. at 13; OCA St. 2S at 4-5.

With respect to the income approach valuation by Gannett Fleming on behalf of Aqua, Mr. Watkins showed that Mr. Walker's 13-year model utilizing a forecasted terminal value of the firm in the thirteenth year is unreasonable. Using a more appropriate 50-year modeling approach and utilizing an appropriate discount rate, produced a valuation result of $54,735,000 as compared to Gannet Fleming's $72,204,407. OCA St. 2S at 6-7, 10; OCA St. 1 at 22-29.

ii. HRG Discounted Cash Flow Method

Aqua witness Vicari's valuation utilizing the income approach is based on the average of two methodologies: the Discounted Cash Flow and Rate Base/Rate of Return methods. Ms. Vicari's DCF analyses produced a valuation of $55,020,000, while her Rate Base/Rate of Return analyses produced a valuation of $100,690,000. Aqua Exh. R at 10-11. The average of these two methods results in her recommended valuation of $77,855,000 under the Income approach. Id. at 11.

Aqua witness Vicari's DCF analysis is contained in Schedule F of her appraisal report. Aqua Exh. R, Sch. F. Ms. Vicari selected a 20-year model in which she projected revenues, expenses, and future capital expenditures to estimate future net cash flows. OCA witness Watkins identified nine key assumptions and inputs utilized within Ms. Vicari's DCF analysis. He identified concerns with four of them:

- income tax expenses are included as a deduction from net cash flows
- a discount rate of 2.5% is utilized
- an add-on of $4.00 million is incorporated as a "provision for going value"
- a deduction of $0.30 million is incorporated as a "provision for erosion of cash flow"

OCA St. 2 at 5-6. Mr. Watkins observed that Ms. Vicari's treatment and calculation of income taxes and her selected discount rate of 2.5% do not comport with accepted financial theory or practice. OCA St. 2 at 6-7. Ms. Vicari's net add-on of $3.7 million ($4.00 million minus $0.30 million) for "going value" and "erosion of cash flow" were made outside her DCF model and are not appropriate. Id. at 6.

Because it was not clear from the HRG appraisal report, in his direct testimony, Mr. Watkins evaluated the DCF analysis from both a buyer's and seller's perspective (utilizing all of Ms. Vicari's other assumptions). In testimony filed at the rebuttal stage of the proceeding, Ms. Vicari clarified that she modeled her DCF analysis based on the perspective of a buyer (IOU, in this case). Aqua St. 4R at 16. Accordingly, Mr. Watkins responded that only his analysis from the buyer perspective should be utilized. OCA St. 2S at 4-5.

(a) <u>HRG DCF from Buyer's (Aqua) Perspective</u>

From Aqua's perspective, the Company is subject to income taxes such that the incremental income taxes associated with this acquisition should be reflected in any DCF analysis. OCA St. 2 at 11. Mr. Watkins determined, however, that Ms. Vicari's calculated income tax expense contains numerous errors. First, Ms. Vicari assumes no Federal or State income taxes for the first four years of her DCF analysis. Aqua Exh. R, Sch. F. Ms. Vicari stated that she assumed zero income taxes for this period because "for tax purposes, depreciation and tax loss carry forward will offset net income." <u>Id.</u> at 9. Mr. Watkins explained why this is incorrect. Mr. Watkins testified:

> The error in Ms. Vicari's logic is that the acquisition of Limerick by Aqua will result in only an incremental increase or decrease to Aqua's total taxable income. In other words, from Aqua's perspective, to the extent that Ms. Vicari's assumptions are indeed correct, this would simply be a reduction to Aqua's overall cash income tax expense. Similarly, to the extent that these incremental cash flows produce additional taxable income, these will result in an additional tax expense to Aqua at the incremental income tax rate.

OCA St. 2 at 11-12; <u>see</u> Tr. 80-81. Only the <u>incremental</u> tax rate is relevant from Aqua's perspective. Second, Ms. Vicari uses a tax rate of 38.9%. The incremental Pennsylvania State income tax rate is 9.99%, while the incremental Federal income tax rate is 35%. This results in a total incremental tax rate of 41.49%. OCA St. 2 at 12. Third, in developing her taxable income calculations, Ms. Vicari treated capital expenditures (beginning in the fifth year) as a tax deductible expense. Only the depreciation of these capital expenditures is tax deductible. Id. In addition, Ms. Vicari's taxable income does not include any deduction for depreciation expense or reflect a deduction for interest expense. Id.

In rebuttal, Aqua witness Vicari argues that any "modifications to taxes would also result in changing the Revenue Requirement which Mr. Watkins did not consider." Aqua St. 4R at 13-14. In response, Mr. Watkins explained that his calculated income tax expenses are based on Ms. Vicari's assumptions of revenues and expenses. OCA St. 2S at 3. Mr. Watkins simply calculated a correct level of income taxes based on her assumptions, which has nothing to do with the required "revenue requirement." Mr. Watkins also pointed out that under Ms. Vicari's DCF analysis, she assumed and incorporated significant revenue increases of 55% in the fourth year and 10% every third year thereafter. Id.

Mr. Watkins calculated each period's taxable income based on Ms. Vicari's level of revenues and cash expenses less depreciation expense associated with all assets (including those new capital investments and replacements), less interest expense based on Aqua's weighted cost of debt and net plant to generate taxable income. OCA St. 2 at 12. Taxable income was then multiplied by the appropriate incremental income tax rates. Id.; see also OCA Sch. GAW-3 (Mr. Watkins' annual income tax calculations).

With regard to the rate utilized to discount future cash flows (discount rate), Mr. Watkins explained that it is well-known and generally accepted that the appropriate discount rate is the firm's total cost of capital, which includes the weighted cost of debt and the weighted cost of equity. OCA St. 2 at 13. Ms. Vicari selected a discount rate of 2.5%, which is substantially below any level of reasonable opportunity cost confronted by Aqua in the ownership and operation of its wastewater system. Id. at 8. Mr. Watkins developed a more appropriate discount rate using Aqua's actual capital structure of 48.5% debt and 51.5% equity, Aqua's actual cost of debt of 4.5%, and a reasonable cost of equity of 9.3%.[8] Id. at 12. This results in a total cost of capital (discount rate) of 6.97%.

In rebuttal, Aqua witness Vicari objected to the 9.3% cost of equity used in Mr. Watkin's cost of capital/discount rate. Aqua St. 4R at 13. She stated that the equity rate should be the rate Aqua is currently earning from operations rather than a recently litigated filing, stating: "It has been some time since Aqua's most recent rate case. At that time a rate of return based on the revenue, expenses depreciation and rate base was authorized." Id. OCA witness Watkins rebutted this opinion, explaining that the "hurdle rate" is the opportunity cost that must be met before a project is considered, whether it be a project undertaken within a firm's operations or the acquisition of another business enterprise.[9] OCA St. 2S at 2. He summarized:

> Put simply, the appropriate discount rate is the rate at which a firm requires a return on its investment; i.e., its cost of capital. Aqua's historical or current performance (rate of return) on its existing business has absolutely nothing to do with its opportunity costs or a required hurdle rate in evaluating the risks and required return as a result of purchasing the Limerick Wastewater System. This of course would be true if Aqua was the buyer or some other IOU. Indeed, Ms. Vicari's position defies logic.

---

[8] This cost of equity is based on the Commission's recent finding on the market cost of equity of a firm with similar risks. Pa. PUC v. City of Dubois – Bureau of Water, Docket No. R-2016-2554150, Order at 97-98 (Mar. 28, 2017). The 9.3% cost of equity was found as the appropriate cost of equity before an adjustment for income taxes applicable to municipal utilities. OCA St. 2 at 13, n.12.

[9] Mr. Watkins also rebutted Ms. Vicari's argument on the basis that it is a misstatement of the Commission's action in Aqua's most recent base rate case. He stated:

> Ms. Vicari is not correct that a rate of return based on the revenue, expenses depreciation and rate base was authorized in Aqua's most recent rate case. That case was settled and the settlement approved by the Commission "is silent on the effective ROE as well as all other aspects of Aqua's capital structure"

OCA St. 2S at 2 (citing Pa. PUC v. Aqua Pennsylvania, Inc., Docket No. R-2011-2267958, Order at 26-27 (June 7, 2012).

OCA St. 2S at 2. Mr. Watkins provided a basic hypothetical to demonstrate this point. Consider a firm that has been earning inadequate returns on its existing operations such that its profitability is below that which is required to attract and maintain capital. As a result, the firm is evaluating new projects and/or acquisitions that will enable it to return to an acceptable level of profitability. In valuing various potential projects or acquisitions, this firm will not use its current deficient rate of return as its hurdle rate for these potential projects or acquisitions, but rather, its required rate of return. Id. Accordingly, the 9.3% cost of equity that Mr. Watkins utilized is the market-based cost of equity, as determined by this Commission, for a similarly situated utility. It is properly used in the calculation of the discount rate and, moreover, it produces a discount rate of 6.97%, compared to the insupportably low discount rate of 2.5% applied by Ms. Vicari.

(b) HRG Rate Base/Rate of Return Analysis

Mr. Watkins summarized the premise underlying Ms. Vicari's rate base/rate of return analysis as follows: as a public utility, Limerick's revenues will recover its "cost of service" on an annual basis. A public utility's "cost of service" is defined as cash expenses plus depreciation expense plus a return on the utility's rate base (which is equal to the utility's weighted total cost of capital). OCA St. 2 at 18. Based on this premise, Ms. Vicari calculates annual cash flows, which include a return on rate base plus non-cash expenses (depreciation), and then discounted these amounts by 2.5% to arrive at a present value of future cash flows. Id. Ms. Vicari's "resulting market value" is $96,990,000. She then adds $3.7 million to this amount to reflect her provisions for "going value" and "erosion of cash flow" to arrive at a "Total Estimated Market Value" of $100.690 million. Id. at 19.

Numerous flaws and unreasonable assumptions are embedded in Ms. Vicari's analysis. First, Ms. Vicari did not use Limerick's actual embedded original cost of rate base in her analysis but instead utilized her "Cost of Reproduction New" rate base for developing her annual cost of service-based returns. OCA St. 2 at 19; Aqua Exh. R, Sch. G. OCA witness Watkins explained that this is a fundamental error because, for regulated utilities, annual revenue requirements are established based on original cost and not the hypothetical cost of reproducing a new system at current construction costs. OCA St. 2 at 19. Second, Ms. Vicari assumed an annual rate of return of 7.5% on "Cost of Reproduction New" rate base. While Ms. Vicari states that 7.5% is based on "Aqua's estimated weighted cost of capital," she provided no support for that number. Aqua Exh. R at 11; OCA St. 2 at 20. In contrast, Mr. Watkins has demonstrated that 6.97% is an appropriate total cost of capital, which is derived from Aqua's current cost of debt and a 9.3% cost of equity applied to Aqua's actual capital structure. Id.; see note 7, supra.

Second, there is a mismatch between Ms. Vicari's rate of return of 7.5%, which – according to Ms. Vicari - represents Aqua's cost of capital, and her discount rate of 2.5%. It is universally accepted that for discounting purposes, a company's cost of capital is the appropriate discount rate. From an arithmetic standpoint, Ms. Vicari calculates annual cash flows based on a profit level of 7.5% but then only discounts this high level of profits by 2.5%.[10] This error significantly overstates the resulting present value of future cash flows.

The final flaw in Ms. Vicari's rate base/rate of return analysis is her estimated annual depreciation expenses. As discussed in Mr. Watkins' testimony and above, depreciation is a

---

[10] Ms. Vicari effectively proposes, as a matter of arithmetic, that a utility should earn 500 basis points above its total cost of capital (7.5% earned return versus 2.5% discount cost rate). OCA St. 2 at 20. Instead, rates are based on the "cost" of providing service where "cost of service" includes a rate of return on its investment that is not excessive yet, will allow a utility to attract and maintain capital, *i.e.* no more than its market-based cost of capital. Id.; Bluefield Waterworks & Improvement Co. v. Public Service Comm'n of West Virginia, 262 U.S. 679, 692-93 (1923); Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591, 603 (1944).

non-cash expense and should be (and is) included within annual cash flows in Ms. Vicari's rate base/rate of return analysis. OCA St. 2 at 20-21. Because Ms. Vicari's estimated annual depreciation expenses are based on the "Cost of Reproduction New" plant as opposed to actual depreciation expenses, however, they are severely overstated. Ms. Vicari estimated annual cash flow associated with depreciation expense of $3,416,000. Aqua Exh. R, Sch. G. Actual depreciation on existing plant is $1,410,000 with an additional depreciation of about $283,000 in future years associated with future capital investments. OCA St. 2 at 21; see OCA Sch. GAW-2. This means that Ms. Vicari's cash flows are overstated by approximately $1,723,000 in every year. OCA St. 2 at 21 ($3,416,000 - $1,410,000 - $283,000).

OCA witness Watkins summarized Ms. Vicari's rate base/rate of return analysis as follows:

> If a utility earns its authorized fair rate of return on its investment over the life of the investment when the cash flows resulting from this ratemaking treatment are then discounted back to the present, the resulting value is the original cost of the investment. With this being said, when properly applied, Ms. Vicari's rate base/rate of return analysis is meaningless in that the appropriate present value of her rate base/rate of return is approximately $43.4 million, which is equal to the Company's original cost investment in plant as shown in Ms. Vicari's Schedule B. However, part of the purpose of this proceeding is to establish an allowable rate base for ratemaking purposes going forward.
>
> To the extent that Section 1329 allows for a higher rate base than depreciated original cost, the resulting returns will be based on this higher rate base. This higher rate base will then be based on the lower of the purchase price or the average of the various valuation studies. Therefore, Ms. Vicari's rate base/rate of return analysis is not only circular, but meaningless and provides no value in this proceeding.

OCA St. 2 at 21-22. Accordingly, the OCA recommends that no consideration should be given to Ms. Vicari's rate base/rate of return analysis. If the concept of Ms. Vicari's rate base/rate of return analysis is utilized in any way, however, a value of approximately $43.4 million (Aqua

Exhibit R, Schedule B) should be utilized instead of Ms. Vicari's overstated value of $100.690 million.[11]

(c) HRG "Going-Value" and "Erosion of Cash Flow" Adders

Aqua witness Vicari applied two adders to her DCF analysis and Rate Base/Rate of Return analysis under the Income approach. Her "going-value" adder is $4,000,000. Her "Erosion of Cash Flow" is a negative amount of $370,000. She also applied the "going-value" adder to her reproduction cost approach analysis under the Cost approach as discussed above. Aqua Exh. R at 11-12, Schs. F, G, I. Mr. Watkins explained that these provisions are not logical, contradictory to Ms. Vicari's analyses, and contain numerous double counts. OCA St. 2 at 14-17.

As discussed in more detail above, Ms. Vicari has no support for her "going-value" adder which does not comport with reality or relate in any way to expected working capital requirements, net income or cash flows. OCA St. 2S at 4. Moreover, the adder conflicts with Ms. Vicari's own cash flow analysis because she estimated annual revenues, expenses, profits and ultimate cash flows based on her expectations of Limerick's operations. Id. Moreover, as explained above, the calculation of the adder contains fundamental flaws. OCA St. 2 at 16-17.

The OCA also recommends that Ms. Vicari's proposal to deduct an amount to reflect that inflation and the absence of rate increases "erode" annual cash flows be rejected. Aqua Exh. R, Sch. H. Mr. Watkins explained that this adjustment is unnecessary and illogical because Ms. Vicari's DCF and other analyses reflect the anticipated cash flows that will be derived from the

---

[11] Ms. Vicari's Rate Base/Rate of Return result of $100.690 million includes $3.7 million for her "going-value" and "erosion of return" adders. Aqua Exh. R, Sched G. As discussed in the following section of the OCA's brief, these adders should be denied.

Limerick operations. OCA St. 2 at 17. Her valuations already reflect her analyses of expected cash flows and there is no basis to make a further adjustment to reflect what Ms. Vicari perceives to be inadequate cash flows in certain years. Id.

For all of the reasons discussed above, the OCA submits that Ms. Vicari's adders for "going value" and "erosion of cash flow" are without merit and should not be considered for any of her appraisals.

(d) Summary

Using all inputs and assumptions used by Ms. Vicari but correcting for her calculation of income taxes and using a more appropriate discount rate, Mr. Watkins determined that the DCF valuation result from Aqua's perspective is as follows:

	Interest Rate	**Resulting Market Value**
Discount Rate: Actual Capital Structure	6.97%	$36,560,000

OCA Sch. GAW-4. This amount compares to Ms. Vicari's DCF results (before her provision for going value and erosion of cash flow) of $51.320 million. The OCA recommends that $36,560,000 be utilized in place of Ms. Vicari's DCF result of $55,020,000.[12] OCA St. 2 at 13; Aqua Exh. R at 10.

As discussed above, the OCA recommends that Ms. Vicari's Rate Base/Rate of Return result be rejected and, therefore, not averaged with the DCF result in developing an Income approach valuation. In addition, the OCA recommends that there be no "going-value" or

[12] As noted above, Ms. Vicari increased her indicated DCF result by $3.7 million to reflect her "going-value" and "erosion of cash flow" adders. Aqua Exh. R at 9, Sch. F ($51,320,000+$3,700,000 = $55,020,000). The OCA recommends that the adders be rejected. See infra, Section IV.A.3.b.i.(d).

"erosion of cash flow" added to the DCF result. Thus, the OCA's recommended DCF result is the same as the OCA's recommended Income approach result.

iii. Gannett Fleming Discounted Cash Flow Method

On behalf of Aqua, Mr. Herbert Walker developed a valuation under the Income approach based on several DCF averages. Aqua Exh. Q, Exhs. 8-9. In general, Mr. Walker conducted his DCF analyses from both the seller's perspective as a municipal utility and the buyer's perspective as an IOU. Within each ownership perspective (municipal and IOU), Mr. Walker averaged two separate DCF analyses. As such, Mr. Walker's income approach is ultimately the result of four different DCF analyses. OCA St. 2 at 22-23.

In his direct testimony, OCA witness Watkins discussed the structure and assumptions made in Mr. Walker's analyses and identified areas of agreement. OCA St. 4 at 24-25. Mr. Watkins also identified two areas of disagreement. Specifically, in all of Mr. Walker's DCF analyses, he used a "terminal value" in the thirteenth year of his model. Aqua Exh. Q, Exh. 8 at 4. Mr. Watkins showed that utilizing a forecasted termination value is unreliable and produces unreasonable results. Id. at 24-25. Mr. Watkins conducted his DCF valuation using 50-years of discounted net cash flows (Debt Free Net Cash Flow) with no termination value. In addition, Mr. Watkins provided more appropriate discount rates using a municipal utility's cost of capital and an IOU's cost of capital. Id. at 25-28.

(a) Gannett Fleming Terminal Value

Mr. Walker's approach is to calculate discounted cash flows net of capital expenditures and changes in working capital (i.e., Debt Free Net Cash Flow). OCA St. 4 at 24. However, Mr. Walker only calculates and discounts these annual Debt Free Net Cash Flows for 13 years. He then uses various scenarios to calculate a "terminal" value of Limerick's operations as of the mid-point of the thirteenth year. This terminal value is then discounted back to a present value basis. Id. In effect, Mr. Walker attempts to calculate a market value of the Limerick system 13 years into the future when, hypothetically, the new owner will value the system in the thirteenth year and effectively resell the system. OCA St. 2 at 24. Aqua witness Walker's own analyses show that the estimation of Limerick's market value 13 years into the future (i.e., terminal value) is extremely speculative and uncertain: Mr. Walker calculates terminal values ranging from $44.084 million to $137.436 million. Aqua Exh. Q, Exhs. 8, 9. This very large range in his calculated terminal values has a significant impact on his ultimate DCF valuations. OCA St 2 at 24.

In Mr. Watkins view, a 13-year model is unreasonably short for an established public utility and he recommended modeling annual Debt Free Net Cash Flows over a longer period of time. OCA St. 2 at 24. Accordingly, Mr. Watkins utilized 50 years of discounted cash flows (Debt Free Net Cash Flows) with no termination value. Id. at 26. By using a longer investment horizon than 13 years, the ultimate DCF valuation incorporates the going concern aspects of Limerick's wastewater operations. Id. at 24. Mr. Watkins explained:

> This is because due to the exponential nature of present value discounting, as we move further into the future, the annual present value factors become exponentially smaller and smaller such that in 40 or 50 years, the present value factor becomes very small. Little weight is therefore given to projected annual Debt Free Net Cash Flows beyond 40 or 50 years.

Id. OCA witness Watkins accepted all annual revenue, expense, capital expenditures, and changes in working capital utilized by Mr. Walker for the first 13 years. OCA St. 2 at 27. He then evaluated Mr. Walker's annual percent changes in Debt Free Net Cash Flows during the last six years of his 13-year model.[13] He escalated Limerick's Debt Free Net Cash Flow by the average annual increase each year for years 14 through 50. Id.

In rebuttal, Aqua witness Walker argues that the use of a terminal value is only a mathematical shortcut and the results of the DCF analyses do not change whether a terminal value or constant cash flow growth is used. Aqua St. 3R at 9-11, Sch. 2. This is not responsive to Mr. Watkins' concern, however, which is that – as a matter of mathematics – when a terminal value is utilized, the assumption is that cash flows will grow at a constant growth rate. OCA St. 2S at 8. Accordingly, Mr. Watkins explained that if and when terminal values are utilized, it must reflect a project's useful life such that cash flows reasonably reflect the capital investments required to maintain and continue a business enterprise's operations as a going concern. Id. Mr. Walker's 13-year DCF model reflects very little capital expenditures. The cumulative capital expenditures (which reduce annual net cash flows) for the first 13 years of Mr. Walker's analysis are only $13.086 million. OCA St. 2S at 8. By the thirteenth year, Mr. Walker assumes an annual level of capital expenditure spending of only $1.292 million. Id. Mr. Watkins observed that these small levels of capital reinvestment within Limerick's wastewater system are not enough to enable the operation to be maintained and continued into perpetuity; but that is assumed by Mr. Walker's calculation of a terminal value in the thirteenth year. Mr. Watkins provided the following hypothetical example to demonstrate the conceptual bias this creates:

> [S]uppose a taxicab company has a fleet of five taxicabs with an expected life of ten years. In the eleventh year, these taxicabs must then be replaced in order to continue its operations and generate future cash flows. It would be an error to estimate the net cash flows from this fleet of existing taxicabs for ten years and then assume that the cash flows generated in the tenth year will continue in perpetuity without an extensive reinvestment of its plant in service (fleet of

[13] Mr. Watkins stated that he selected six years because it represents a consistent pattern of revenue growth (4% increase every third year and 1% increase in non-rate increase years), expense inflation (2% annually), and capital expenditures (1.5% annually). OCA St. 2 at 27.

> taxicabs) that needs to be replaced starting in the eleventh year. In other words, the net cash flows in the tenth year are fairly strong based on the almost worn out fleet of cabs. However, in the eleventh year, a significant capital investment will be required to replace this fleet of taxicabs, which will significantly impact (if not eliminate) the positive net cash flows in the eleventh year. This same concept is true for Limerick's wastewater operations.

OCA St. 2S at 8-9.

The calculations provided on pages 9 to 10 of Mr. Watkins' Surrebuttal testimony show that, based on Mr. Walker's own assumptions within his DCF and Cost of Reproduction New analyses, the cost of replacing the Limerick plant in service in the thirteenth year is in excess of $161 million and his assumed annual capital investments are less than 1% (0.80%) of that total replacement cost. The Limerick system cannot reasonably be expected to operate in perpetuity at this level of reinvestment to replace worn out plant; however, that is the assumption utilized in Mr. Walker's valuation model. Moreover, it implies an effective service life of new plant of 125 years, which is clearly unreasonable. Id.

By utilizing a 50-year model, Mr. Watkins considered the useful remaining life of Limerick's system without totally (or significantly) replacing the system as it wears out after 50 years. The OCA submits that this approach is reasonable and Mr. Watkins adjustments to this aspect of the Gannett Fleming DCF analyses should be adopted, in addition to Mr. Watkins recommended discount rates discussed below.

(b) Gannett Fleming Discount Rates from Seller's (Limerick) Perspective

Mr. Walker used a discount rate of 4.37% within each of his DCF models from a municipal utility perspective. Mr. Walker utilized a 4.37% discount rate (opportunity cost) based on the December 2016 municipal revenue bond yield. Aqua Exh. Q at 28. As such, Mr. Walker has utilized this debt cost rate as the opportunity cost to a municipally-owned utility. Mr.

Watkins disagreed because a firm's cost of capital should reflect the financial and business risks that the firm confronts. OCA St. 4 at 25. Accordingly, a municipal's total cost of capital should reflect both the cost of debt and the opportunity cost of equity. Further, Mr. Walker has represented municipalities in numerous water and wastewater rate cases and, in every case, has argued for a significantly higher cost of equity than either the embedded or marginal cost of debt. Id. at 25-26. Mr. Watkins stated:

> Indeed, [Mr. Walker's] arguments in these rate cases stem from the fact that there is a business risk associated with operating a utility and that an equity return well above the cost of debt should be included in the overall allowed rate of return (cost of capital) for the municipal utility. For example, in the recent fully litigated City of Dubois rate case, Mr. Walker recommended a cost of equity for the City's water operations of 10.5%.

OCA St. 4 at 26.

As such, Mr. Watkins developed a discount rate using equity as well as debt. Specifically, he used Limerick's actual embedded cost of debt of 3.39%, which was developed from the Township's 2015 audited Financial Statement for its sewer operations. OCA St. 2 at 9-10, 26. This number is conservative because the current (forward-looking) cost of municipal bonds is approximately 4.37%. With regard to equity, OCA witness Watkins used the cost of equity for a municipal water utility of 7.61% found by the Commission in a recent, fully litigated rate case.[14]

Next, Mr. Watkins used Limerick's actual capital structure of 17% debt/83% equity and a hypothetical 50% debt/50% equity capital structure. OCA St. 2 at 9. OCA witness Watkins explained that he included the hypothetical capital structure because 83% equity is unusually high for a municipally-owned utility, for ratemaking purposes it is unlikely that this Commission would utilize such a high equity ratio in determining a utility's cost of capital, and it produces a

---

[14] City of DuBois at 97-98 (9.3% equity return adjusted for taxes = 7.61%).

conservative result.[15] Id. at 10. The determination of the weighted cost of capital under these two capital structures result in total costs of capital of 6.89% and 5.50%, respectively. Id. at 10. Mr. Watkins also conducted his DCF valuation using 50-years of discounted net cash flows (Debt Free Net Cash Flow) with no termination value. OCA St. 2 at 26. Otherwise using all inputs and assumptions used by Mr. Walker, Mr. Watkins determined that a cost of capital of 6.89% (17% debt/83% equity capital structure), produces a present value (valuation) of $47,464,000. A cost of capital of 5.50% (50% debt/50% equity), produces a valuation of $59,745,000. OCA St. 2 at 27, Schs. GAW-5, GAW-6.

	Interest Rate	**Resulting Present Value**
Discount Rate: Actual Capital Structure	6.89%	$47,464,000
Discount Rate: Hypothetical Capital Structure	5.500%	$ 59,745,000
Average:		$51,320,000

OCA Schs. GAW-5, GAW-6; OCA St. 4 at 29. The average of these two amounts is $51,320,000.

(c) Gannett Fleming Discount Rates from Buyer's (Aqua's) Perspective

Mr. Walker utilized the same model and conceptual framework to develop his DCF valuations under an IOU's perspective as he did under a municipal utility perspective. For purposes of his DCF analysis under an IOU's perspective, however, Mr. Walker did use an

[15] Using a lower discount rate (hypothetical capital structure generates a lower discount rate) produces a somewhat higher valuation than the Township's actual capital structure, which in turn can be considered conservative because it produces a somewhat higher valuation than the discount rate derived utilizing the Township's actual capital structure. OCA St. 4 at 10.

estimate of an IOU's total cost of capital. OCA St. 4 at 27. In this regard, Mr. Walker estimated an IOU's total cost of capital using a capital structure of 24.5% debt/75.5% equity, a cost of debt of 4.22% and costs of equity of 9.76% and 7.96%. This capital structure and capital costs results in Mr. Walker using total costs of capital of 7.99% and 6.63%, respectively. Id. Mr. Watkins determined that this total cost of capital range is not unreasonable for an IOU, but disagreed with Mr. Walker's use of an equity ratio of 75.5% because it is excessive and significantly higher than Aqua's actual equity ratio. OCA St. 4 at 28. Mr. Walker calculated his capital structures based on market ratios instead of book ratios. However, Aqua will be financing Limerick with a combination of book equity and book debt. Id. Therefore, Mr. Watkins adopted a more reasonable approach using Aqua's actual book capital structure of 48.5% debt/51.5% equity.

Mr. Watkins considered Mr. Walker's cost of equity ranging from 7.96% to 9.76% to be within the range of reasonableness. OCA St. 4 at 28. He used a more direct approach, however, and utilized the recent cost of equity for a similar operation authorized by this Commission, *i.e.* the 9.3% adopted in City of DuBois. This results in a total cost of capital of 6.97%. Id.

Using the same assumptions and procedures as discussed above (under a municipal utility's perspective) and using a 6.97% discount rate, produces a valuation of $48,233,000. OCA Sch. GAW-7. Subsequently, Mr. Watkins corrected this number to reflect net of tax cost of debt, which results in a 6.09% discount rate. OCA St. 2S at 6-7. This discount rate produces a net present value (valuation) of $55,864,000.

(d) Mr. Watkins Used The Proper Discount Rate When Evaluating Gannett Fleming's Cash Flow Method

In his rebuttal, Mr. Walker maintained that only cost of debt should be used because municipalities "can only prospectively finance with debt capital, not equity capital. Accordingly, for market valuation purposes, municipal capital structure has to be 100% marginal debt." Aqua

St. 3R at 7. Mr. Watkins expressed his strong disagreement with this argument, based on the fact that Limerick's wastewater operations are financed with 83% equity and 17% debt. OCA St 2S at 6. He stated:

> To accept Mr. Walker's assertion would mean that the Township does nothing with the large amount of equity capital within its wastewater operations. In other words, according to Mr. Walker, this large amount of equity would simply be in the form of cash and remains within the Township's wastewater operations to simply earn interest. Clearly this is not the case as the Township, like any other business enterprise, uses this equity capital to fund capital expenditures and working capital.

Id. While Mr. Walker indicated that funds required for a road or bridge construction are typically funded with debt financing, this example is not applicable to a revenue-producing municipal wastewater operation that operates as a business enterprise. OCA St. 4 at 6. To this point, if Limerick were only concerned with recovering its debt cost, it would offer to sell its wastewater operations at the level of its outstanding debt. Instead, Limerick has attempted to maximize the proceeds from the sale of its wastewater system. Id.

Aqua witness Walker also argued that the marginal, rather than embedded, cost of debt should be used. Aqua St. 3R at 6. Mr. Watkins agreed that marginal cost of debt is appropriate but explained that the embedded cost of debt of 3.39% is lower than Mr. Walker's estimated marginal cost of debt of 4.37%. OCA St. 2S at 6. To avoid disagreement, he purposely selected the more conservative lower cost. That is, using a higher marginal cost of debt of 4.37% would have resulted in a higher cost of capital and therefore, a higher discount rate, which would have reduced the DCF valuations. Id.

Finally, Mr. Walker opposes Mr. Watkins use of a 9.30% cost of equity under a buyer's perspective. Aqua St. 3R at 8-9. Mr. Walker states that he is not aware of any appraisals that have used authorized returns on equity as being appropriate for use in the income approach for fair market appraisals. In response, Mr. Watkins pointed out that Mr. Walker developed the cost of capital range in his valuations (from an IOU perspective) with a cost of equity range of 7.96% to 9.76%. OCA St. 2S at 7. Mr. Watkins analysis uses a cost of equity of 9.30%, which is within this range. Further, the 9.30% is based specifically on this Commission's recent finding on the market cost of equity of a firm with similar risks.

For these reasons, Mr. Walker's objections are not persuasive. OCA witness Watkins' recommended valuations from the Seller and Buyer's perspective should be adopted.

(e) Summary

In order to accommodate Mr. Walker's conceptual basis to value Limerick's wastewater operations as a business enterprise that will continue many years into the future, OCA witness Watkins expanded Mr. Walker's 13-year model to a 50-year model with no terminal value. He utilized more appropriate discount rates using a municipal utility's cost of capital as well as an IOU's cost of capital. These procedures produce valuations of $47,464,000 and $59,745,000 under a municipal utility's perspective (average of $53,605,000) and $55,864,000 under an IOU's perspective. Mr. Watkins averaged the municipal and IOU DCF valuations, consistent with Mr. Walker's approach, to produce a reasonable valuation of Limerick's wastewater operations under the Income approach. The OCA's overall recommendation for the Income approach is $50,919,000 compared to Gannett Flemings recommended $75,204,407.

c. HRG Market Approach

The OCA did not recommend adjustments to Gannett Fleming's Market approach valuation. As such, the discussion in this section is limited to the Market approach valuation conducted by Aqua witness Vicari (HRG).

Ms. Vicari defines market value as "the value established in a public market by exchanges between willing sellers and willing buyers not under duress." Aqua Exh. R at 7. She explains her method of determining a Market approach result as follows:

> HRG used a sample of recent municipal wastewater acquisitions to approximate the value on a per customer basis and then averaged the findings to develop an average cost of $8,661 per customer. The average system purchase price was then multiplied by the number of projected LTSSS customers over the twenty year period of the analysis.

Id. at 8. OCA witness Everette identified two flaws with the inputs used in this calculation. First, Ms. Vicari used a projected number of Limerick customers. OCA St. 1 at 21-22. Second, Ms. Vicari used inconsistent purchase price values to calculate the average costs per customer. Id. at 23.

i. Incorrect Use of Projected Customers

The Limerick system has 5,434 customers. Aqua St. 1 at 5. Ms. Vicari did not use the current customer number; she used the number of customers that she projects the Limerick system will have in 2036. Aqua Exh. R at 7. In contrast, she calculated the average cost per customer of the acquisitions in her sample group using the actual number of customers. OCA witness Everette explained how this inconsistency distorts the result:

> Ms. Vicari then applied this actual current cost per customer to a projected future number of customers on the Limerick system. The result is a comparison that is not apples-to-apples and a result that inflates the resulting market value.

OCA St. 1 at 22 (emphasis added). Ms. Vicari did not use the projected number of customers in 20 years for each of the utilities in her sample group. In the absence of this information, the only reasonable way to apply the actual current cost per customer for the sample group to Limerick is to use the actual number of Limerick customers.

In rebuttal, Aqua witness Vicari appears to argue that the possible number of customers at some point in the future increases the market value today. Aqua St. 4R at 5-6. Ms. Vicari does not, however, apply that logic to the other acquisitions in her sample group by reflecting their future customer counts.[16] OCA St. 1S at 16. By using the actual number of customers for the other systems, she achieved a higher average cost per customer. She then multiplied this overstated cost per customer times the projected future number of customers on the Limerick system, compounding the error.

OCA witness Everette performed a calculation that removed these errors. OCA St. 1 at 22-23. Using the actual, current number of Limerick customers (and the actual number of customers in the sample group utilities), the market value is $47,060,000 rather than $62,760,000 ($8,661 x 5,436 customers). Id. This is not the ultimate result recommended by the OCA, however, due to an additional problem with the purchase price values.

ii. Inconsistent Purchase Price Values

Similar to the problem with the customer count, Aqua witness Vicari did not use consistent purchase price values. OCA St. 1 at 23. For the comparative acquisitions, she used the purchase price plus the value of capital improvements required by the agreement of sale. Aqua St. 4R at 6. For Limerick, however, she uses only the purchase price and does not add the $8.3 million of capital investments that Aqua anticipates making. Aqua Exh. V at 8. Including the cost of capital improvements distorts the results, making the market value unreliable. OCA St. 1 at 23. It also has the effect of artificially inflating the market value.

[16] Aqua witness Vicari argues that the number of Equivalent Dwelling Units (EDUs) in the Limerick system supports her calculation of the future customer counts but that is not relevant because she does not use EDUs – and admits she does not know – the number of EDUs for any of the other systems. OCA St. 1S at 16 (citing Aqua response to OCA Set V-7). The OCA does not contest the future customer count, the OCA objects to the inconsistency in Ms. Vicari's comparison.

OCA witness Everette performed the calculation without the adder for future capital improvements. OCA Exh. AEE-5. This produces a corrected market value per customer of $7,317. Using Limerick's actual number of customers as described above, Ms. Everette estimated market value produced is $39,775,212 ($7,317 x 5,436 customers). Id.; OCA St. 1 at 23.

As discussed in the context of cost approach above, Aqua witness Vicari argues that post-acquisition improvements are an "integral part of the compensation and a means of getting to an agreement of sale." Aqua St. 4R at 5. While Aqua's plans to make improvements to the Limerick system may (or may not) have been a benefit that Limerick attributed to the agreement, this does not mean that the cost of capital improvements to be paid for by Aqua are somehow a benefit to Aqua. OCA St. 1S at 13-14. As stated by Ms. Everette, "the illogic of this concept is self-evident." Id. As stated above, adding the cost of future improvements to the value of rate base and then adding them again after Aqua makes the capital improvements would be to include the same costs twice, to the detriment of ratepayers.

4. OCA Recommendations

Ms. Everette and Mr. Watkins recommended adjustments to Ms. Vicari's Cost, Income, and Market approaches modify the HRG appraisal result from $76,888,333 to $48,676,875. The recommended changes to the HRG results are summarized here:

	Weight	HRG	OCA Adjusted
Cost Approach	33.33%	$30,016,667	$20,251,804
Income Approach	33.33%	$25,591,667	$14,896,667
Market Approach	33.33%	$20,920,000	$13,258,404
Appraised Value		$76,888,333	$48,676,875
Recommendation:		$76,890,000	$48,676,875

OCA Exh. AEE-1S.

Mr. Watkins recommended adjustments to the Income approach utilized by Mr. Walker modify the Gannett Fleming appraisal result from $75,204,407 to $54,735,000. OCA St. 2S at 10. The recommended changes to the Gannett Fleming results are summarized here:

	Weight	Gannet Fleming	OCA Adjusted
Cost Approach	33.33%	$28,692,716	$28,692,716
Income Approach	33.33%	$25,065,629	$18,243,176
Market Approach	33.33%	$26,339,594	$26,339,594
Appraised Value		$80,097,938	$73,275,485
Recommendation:		$76,890,000	$73,275,485

When the HRG appraisal result of $48,676,875 and Gannett Fleming result of $73,275,485, both as adjusted by the OCA, are averaged, the result is $60,976,180. OCA St. 1S at 22; OCA Exh. AEE-1S. Because this amount is less than the $75,100,000 purchase price, the OCA submits that the amount approved for ratemaking rate base pursuant to Section 1329 must be no more than $60,976,180, rather than $75,100,000 as proposed by Aqua.

B. Rate Stabilization Plan and Asset Purchase Agreement

In addition to Aqua's request to have a ratemaking rate base of $75.1 million established for the Limerick assets in this case, Aqua is asking for approval of its Asset Purchase Agreement, which includes a rate freeze that will be in place for the first three years of Aqua's ownership. APA, ¶7.05(b),(c). Further, under Section 1329(f)(2), Aqua is permitted to use special ratemaking treatment for its projected $8.3 million of postacquisition improvements, which will increase the shortfall in the Limerick customers' rates relative to their actual cost of service. As discussed below, if the transaction is approved, the OCA recommends that the Commission adopt language to clarify its authority and discretion to mitigate the rate impact for Aqua's existing customers by increasing rates for Limerick customers, whether or not the rate freeze is in place at the time of the base rate case seeking to reflect this acquisition in rate base. The OCA seeks other conditions to protect customers related to application of the DSIC to Limerick customers and information necessary to properly assess the impact on ratepayers resulting from Aqua's proposed regulatory asset treatment of a portion of the ratemaking rate base.

Consistent with the testimony of OCA witness Everette, the OCA recommends that the regulatory asset should not be approved by the Commission in this proceeding. If Aqua chooses to present the regulatory asset methodology in its next base rate case, Aqua should also provide a net present value analysis showing the impact on ratepayers as compared to the impact on ratepayers of depreciating the rate base value approved by the Commission. In addition, the entire ratemaking rate base that is approved by the Commission should be treated as rate base by Aqua and Aqua should begin depreciating it for accounting purposes immediately upon closing. Following the next base rate case, Aqua can modify the accounting treatment to reflect the rate base determination that is approved in the next base rate case.

1. <u>Asset Purchase Agreement: Rate Freeze</u>

As stated above, the APA contains a provision that freezes rates for Limerick customers for the first three years of Aqua ownership. Specifically, ¶7.05(b) and (c). state as follows:

> (b) Rate Stabilization. After Closing, Buyer shall begin charging the Base Rate as Buyer's rates within the Service Area, which Base Rate the Parties agree may not be increased until after the third anniversary of the Closing Date (the "Stabilization Period").
>
> (c) The rate provisions of Sections 7.05(a) and (b) shall be part of the Buyer's requested PaPUC Governmental Approval and shall be expressly incorporated into a final PaPUC approval of the transaction.

APA, ¶7.05(b) and (c). Aqua witness Packer stated that the rate freeze provision of the APA does not bind the ratemaking authority of the Commission. He stated:

> While the APA includes a period of three years over which rates are to remain unchanged at seller's rates, there is no provision within the APA that changes the purchase price, or provides for a limitation on rate increases. In addition, I note that the Commission maintains the authority to set rates in [Aqua's] next base rate case.

Aqua St. 1 at 6; Aqua St. 1R at 8. As written, however, the APA does not contain language acknowledging the Commission's discretion to set rates that are inconsistent with the proposed rate freeze. Aqua provided testimony, schedules and workpapers showing the impact of the rate freeze on existing customers who need to cover the revenue requirement that would be shifted to them under the plan.[17] Aqua St. 1 at 13-16, Exhs. C, D. As discussed in Section IV.A.2.a above and shown in Aqua's testimony and exhibits, the rate impact for existing water and wastewater customers could be substantial. For example, as shown on Aqua Exhibit C ($75.1 million ratemaking rate base), depending on the year that Aqua files a rate increase request, existing water and wastewater customers would see increases ranging from 9%[18] (file in Year 9) to 64% (file in Year 2). As shown on Aqua Exhibit D ($60 million ratemaking rate base, with $15.1 million regulatory asset), depending on the year that Aqua files a rate increase request, existing water and wastewater customers would see increases ranging from 11% (file in Year 9) to 55% (file in Year 3). Id.

The OCA recommends that the proposed transaction be denied because Aqua has failed to show that it will produce the required affirmative benefits. If the Commission determines otherwise, however, the OCA recommends that the Commission explicitly adopt the following conditions:

1. The Commission retains the authority to allocate revenues, if appropriate, to the Limerick Township customers that are inconsistent with the restrictions contained in the APA.

2. Aqua and its shareholders should bear all risk of a shortfall between the revenues Aqua is permitted to recover under its agreement with Limerick

[17] Utilities filing a rate stabilization plan under Section 1329 are required to include testimony, schedules, and work papers that establish the basis for the plan and its impact on existing customers who need to cover the revenue requirement that would be shifted to them under the plan. Final Implementation Order at 27; 66 Pa. C.S. § 1329(d)(1)(v), (g); Aqua St. 1 at 13-16.

[18] Percentage increase is calculated using the "impact to existing customers" shown on Aqua Exhibits C and D divided by $12.1 million of existing revenues (OCA St. 1S at 6).

> and the costs that the Company will incur with respect to the acquired system. To the extent that Aqua is unwilling or unable to charge costs in excess of the limitations provided in the Asset Purchase Agreement, the excess costs should be borne by shareholders and not spread to other ratepayers.

The OCA's proposed conditions would ensure that the risk of a shortfall between what can be collected from Limerick customers under the rate freeze and what would be allocated based on cost of service in future rate cases would be borne by Aqua shareholders. The express language of the APA does not provide any leeway regarding the application of the rate freeze. Aqua witness Packer seems to recognize the Commission's ultimate jurisdiction regarding rates charged to customers for utility service Aqua St. 1-R at 8, but only by having a condition to the Commission's approval of the application would it be expressly required.

2. Rate Impact of Section 1329 Ratemaking Exceptions

Aqua has indicated that it will spend approximately $8.3 million in capital projects after acquisition. Exh. V at 8. Under Section 1329(f), these postacquisition projects, to the extent not eligible for DSIC recovery, will receive special ratemaking treatment. Specifically, Aqua will be permitted to defer depreciation for book and ratemaking treatment (66 Pa. C.S. § 1329(f)(2)) and it will be permitted to continue to accrue allowance for funds used during construction (AFUDC) for up to four years or until the asset is included in the next base rate case, whichever is earlier. See OCA St. 1 at 7; 66 Pa. C.S. § 1329(f)(1). These costs contribute to the gap between Limerick customers' rates and their actual cost of service which potentially will shift additional costs to Aqua's existing water and wastewater customers.

3. Rate Stabilization Plan: Regulatory Asset Treatment

Section 1329 requires the acquiring utility to provide a rate stabilization plan with its application if it proposes to "hold rates constant or phase rates in over a period of time after the next base rate case." 66 Pa. C.S. § 1329(d)(1)(v), (g). Aqua provided a rate stabilization plan in this case, in its Exhibit D to the application. Aqua Exh. D. Aqua proposes to split the $75.1 million ratemaking rate base into two parts; an initial rate base of $60 million and a regulatory asset of $15.1 million. Aqua states that the plan is "non-binding and subject to review in future base rate cases." OCA St. 1 at 4-5 (citing Aqua response to OCA set I-1). The Company also provided an analysis of the impact of moving the full $75.1 million into Aqua's rate base in the next base rate proceeding. Aqua St. 1, Exh. C. Aqua witness Packer states that Exhibit C is provided for illustrative purposes only, "[t]he only plan being proposed by the Company is the plan that would split the approved rate base of $75.1 million into an initial rate base of $60 million and a $15.1 million regulatory asset." Aqua St. 1R at 11.

More specifically, Aqua proposes to amortize the $15.1 million regulatory asset at a rate of $2.1 million per year, which would be moved into rate base at the time(s) the Company files a base rate case. OCA St. 1 at 5. Therefore, if two years elapse before a rate case filing, $4.2 million would be moved into rate base at the time of that rate case. The regulatory asset does not depreciate; however, depreciation begins when Aqua amortizes it into rate base. Id. The OCA objects to approval of a regulatory asset in this proceeding for several reasons articulated by OCA witness Everette:

> The regulatory asset treatment that Aqua has proposed in this case is not consistent with the typical use of a regulatory asset as a ratemaking tool. In my experience, regulatory assets are typically used for expense items, not for deferring utility plant in service.
>
> Further, a regulatory asset is amortized over a fixed period of time. The proposal to amortize the asset in increments as Aqua decides to file base rate cases means

> that it is not possible to know when the asset will be fully amortized and included in rate base. This is not consistent with the proper procedure for amortizing a regulatory asset, and potentially creates unnecessary risk for customers.

OCA St. 1 at 5-6 (e.g., other post-employment benefit expenses, storm damage expenses) (footnotes omitted). Typically, utilities do not earn a return on expenses in a regulatory asset. Aqua states, however, that it will seek a return on the increments as each is included in rate base. Id. at 6.

In response to the OCA's concerns regarding the use of regulatory assets for rate base items, Aqua witness Packer stated that the Company has regulatory assets in rate base currently, including two related to FAS 109 and FAS 143. Aqua St. 1R at 4; OCA St. 1S at 2. He confirmed, however, that neither was specifically approved by the Commission. OCA St. 1S at 2 (citing Aqua response to OCA-V-1). Moreover, neither regulatory asset is used for deferring utility plant in service or for plant that will eventually be moved into rate base. Aqua's proposal in this case is a matter of first impression.

Consistent with the testimony of OCA witness Everette, the OCA recommends that the regulatory asset should not be approved by the Commission in this proceeding. If Aqua chooses to present the regulatory asset methodology in its next base rate case, Aqua should also provide a net present value analysis showing the impact on ratepayers as compared to the impact on ratepayers of depreciating the total $75.1 million rate base. The entire ratemaking rate base that is approved by the Commission should be treated as rate base by Aqua and Aqua should begin depreciating it for accounting purposes immediately upon closing. Following the next base rate case, Aqua can modify the accounting treatment to reflect the rate base determination that is approved in the next base rate case.

4. <u>Revised DSIC Tariff and LTIIP</u>

Section 1329(d)(4) permits the acquiring utility to collect a Distribution System Improvement Charge (DSIC) from the time that a tariff goes into effect until such time as new rates are approved for the acquiring utility in a base rate case. 66 Pa. C.S. § 1329(d)(4). Consistent with the Final Implementation Order implementing Act 11 of 2012, if Aqua determined to charge a DSIC to the Limerick customers prior to establishing rates for those customers in a base rate proceeding, the Company should file a revised tariff to reflect this change and a revised Long Term Infrastructure Improvement Plan (LTIIP). <u>Implementation of Act 11 of 2012</u>, Docket No. M-2012-2293611, Final Implementation Order at 28 (Aug. 2, 2012). The OCA submits that if Limerick customers will begin paying a DSIC prior to effective date of rates established in Aqua's next base rate case, the Commission should condition its approval of the transaction by requiring that Aqua file the required tariff changes and revised LTIIP no later than 30 days after entry of the Commission order in this proceeding.

C. <u>The Application Does Not Meet the Statutory Standard for Approval Under Section 1102 Because It Does Not Provide Substantial Affirmative Public Benefits.</u>

In addition to the requirements of Section 1329, the proposed transaction must satisfy Section 1102. 66 Pa. C.S. § 1102. Aqua has failed to show that the transaction would provide the required affirmative benefits. The Public Utility Code authorizes the Commission to permit a regulated public utility to begin to offer service in an additional territory and to acquire property used and useful in the public service, as is requested in this application.[19] 66 Pa. C.S. §

---

[19] Section 1102(a)(1) provides:

> (a) General Rule. Upon the application of any public utility and the approval of such application by the commission, evidenced by its certificate of public convenience first had and obtained, and upon compliance with existing laws, it shall be lawful:

1102(a)(1), (3). The merits of applications arising under Section 1102 are measured by the standards set forth in the City of York. In City of York, the Supreme Court addressed a proposed merger of three telephone companies. The Pennsylvania Supreme Court specifically cited Section 203, the predecessor statute to Section 1103, and set forth the standard as follows:

> Section [1103] of the Public Utility Law requires that those seeking approval of a utility merger demonstrate more than the mere absence of any adverse effect upon the public. Section [1103] requires that the proponents of a merger demonstrate that the merger will affirmatively promote the "service, accommodation, convenience, or safety of the public" in some substantial way.

295 A.2d at 828 (quoted in Application of Pennsylvania-American Water Co., Docket No. A-2016-2537209, Order at 11 (Oct. 19, 2016)). This is the standard by which all mergers of Pennsylvania utility companies must be judged.

This standard was addressed by the Commonwealth Court in Middletown Township v. Pa. P.U.C., 482 A.2d 674 (Pa. Commw. Ct. 1984) (Middletown). In Middletown, in order to acquire part of the facilities of the Newtown Artesian Water Company, Middletown Township filed an application for a Certificate of Public Convenience. The ALJ determined that the acquisition would be a benefit to some customers, but would have an adverse impact on other customers. Id. at 679. The ALJ, therefore, denied the application. Id. The Commission adopted

---

> (1) For any public utility to begin to offer, render, furnish or supply within this Commonwealth service of a different nature or to a different territory than that authorized by:
>
> (i) A certificate of public convenience granted under this part…
>
> . . .
>
> (3) For any public utility… to acquire from, or to transfer to, any person or corporation, including a municipal corporation, by any method or device whatsoever, including the sale or transfer of stock and including a consolidation, merger, sale or lease, the title to, or the possession or use of, any tangible or intangible property used or useful in the public service.

Id. Section 1103 states that a certificate of public convenience will be granted only where necessary or proper for the service, accommodation, convenience or safety of the public. 66 Pa. C.S. § 1103(a).

the ALJ's Initial Decision and the Township appealed. In hearing the appeal, the Commonwealth Court considered the City of York standard applicable through Section 1102 and Section 1103. The Court affirmed the Commission's decision to reject the merger stating, *inter alia*, that "when the 'public interest' is considered, it is contemplated that the benefits and detriments of the acquisition be measured as they impact on all affected parties, and not merely on one particular group or geographic subdivision as might have occurred in this case." Id. at 682 (emphasis in original). The Court added that "the primary objective of the law in this area is to serve the interests of the public." Id.; see also Popowsky v. Pa. P.U.C., 937 A.2d 1040 (Pa. 2007).

In this proceeding, the Commission must fully consider the harms of this acquisition on three specific groups with respect to the traditional City of York affirmative public benefits test: (1) the existing Aqua wastewater customers, (2) the existing Aqua water customers – who may potentially bear costs of the Limerick system, if the Commission permits costs to be shifted under 66 Pa. C.S. § 1311(c), and (3) the existing Limerick Township customers who will be transferred to Aqua.

It is well-established that the Township will benefit from the proposed transaction. Limerick Township will receive $28.9 million or 63% more than the net book value of the system. OCA St. 1 at 3. Aqua anticipates spending $8.3 million for capital improvements to the Limerick system during the next 10 years.[20] Id.; Aqua Exh. V at 8. In addition, the seven

[20] OCA witness Everette explained that Section 1329 allows Aqua to recover additional costs related to post-acquisition improvements:

> To the extent that these capital improvements occur before Aqua's first base rate case, under Section 1329(f) of the Public Utility Code, Aqua may be permitted the following exceptions to normal ratemaking treatment: the deferral of depreciation for book and ratemaking purposes for post-acquisition improvements and the accrual of allowance for funds used during construction (AFUDC) for post-acquisition improvements.1 Aqua has not quantified those costs in this proceeding.

existing Limerick employees will be hired by Aqua to continue operating the Limerick system. Id. at 10.

There is, however, no support for concluding that existing Aqua wastewater and water customers will receive any net benefit or that the Limerick customers will see a net benefit after their rate freeze ends. In fact, the record shows that these customers will experience substantial harm that is outweighed by any purported benefits. As such, Aqua has failed to demonstrate the necessary public benefits required for approval of this Application.

1. Harm to Existing Wastewater and Water Customers

An acquisition provides an affirmative benefit if the benefits of the transaction outweigh the adverse impacts of that transaction. Application of CMV Sewage Co., Inc., 2008 PaPUC LEXIS 950, *30 (CMV). In order to determine whether benefits meet this standard, the Commission may consider: "(1) the legal and technical fitness of the purchasing entity to provide service; (2) the public need for service; (3) the inadequacy of the existing service; and (4) any other relevant evidence." Application of North Heidelberg Water Co., 2010 PaPUC LEXIS 919, *20.

The OCA recommends that the Commission deny the application on the basis that the acquisition and the associated $75.1 million rate base (or even the $60 million rate base calculated by OCA) would harm existing and acquired ratepayers and would not provide substantial affirmative public benefit. OCA St. 1 at 7-17; OCA St. 1S at 3-8, 22. As discussed below, the benefits identified by Aqua are simply generalizations that do not address the

OCA St. 1 at 3; 66 Pa. C.S. § 1329(f).

corresponding harm to existing Aqua wastewater and water customers, and to the Limerick customers after acquisition.

In this proceeding, Aqua alleges that its existing wastewater customers will benefit from the proposed transaction because, at some time in the future, they will benefit from regionalization and consolidation. Aqua St. 1R at 6. Aqua witness Packer stated:

> While the Company has submitted a rate stabilization plan that covers ten years, this system, as with many others previously acquired by the Company, will be operating for a much longer time, and in-doing so, the Company believes the benefits of regionalization and consolidation will be realized.

Id. In response to the OCA's questions seeking support for this statement, Mr. Packer provided a schedule that carries out the assumptions underlying the Company's proposed rate stabilization plan for Years 15 and 16. OCA St. 1S at 3; Tr. 22. The schedule provided in Mr. Packer's rate stabilization plan workpaper showed Aqua's analysis regarding the revenue increase and rate impact associated with the Limerick system for Years 1 to 14. Aqua St. 1, Exh. D. Taken together, the schedules show the Company's projection that the acquisition will increase rates for existing customers for 15 years. In Year 16, Aqua projects that existing customers may save 3 cents per month due to the Limerick acquisition. OCA St. 1S at 3. The potential for 3 cents per month savings some fifteen years into the future does not establish affirmative benefits for purposes of Section 1102. As OCA witness Everette stated:

> For existing customers, a possible cost benefit of 3 cents per month after 15 years of increased rates is not an indication that the acquisition provides substantial public benefits. Mr. Packer did not provide any other support to demonstrate how or when customers will benefit in the future (OCA-V-2) or make any projections about how many more systems must be acquired and at what cost to turn costly acquisitions like Limerick into a benefit.

Id.

Aqua witness Packer argues, however, that affirmative benefits from regionalization and consolidation should be evaluated over a longer timeframe and more broadly. He states that the Commission has "consistently applied a long-term philosophy towards its policy of promoting further consolidation" and takes "a bigger picture view" of how the fair market value acquisitions will benefit "the water and wastewater industry as a whole." Aqua St. 1 at 8-11; Tr. at 37. Mr. Packer recognized, however, that when a system is acquired at market value versus net original cost, the resulting impact on rates could weigh against its approval by the Commission, even where that acquisition promotes regionalization and consolidation.[21] Tr. at 38-39. Mr. Packer testified:

> So clearly, it's not unknown to the company that the valuation that's established is going to increase cost. So when you say five times, ten times [the net original cost of the system] – I mean, I know going from five to ten is going to have increases in rates, okay, that may not – may not – be viewed as well.

Id. at 39.

In the case of Limerick, the purchase price is 63% ($28,946,133) over the net book value. OCA St. 1 at 3. The evidence shows that acquiring the 5,434 customers served by the Authority for $75.1 million would increase costs substantially and disproportionately. OCA St. 1 at 16-17. OCA witness Everette explained:

> With 20,440 wastewater customers and wastewater net utility plant of $73,477,924, Aqua's existing system has an average net plant amount of $3,595 per customer. By contrast, the acquisition of Limerick will add 5,434 customers and $75,100,000 of rate base (plant), or an average of $13,820 per customer. The average rate base cost of each Limerick customer is nearly four times that of an existing Aqua customer ($13,820 / $3,595).

[21] On cross-examination, Mr. Packer was unable to think of any example where acquisition of a municipal system by Aqua would not result in consolidation and regionalization. Tr. at 37. This suggests that there is no limit and certainly no search for efficiencies from his definition of consolidation and regionalization.

Id. at 16. While the number of wastewater customers would increase by 27%, the average rate base cost of Aqua's wastewater customers would increase by 60% per customer. Id.

Exacerbating this inequity, Aqua proposes a 3-year rate freeze for Limerick customers. APA, ¶7.05(b); Aqua St. 1 at 14-15. The result is that Aqua's existing customers will be expected to support any subsidies for keeping Limerick rates lower than cost for the first 3 years post-acquisition. Aqua St. 1, Exhs. C, D. Aqua projects that subsidy will be roughly 60%. OCA Exhs. AEE-2A, AEE-2B; OCA St. 1 at 13. Seven years after the rate freeze ends, Aqua projects that existing Aqua customers will be paying almost 10% of Limerick's revenue requirement. OCA St. 1 at 13-14.

As Aqua has structured the transaction, Aqua's existing water customers are also at risk for supporting the costs of acquiring the Limerick customers. The Company may seek approval under 66 Pa. C.S. § 1311(c) to allocate a portion of its wastewater revenue requirement to the combined water and wastewater customer base. It must be recognized that every other Aqua water customer already has to pay for wastewater disposal either to another provider, to Aqua, or with their individual wastewater system.

For all of these reasons, Ms. Everette concluded that the proposed transaction is neither fair to customers nor consistent with principles of cost-based ratemaking. The terms of the transaction would not provide an affirmative benefit and would substantially harm Aqua's existing customers.

2. Harm to Limerick Customers after Year 3

The record does not show that Limerick customers will affirmatively benefit from the proposed transaction. During the first three years post-acquisition, Aqua will freeze rates for Township customers, exclusive of the DSIC. APA, ¶7.05(b); Aqua St. 1 at 14-15; OCA St. 1 at

1-2. If approved as proposed, Aqua would continue to charge Limerick customers their present sewer rate of approximately $38 per month. Aqua St. 1 at 14. In the fourth year of ownership, however, Aqua projects increasing those rates by almost 100%. Id. at 14-15. OCA witness Everette explained further:

> Aqua witness Packer states that Aqua desires to raise the rates of Limerick customers, from $38 per month to $70 per month, which would nearly double the rates to Limerick customers. Aqua states that the rates would be "targeted" to these levels during years four through ten of Aqua ownership (Exhibit U, page 14). Mr. Packer's Exhibits C and D show Aqua's projection that it intends to increase rates to Limerick customers by $4,650,000 in the first ten years. This is an increase of 105% over existing revenues.

OCA St. 1 at 11-12. Even at $70 per month, Aqua anticipates that Limerick customers will not be paying the full cost of their acquired system until at least Year 15. Aqua St. 1, Exhs. C, D; OCA St. 1S at 3. Company witness Packer testified that, in order to shift less costs to Aqua's existing customers, the Limerick customer rates could be increased at an even greater amount. Tr. at 22. For the foreseeable future, thus, Limerick customers will experience a significant rate increases.[22]

In addition, Limerick customers will lose the benefit of capital reserve fund payments. OCA St. 1 at 11. The Township's financial statement describes a sewer pump station project being planned and designed that was to be paid for with funds provided by the wastewater customers (by way of EDU fees). OCA St. 1 at 9, 11; Aqua Exh. I1 at 17. OCA witness Everette explained how these capital reserve funds will be treated for ratemaking purposes.

> Despite the fact that Limerick customers already paid once for this expenditure, under Aqua's proposed Section 1329 acquisition, Limerick customers and Aqua's existing customers will pay for this expenditure a second time. Under Aqua's proposal, no consideration is given to the fact that plant was paid for directly out of a fund contributed by customers. As another example, the 2015 annual report highlights a capital contribution of $1.4 million in 2015. A contribution of this nature would generally be a deduction from rate base, due to the fact that it was

[22] Ms. Vicari assumed a 55 % rate increase in Year 4 and then 10% rate increases per year every three years.

> contributed to public service at no cost to the utility. However, under Section 1329 of the Public Utility Code, this plant will be paid for a second time, this time, by Limerick customers and existing Aqua ratepayers.

OCA St. 1 at 11.

The record does not bear out Aqua's contention that Limerick customers will receive a benefit that outweighs the detriment of dramatically increased rates and the loss of their capital reserve fund payments. The evidence shows that the Limerick system is in a strong financial position. OCA St. 1 at 8-10. Aqua witness Packer anticipates that the system "will likely be able to be operated many years without extensive capital investment." Aqua St. 1 at 10. As OCA witness Everette summarized:

> Limerick's wastewater system is much larger than many wastewater utilities in Pennsylvania, in terms of both number of customers and annual revenues. If Limerick were a regulated utility, it would be classified as a Class A company. The financial statements indicate that Limerick's sewer system is in good financial shape and that the management has appropriately planned for needed capital improvements.

OCA St. 1 at 10 (citation omitted).

3. The Adverse Impacts on Aqua's Existing Customers and the Limerick Customers Outweigh the Benefits of the Proposed Transaction.

In the CMV case discussed above, the Commission concluded that the adverse impacts of the proposed transaction for the existing customers outweighed the benefits. 2008 Pa. PUC LEXIS 950, * 32. The customers proposed to be acquired were currently receiving service from a system that was in compliance with applicable environmental laws and regulations. While the CMV system might have required upgrades to comply with stricter environmental requirements at an unknown future date, there was no certain evidence on that point. The Commission stated:

> The advantages alleged by NCTSA do not outweigh the certain, immediate adverse impacts of this transaction. The proposed transaction will result in an immediate $1,800 cost for Colonial Crossings customers, which is in addition to an average rate increase of approximately $70 per quarter, or 54% compared to

> existing rates. We find that the ALJ correctly weighed the evidence before him, and concluded that the costs of the proposed transaction for the Colonial Crossings customers outweigh the benefits for those customers.

Id. at *32. As in CMV, the alleged benefits of acquiring the Limerick system are disputed and the adverse impacts of the proposed acquisition outweigh any claimed benefits.[23]

Although Aqua references economies of scale, the Company has not provided any showing of cost reductions or efficiencies that will be produced by the acquisition of the Limerick customers. Aqua St. 1 at 8, 10; OCA St. 1 at 14-15. Simply having more customers does not create economies of scale. As stated by OCA witness Everette:

> Generally for utilities, acquisitions increase economies of scale because fixed costs can be spread to more customers. However, as Mr. Packer testified to, and as I explained above, Limerick customers will not even be covering their full cost of service under Aqua ownership at the proposed $75.1 million rate base. Therefore, they cannot make any contribution to overall fixed costs.

OCA St. 1 at 14-15. Stated otherwise, if the Limerick customers do not pay even their full cost of service, they will not share the costs of infrastructure improvements for other parts of Aqua's service territory.

Further, the Joint Applicants provided no documentation that Aqua can construct, operate and maintain the existing Limerick system and anticipated improvements at a lesser cost than Limerick Township, which does not have to pay income taxes and state and federal taxes on its equity earnings and has the advantage of being able to issue tax exempt debt. 26 U.S. Code § 115(1); 61 Pa. Code Chs. 5-6; 53 Pa. C.S. § 8005(c). Rather, based on Aqua's projections, it appears that Aqua's operating and maintenance expenses would be similar to or greater than

[23] In CMV, the Commission was not persuaded that potential economies of scale provided a benefit that outweighed the known adverse impacts of the transaction. As the OCA pointed out in CMV, there is no guarantee that savings resulting from any economies of scale will be reflected in the rates charged to customers. Id. at *29-30.

those experienced by Limerick.[24] Thus, it is not clear whether there will be any efficiencies in costs to run the system through Aqua's acquisition.

In addition, despite Mr. Packer's repeated assertions regarding Limerick's "declining cost profile," because the system does not require ongoing extensive capital improvements, that profile exists independent of Aqua's ownership and is attributable to Limerick's management of the system. Aqua St. 1 at 10, 15; Aqua St. 1R at 9, 16; OCA St. 1S at 8-10. Ms. Everette stated further:

> Mr. Packer reiterates his argument that the benefits of Limerick are over the long term. To support this, he says that "The Limerick system is one with a declining cost profile, not requiring ongoing extensive capital improvements" (Aqua Statement No. 1R, page 9). However, Mr. Packer's analysis does not demonstrate that even lack of capital improvements will make the high purchase price cost effective. In fact, Mr. Packer's exhibits show that even as the Limerick system costs decline, the Limerick system costs remain far above existing Aqua customer costs. Aqua's current wastewater revenues totaled $12.1 million in 2016 (2016 Annual Report, Schedule 400). In 2016, Aqua had 20,440 customers (2016 Annual Report, Schedule 402) which is average revenue per customer of $593 ($12.1 million / 20,440). In contrast, Mr. Packer's anticipated required revenues for Limerick are much higher. Mr. Packer's Exhibit D and associated workpapers shows necessary revenues per customer of $1,495 in Year 2 and $1,466 in Year 7. Thus, even if costs decline, it appears that they will still significantly exceed the average costs of current customers, which lessens any benefit gained from consolidation or regionalization.

OCA St. 1S at 6. It should be noted that the rate base amount reflected in these numbers does not reflect that Aqua has also filed to acquire the New Garden Township system under Section 1329. OCA St. 1 at 16, n.17. That system also has a substantially higher system cost than the existing Aqua system.[25] Id. Again, any benefit gained from regionalization and consolidation is

---

[24] Limerick's expenses in 2015 were $1,802,106 before depreciation. Aqua Exh. I1 at 29 ($3,388,685 - $7,586,579 = $1,802,106). Aqua projects $2,000,000 of O&M expenses in the first year of operation. Aqua St. 1, Exhs. C, D.

[25] This is Aqua's second acquisition filed under Section 1329 since December 2016. The rate base amount used in the filing and in my testimony does not include the acquisition of New Garden Township (Docket number A-2016-2580061) because to my knowledge, Aqua has not completed the closing of the purchase. Aqua will pay $29.5 million to acquire the New Garden system. New Garden has 2,106 customers. If Aqua's current rate base, the New Garden rate base, and the Limerick rate base are added together, the result is $178.1 million. The total number of

diminished where the costs of acquisition significantly exceed the average costs of Aqua's current customers.

For these reasons, and those discussed above, the Joint Applicants have failed to show that the terms of the proposed transaction would result in any substantial, affirmative public benefits to Aqua's existing water and wastewater customers or the acquired Limerick customers. The OCA submits, therefore, that the Commission must deny the Application.

4. Recommended Conditions

As set forth above, the OCA recommends that the Commission deny the relief requested in the Application. If, however, the Commission permits the proposed acquisition, the OCA recommends the following conditions:

- The Commission retains the authority to allocate revenues, if appropriate, to the Limerick Township customers that are inconsistent with the restrictions contained in the APA;
- Aqua and its shareholders should bear all risk of a shortfall between the revenues Aqua is permitted to recover under its agreement with Limerick and the costs that the Company will incur with respect to the acquired system. To the extent that Aqua is unwilling or unable to charge costs in excess of the limitations provided in the Asset Purchase Agreement, the excess costs should be borne by shareholders and not spread to other ratepayers;
- Aqua and its shareholders should bear all risk of a shortfall between the revenues it is permitted to recover under its agreement with Limerick and the costs that the Company will incur with respect to this system.
- The regulatory asset should not be approved in this case;
- If Aqua proposes the regulatory asset treatment in its next base rate case, the Commission should require Aqua to provide a net present value analysis showing the impact on ratepayers of using a regulatory asset as compared to the impact of depreciating the total $75.1 million rate base;

Aqua wastewater customers after these two Section 1329 acquisitions will be 27,324. The average rate base cost per customer will be $6,517 ($178.1 million / 27,324), or an increase of 75% from Aqua's per-customer rate base before either Section 1329 acquisition.

- If Limerick customers will begin paying a DSIC prior to effective date of rates established in Aqua's next base rate case, the Commission should require that Aqua file the required tariff changes and revised LTIIP no later than 30 days after entry of the Commission order in this proceeding; and

- The Commission should adopt the OCA's proposed adjustments to the appraisals, resulting in an overall ratemaking rate base of $60,976,180 (prior to closing and transaction costs).

Supra, Sections IV.B.1, IV.B.3, IV.B.4.; OCA St. 1S at 22-23.

V. CONCLUSION

The OCA's recommendation that the Commission deny Aqua's application for a Certificate of Public Convenience to purchase the Limerick wastewater assets and provide wastewater service is intended to prevent Aqua's existing water and wastewater customers from bearing the costs of a transaction that does not provide affirmative benefits that outweigh the harms to customers. For the reasons set forth above, the Office of Consumer Advocate urges the Commission to find that the Application of Aqua does not satisfy the standards set forth in Section 1103(a) of the Public Utility Code and City of York. In the alternative, the Office of Consumer Advocate's proposed conditions should be adopted, including the OCA's proposed adjustments to the appraisals resulting in an overall ratemaking rate base of $60,976,180.

Respectfully Submitted,

Erin L. Gannon/CMH

Christine Maloni Hoover
Senior Assistant Consumer Advocate
PA Attorney I.D. # 50026
E-Mail: CHoover@paoca.org

Erin L. Gannon
Senior Assistant Consumer Advocate
PA Attorney I.D. # 83487
E-Mail: EGannon@paoca.org

Counsel for:
Tanya J. McCloskey
Acting Consumer Advocate

Office of Consumer Advocate
555 Walnut Street 5th Floor, Forum Place
Harrisburg, PA 17101-1923
Phone: (717) 783-5048
Fax: (717) 783-7152

August 11, 2017
238481

List of Exhibits Sponsored by the OCA

The following OCA Testimony and Exhibits were admitted into the record at the Evidentiary Hearings on July 20 and 21, 2017:

OCA Statement No. 1: Direct Testimony of Ashley E. Everette
Appendix A: Background and Qualifications
OCA Exhibits AEE-1 through AEE-5

OCA Statement No. 2: Direct Testimony of Glenn A. Watkins
OCA Exhibits GAW-1 through GAW-7

OCA Statement No. 1S: Surrebuttal Testimony of Ashley E. Everette
OCA Exhibit AEE-1S

OCA Statement No. 2S: Surrebuttal Testimony of Glenn A. Watkins