# EXHIBIT U TESTIMONY OF WILLIAM C. PACKER

## BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

#### AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2017-\_\_\_\_

## DIRECT TESTIMONY OF WILLIAM C. PACKER

With Regard To
A General Overview of the Transaction
Financial and Legal Fitness of APW
Public Benefits of the Transaction
Section 1329, Including Rate
Stabilization Plan

1	Q.	Please state your name and business address.	
2	A.	My name is William C. Packer. My business address is 762 West Lancaster Avenue,	
3		Bryn Mawr, Pennsylvania 19010.	
4	Q.	By whom are you employed and in what capacity?	
5	A.	I am employed by Aqua Pennsylvania, Inc. ("Aqua PA"), as Vice President – Controller	
6		and I also oversee certain financial operations for Aqua America, Inc. ("Aqua America")	
7		and its subsidiary Aqua New Jersey, Inc. ("Aqua NJ"). Aqua PA is the parent company	
8		to Aqua Pennsylvania Wastewater, Inc. ("APW" or the "Company").	
9	Q.	Please provide a brief description of your education and work experience.	
10	A.	I graduated from Richard Stockton College of New Jersey in 1998 with a Bachelor of	
11		Science degree in Business Studies with a concentration in Accounting. In 1998, I joined	
12		GE Capital Mortgage Services Inc. as a Staff Accountant. In September 1999, I joined	
13		New Jersey American Water Company ("American") as a General Staff Accountant	
14		responsible for financial statement preparation, account reconciliation, financial support	
15		for rate cases, and account analysis. In September 2001, I was transferred to American's	
16		Service Company, in its Shared Services operation located in Mt. Laurel, New Jersey. I	
17		was employed there for four years in several roles, including Senior Fixed Assets/Job	
18		Cost Accountant, Financial Support Analyst, and Accounting Supervisor Fixed Assets.	
19		At American, I had the opportunity to support the rate-making process by working	
20		closely with operating subsidiaries in 23 states, preparing schedules and answering	
21		interrogatories.	
22		In March 2005, I joined Aqua New Jersey, Inc., where I served as Assistant	
23		Controller until December 2006, when I transferred to Aqua America, Inc. In July 2008,	

1		I was promoted to the position of Mid-Atlantic Manager of Rates. In April 2011, I	
2		became the Manager of Rates and Planning - Northeast Divisions. I was promoted to	
3		Regional Controller for Aqua PA and Aqua NJ subsidiaries in October 2012. In April	
4		2017, I was promoted to my current position of Vice President – Controller of Aqua PA.	
5	Q.	Have you testified before this Commission before?	
6	A.	Yes, I have testified in several proceedings before the Pennsylvania Public Utility	
7		Commission ("PUC" or the "Commission"), including Aqua PA's petition to charge a	
8		7.5% Distribution System Improvement Charge ("DSIC") at Docket R-2008-2079310,	
9		Aqua PA's last two rate cases at Docket Nos. R-2009-2132019 and R-2011-2267958, and	
10		APW's previous Section 1329 proceeding in Docket No. A-2016-2580061.	
11	Q.	Has the Company filed an application with the Pennsylvania Public Utility	
12		Commission for regulatory approval to acquire the wastewater system assets of the	
13	Limerick Township ("Township") Sanitary Wastewater and Collection System		
14		("Limerick Wastewater")?	
15	A.	Yes. APW filed its Application on May 19, 2017.	
16	Q.	What is APW seeking in its application?	
17	A.	There are two requests. First, APW is requesting approval of the acquisition under	
18		Section 1102, 66 Pa. Cons. Stat. § 1102, similar to many requests that come before the	
19		Commission. Second, pursuant to Act 12 of 2016 ("Act 12" or the "Act"), 66 Pa. Cons.	
20		Stat. § 1329, APW is seeking to utilize fair market value for the ratemaking rate base of	
21		Limerick Wastewater.	
22	Q.	What does Section 1329 require to be included in the application?	

1	A.	Section 1329 requires that the application include (1) copies of the two appraisals, (2) the	
2		purchase price, (3) ratemaking rate base, (4) transaction and closing costs, and (5) the	
3		proposed tariff. A rate stabilization plan could also be required if it is applicable to the	
4		transaction.	
5	Q.	What does the Commission require for the approval of the certificate that utilizes	
6		Section 1329?	
7	A.	In its Final Implementation Order entered October 27, 2016, in Docket No. M-2016-	
8		2543193 ("Final Implementation Order"), the Commission referenced the checklist in the	
9		Tentative Implementation Order for items to include with the application for it to be	
10		processed in a six month time frame. APW has included references with the Checklist	
11		indicating where in the Application the relevant information is located.	
12	Q.	What is the purpose of your testimony?	
13	A.	The purpose of my testimony is as follows: (1) to provide a general overview of APW;	
14		(2) to provide a general overview of the proposed transaction ("Transaction") between	
15		APW and the Township; (3) to describe APW's legal and financial fitness to run the	
16		system; (4) to explain the benefits of the proposed transaction; (5) to describe the utility	
17		valuation expert's ("UVE") appraisals; (6) to describe the UVE's fees; and (7) to explain	
18		the Company's rate stabilization plan.	
19	Q.	Are you sponsoring any Exhibits with your testimony?	
20	A.	Yes. I am sponsoring the following Exhibits:	
21		• Exhibit A – Contract Engaging the Company's UVE	
22		• Exhibit B – Invoices for the Company's UVE.	
23		• Exhibit C – Impact on customers of Rate Base Claim of \$75.1M – Schedule/Workpaper	

1 2 3		• Exhibit D –Company Proposed Rate Stabilization Plan – Schedule/Workpaper – Initial Rate Base of \$60.0M and \$15.1M Regulatory Asset
4	Q.	Please provide a general overview of Aqua PA and APW.
5	A.	Aqua PA is the second largest investor owned regulated water/wastewater utility
6		operating in the Commonwealth of Pennsylvania. Aqua PA provides water and
7		wastewater utility service to approximately 455,000 customers, consisting of 435,000
8		water customers and 20,000 wastewater customers. Aqua PA employs approximately
9		600 highly trained utility professionals to achieve its mission to provide safe, adequate,
10		and reliable utility service at reasonable rates. In addition, Aqua PA is one of eight
11		regulated subsidiaries of Aqua America, which brings to bear its own financial, technical
12		and managerial resources to assist in our mission.
13		APW is a subsidiary of Aqua PA and is engaged in the business of collecting,
14		treating, transporting, and disposing of wastewater for the public. APW provides
15		wastewater service to approximately 20,000 customers in Adams, Bucks, Carbon,
16		Chester, Clarion, Clearfield, Delaware, Lackawanna, Luzerne, Monroe, Montgomery,
17		Pike, Schuylkill, Venango, and Wyoming Counties. APW brings extensive expertise in
18		providing wastewater service to citizens of Pennsylvania, and currently operates 34
19		wastewater treatment plants.
20	Q.	Please provide a description of Limerick Township and Limerick Wastewater.
21	A.	The Township owns the assets of the wastewater system that are being purchased by
22		APW. The Township is a Pennsylvania second-class township. Wastewater utility
23		service is provided to approximately 5,434 customers (7,272 Equivalent Dwelling Units
24		("EDU's")). The utility infrastructure being acquired includes, but is not limited to,
25		treatment, collection, and pumping assets.

1	Q.	Are there any other witnesses submitting testimony with this application?	
2	A.	Yes, Aqua Services, Inc. ("Aqua Services") Senior Project Engineer – Mark J. Bubel, Sr.	
3		will be providing testimony regarding the specifics of the system being acquired from an	
4		operations/engineering perspective.	
5	Q.	Please provide an overview of the proposed Transaction.	
6	A.	APW responded to a request for bids by the Township and was ultimately chosen as the	
7		winner. After arms-length negotiations between APW and the Township, the Asset	
8		Purchase Agreement ("APA") was signed and executed on November 16, 2016 providing	
9		for the sale of the assets, properties and rights of the wastewater system. <sup>1</sup> The purchase	
10		price totaled \$75.1 million. According to the APA, the acquired customers will be	
11		charged the existing rates of the seller for a period of not less than three years. APW's	
12		tariff rules and regulations will apply following closing.	
13	Q.	Does the APA provide for an agreement as to level of rate increases over a period of	
14		time?	
15	A.	No. While the APA includes a period of three years over which rates are to remain	
16		unchanged at seller's rates, there is no provision within the APA that changes the	
17		purchase price, or provides for a limitation on rate increases. In addition, I note that the	
18		Commission maintains the authority to set rates in APW's next base rate case.	
19	Q.	Please describe how the Company is legally fit to own and operate the system.	
20	A.	APW is a public utility operating under Commission granted certificates of public	
21		convenience. There are no pending legal proceedings challenging APW's ability to	
22		provide safe and adequate service to customers.	

 $<sup>^{1}</sup>$  Certain vehicles, equipment, and other assets have been excluded as per Section 2.02 and Schedule 2.02(i) of the APA.

1	Q.	Please describe now the Company is financially fit to own and operate the system.	
2	A.	As I mentioned in my overview, Aqua PA, as parent company to APW, is a Class A	
3		water utility in the Commonwealth and the largest subsidiary of Aqua America, with total	
4		utility plant assets of \$3.9 billion and annual revenues of \$418 million in 2016. Aqua PA	
5		had operating income of approximately \$213 million and net income of \$173 million.	
6		Aqua PA's cash flows from operations equaled \$186 million. APW is a Class A	
7		wastewater utility in the Commonwealth, with total assets of \$111 million and annual	
8		revenues of \$12 million.	
9		Aqua PA has an A+ rating from Standard and Poor's Rating Service and has	
10		approximately \$1.1 billion in outstanding long-term debt at a weighted average interest	
11		rate of approximately 4.5%. Aqua PA also utilizes low-cost long-term debt financing	
12		instruments through the Pennsylvania Infrastructure Investment Authority ("Pennvest"),	
13		representing about 5% of Aqua PA's total debt portfolio. In addition to Aqua PA's	
14		access to long-term debt, Aqua PA has its short term credit facility of \$100 million and	
15		has access to equity capital as a subsidiary of Aqua America. APW, as a subsidiary of	
16		Aqua PA, has access to Aqua PA's financing capabilities.	
17	Q.	Please explain how APW plans to fund the Transaction.	
18	A	This Transaction will be funded using existing short term credit lines. The short term	
19		credit funding will be converted to a mix of long-term debt and equity capital shortly	
20		after closing.	
21	Q.	Do you anticipate the Transaction will affect Aqua PA's corporate credit rating?	
22	A.	No. The Company does not anticipate that the Transaction will affect Aqua PA's	
23		corporate credit rating.	

1	Q.	Please explain the rate provisions in paragraph 7.05(b) of the APA.	
2	A.	Under the provisions of paragraph 7.05(b) of the APA, as of the day of closing, the	
3		Company will charge the same rates as those previously charged by the Township for a	
4		period of not less than three years. Additionally, pass through costs imposed by the	
5		Commonwealth of Pennsylvania, including, but not limited to State Tax Adjustment	
6		Surcharges, may be included in base rates.	
7	Q.	Please explain how the Company will bill the Township's customers after closing.	
8	A.	Currently, the Township bills their customers on a quarterly basis. The Company will	
9		establish monthly billing at a later date after closing, however, this would likely happen	
10		sometime after the first year of operation.	
11	Q.	Please explain why the proposed transaction is in the public interest?	
12	A.	The PUC has a long-standing record of support for consolidation/regionalization of	
13		water/wastewater systems. The PUC understands that in doing so, the utility industry	
14		will have a better chance to realize the benefits of better management practices,	
15		economies of scale, and the resulting greater customer/environmental/economic benefits.	
16		The Commission has previously stated that "acquisitions of smaller systems by larger	
17		more viable systems will likely improve the overall long-term viability of the water and	
18		wastewater industry. Additionally, these types of acquisitions will also enhance the	
19		quality of ratepayers' daily lives, promote community economic development, and	

21

22

both existing and acquired. The proposed transaction of Limerick Wastewater is no

exception to the principles noted in the aforementioned policy statement, and Aqua PA

<sup>&</sup>lt;sup>2</sup> Pennsylvania Public Utility Commission, Final Policy Statement on Acquisitions of Water and Wastewater Systems, Docket No. M-00051926, Final Order at 18 (Aug. 17, 2006).

1		has successfully acquired numerous water/wastewater utilities over its now 130 years of	
2		operation.	
3	Q.	Please discuss the Company's track record of acquiring and improving wastewater	
4		systems in the Commonwealth.	
5	A.	APW currently provides utility service to approximately 20,000 wastewater customers in	
6		the Commonwealth and has years of experience operating wastewater treatment and	
7		collection systems in a safe, reliable and efficient manner. Moreover, APW has the	
8		managerial, technical, and financial resources to continue to operate, maintain and	
9		improve the Limerick Wastewater system.	
10		APW has acquired 15 wastewater systems over the past 10 years. <sup>3</sup> Many of these	
11		systems required significant investment to correct service and environmental issues.	
12		APW has also acquired systems that did not need substantial capital investment. The	
13		Company has acquired, and will continue to acquire, both troubled and viable systems	
14		that will foster regionalization thereby promoting overall quality of service to customers.	
15		APW and Aqua PA are essentially the compilation of smaller systems that have been	
16		acquired over the last 130 years and make both companies what they are today. The	
17	acquisition of the Limerick Wastewater system will continue to address the		
18		Commission's supported policy of consolidation and regionalization.	
19	Q.	Will the Township's customers benefit from the transaction?	
20	A.	Yes. The Township's customers will become part of a larger-scale, efficiently operated,	
21		wastewater utility that over time will likely yield further operating efficiencies. The	
22		Company has operations in nearby service areas and will be able to assume the operations	
	3 Emle	enton Honeycroft (2016): Runker Hill (2015): Penn Townshin (2014): Treasure Lake (2013): Sage Hill	

<sup>&</sup>lt;sup>3</sup> Emlenton, Honeycroft (2016); Bunker Hill (2015); Penn Township (2014); Treasure Lake (2013); Sage Hill, Kidder Township, Beech Mountain, Village at Valley Forge (2012); Stony Creek (2010); Cove Village, Washington Park (2009); New Daleville (2008); and Newlin Green, The Greens at Penn Oaks (2007).

of Limerick Wastewater, fold them into a larger-scale, efficiently operated, wastewater utility that over time will likely yield further operating efficiencies and improve the long-term viability as envisioned in the PUC policy statement. The acquisition will not have any immediate impact on the rates of either the Township's customers or the existing customers of APW. Notably, APW has not filed a base rate case for a rate increase since 2010 for its wastewater systems.

#### O. Will APW's existing customers benefit from the acquisition?

A.

Yes. The acquisition of the Limerick Sewer system will be an approximate 27% increase in APW's customer base. By virtue of the Company's larger customer base, future infrastructure investments across the state will be shared at a lower incremental cost per customer for all of APW's customers. The system is in generally good condition and will likely be able to be operated many years without extensive capital investment.

Additionally, this acquisition is one that comes with the expectation of future growth, as noted in the testimony of Mark J. Bubel, Sr. More importantly, that future incremental growth will be able to be accommodated utilizing the current sewer utility treatment infrastructure. This will further spread the cost of service across even more customers and improve the economies of scale as this system is integrated into APW. Notably, as of the date of the application there are approximately 7,300 (EDU's) being billed by the Township, with approximately 8,400 (EDU's) currently purchased. Those additional EDU's represent a 15% increase in billable units. I note again that both APW and Aqua PA have developed into the utility they are today by acquiring and operating smaller and mid-sized systems. This progression has successfully happened over the last several decades and took the form of both viable and non-viable systems. Over the long

1		term, this process has benefitted both current customers, future customers that were		
2		acquired, and the Commonwealth.		
3	ACT 12 OF 2016 (SECTION 1329) CONSIDERATIONS			
4	Q.	Is APW proposing that its application be evaluated utilizing the Fair Market Value		
5		provisions of Section 1329 of the Public Utility Code?		
6	A.	Yes. The Company's Application has been prepared with this in mind. Specifically, the		
7		Company is requesting that the ratemaking rate base of Limerick Wastewater be based on		
8		the lesser of the average of the Fair Market Value Appraisals included in the Application		
9		or the purchase price pursuant to Section 1329 of the Public Utility Code.		
10	Q.	Has APW prepared its application in compliance with the Commission's Final		
11		Implementation Order?		
12	A.	Yes. APW has complied with all required documentation according to the PUC's		
13		application checklist including, but not limited to, the Engineering Assessment of Assets		
14		and two independent Fair Market Value appraisals.		
15	Q.	Please provide an overview of the valuation process.		
16	A.	Following the execution of the APA, the Company and the Township agreed on a		
17		Licensed Engineer to complete the Assessment of Tangible Property (Exhibit W).		
18		Following the receipt of the Assessment, both parties engaged their respective UVEs to		
19		perform a Fair Market Value analysis of the system in accordance with the Uniform		
20		Standards of Professional Appraisal Practice ("USPAP"), utilizing the cost, market, and		
21		income approaches. APW engaged the services of Gannett Fleming Valuation and Rate		
22		Consultants, LLC. ("Gannett") and has attached to its Application their Fair Market		
23		Value Appraisal as Exhibit Q. The Township engaged the services of Herbert, Rowland,		

1		& Grubic, Inc. ("HRG") and their Fair Market Value Appraisal is attached to the
2		Application as <b>Exhibit R</b> . Both firms have been pre-certified as authorized UVEs by the
3		PUC and are on the list of qualified appraisers maintained by the PUC.
4	Q.	Please describe the conclusions of the two appraisals used to determine the fair
5		market value of the Authority's assets.
6	A.	The two appraisals used the USPAP employing the cost, market, and income approaches
7		to arrive at the fair market value of the system. The Township sponsored appraisal
8		performed by HRG arrived at a system value of \$76,890,000. The Company's sponsored
9		appraisal performed by Gannett arrived at a system value of \$80,097,939. Therefore, the
0		fair market value as defined in Act 12 is the average of these two appraisals which is
1		\$78,493,970.
12	Q.	Pursuant to Section 1329 of the Public Utility Code, what is the resulting rate base
13		determination for Limerick Wastewater?
14	A.	According to Act 12, the ratemaking rate base is the lesser of either the purchase price in
15		the APA, which is \$75,100,000, or the fair market value which is \$78,493,970. In this
16		instance, since the purchase price is lower than that fair market value, the ratemaking rate
17		base for Limerick Wastewater is \$75,100,000.
8	Q.	Please state the total of the UVEs' fees incurred by the Company.
9	A.	The UVEs' fees for the Company's appraisal totaled \$38,888.
20	Q.	Please explain whether you believe the UVEs' fees are reasonable?
21	A.	Based on the scope of work, the methods used as accepted industry practice, and that the
22		UVEs' fees were less than 5% of the fair market value benchmark noted in the Final
23		Implementation Order, as such, I believe the fees are reasonable. Per the Final

1 Implementation Order, I have included in Exhibit A attached to my testimony the 2 contract engaging the Company's UVE, Gannett, and I have included in Exhibit B 3 attached to my testimony copies of the invoices for the cost of the appraisal. 4 Please describe the Company's Rate Stabilization Plan and its impact on customers? Q. A Rate Stabilization Plan is defined in Section 1329 as "[a] plan that will hold rates 5 A. constant or phase rates in over a period of time after the next base rate case." In its Final 6 7 Implementation Order at Docket No. M-2016-2543193, the PUC concluded that "rate 8 stabilization plans will be subject to review in each rate case for reasonableness and should not place long term burdens on the acquiring utility's existing ratepayers." With 9 10 that background, I first prepared the calculations and assumptions attached to my 11 testimony as Exhibit C, based on a rate base claim of \$75.1 million, that focuses on the 12 first ten years of operations, and then more specifically focuses on the midpoint of the pre and post three year rate freeze time period. I next prepared the calculation and 13 14 assumptions attached to my testimony as Exhibit D. Exhibit D is APW's proposal to split 15 the Section 1329 ratemaking rate base of \$75.1 M into two parts: (1) a ratemaking initial rate base of \$60.0M and (2) a \$15.1M Regulatory Asset. I would point out that, 16 17 irrespective of any plan that the Company presents and that the Commission approves 18 here, the real impact ultimately will be determined in the context of a base rate case or 19 cases. The timing as to which rate cases might occur during the first ten years could 20 increase or decrease as a result of various changing factors. 21

#### What is presented in Exhibit C? Q.

<sup>&</sup>lt;sup>4</sup> 66 Pa. C.S. § 1329(g).

<sup>&</sup>lt;sup>5</sup> Pennsylvania Public Utility Commission, Implementation of Section 1329 of the Public Utility Code, Docket No. M-2016-2543193, Final Implementation Order at 27 (Oct. 27, 2016).

Exhibit C is based on a rate base claim of \$75.1M. For the purposes of identifying the potential impact on existing customers during the rate freeze period in years one through three, I calculated the cost of service of the Limerick Wastewater system utilizing the anticipated revenues and expenses and a \$75.1M rate base during this period, which assumes increases in customers and operating expenses. My calculations show that the system needs an approximate revenue increase of \$7.8M above their anticipated revenues of \$4.8M in year two. If included in the context of a consolidated rate filing, these costs would be spread amongst the Company's existing sewer and water customers. On a consolidated basis, the monthly cost impact on customers is \$1.42.

Regarding years four through ten, the calculations presented in Exhibit C assume additional increases in customers (as supported by the testimony of Mark J. Bubel, Sr.), operating expenses, and a projected rate base to year seven as an estimate for this system. Assuming that Limerick Wastewater's rates will be very close to what I anticipate the average residential rate per month for APW's existing customers during the same time period, the residential rates would be targeted to approximately \$70 per month. This is in comparison to their present residential sewer rate of approximately \$38 per month. Exhibit C shows that an approximate \$6.55M rate increase would be required above their present revenues of \$5.5M, of which \$4.65M would be applied to the customers of Limerick Wastewater in order to arrive at approximately \$70 per month residential sewer bill. This would leave approximately \$1.9M of revenue requirement to be spread amongst the Company's existing sewer and water customers, as part of a consolidated base rate case. On a consolidated basis, the monthly cost impact on customers is \$0.34.

#### Q. What is presented in Exhibit D?

A.

A. A meaningful part of the value of the Limerick Wastewater system is tied towards its future growth, and as that growth is realized the impact on the rates of all customers is lessened. Due to the unique nature of the growth presented in this acquisition, the Company has prepared an analysis and is presenting a plan that, initially, would reflect in rates a lesser portion of the \$75.1 million ratemaking rate base established through Section 1329. The difference would be recognized in rate base and in rates over time, as the system's customer base grows. The approach that the Company is presenting here stems from the specific circumstances of this transaction and is not something that the Company might view as appropriate in any other circumstance.

#### Q. Would you explain Exhibit D further?

A.

Yes. Exhibit D is based on a rate base claim of \$60.0M and a \$15.1M Regulatory Asset. As previously mentioned, the Company recognizes that the Limerick Wastewater system is in generally good condition and, therefore, will likely operate for many years without extensive capital investment, which is unlike many of the systems that Aqua has acquired in the past. For the purposes of identifying the potential impact on existing customers during the rate freeze period in years one through three, I have calculated the cost of service of the Limerick Wastewater system utilizing the anticipated revenues, expenses, and \$60.0M initial rate base during this period. The Company is proposing to split the Section 1329 ratemaking rate base of \$75.1M into two parts: (1) a ratemaking rate base of \$60.0M and (2) a \$15.1M Regulatory Asset, which will be gradually transferred into rate base over approximately 7.2 years (\$15.1M / \$2.1M = 7.2 years). The rate at which the regulatory asset will transfer is at a rate equal to the annual depreciation expense of the \$60.0M rate base (\$2.1M = \$60M x 3.5% composite depreciation rate). The portion

of the regulatory asset recognized as rate base would then be amortized into income at the same rate as the rate base, which would begin after the first base rate case. Subsequent additions to the regulatory asset would not begin amortizing until the next base rate case. With the implementation of such mechanisms, my calculations show that the system needs an approximate revenue increase of \$6.3M above their anticipated revenues of \$4.8M in year two. If included in the context of a consolidated rate filing, these costs would be spread amongst the Company's existing sewer and water customers. On a consolidated basis, the monthly cost impact on customers is \$1.16.

Regarding years four through ten, my calculations assume additional increases in customers, operating expenses, and a projected gradually increasing rate base to year seven as an estimate for the Company's rate plans for this system. Again, assuming that Limerick Wastewater's residential rates would be targeted to approximately \$70 per month, Exhibit D shows that an approximate \$6.65M rate increase would be required above their present revenues of \$5.5M, of which \$4.65M would be applied to the customers of Limerick Wastewater in order to arrive at approximately \$70 per month residential sewer bill. This would leave approximately \$2.0M of revenue requirement to be spread amongst the Company's existing sewer and water customers, as part of a consolidated base rate case. On a consolidated basis, the monthly cost impact on customers is \$0.37.

The proposed rate stabilization plan accomplishes gradual rate stabilization, while also stabilizing the earnings over the same period of time for the Limerick Wastewater system and its growing customer base. Ultimately, any plan would have to be reviewed for reasonableness and approved in a base rate case. The Company believes, however,

1		that the proposal reflected in Exhibit D is a reasonable approach to address rate	
2		stabilization for its customers.	
3	Q.	Please comment on the transaction and closing costs?	
4	A.	The Company anticipates that the transaction and closing costs will be approximately	
5		\$250,000 including the Company's UVE fees. The exact closing costs will be	
6		determined at closing.	
7	Q.	Does this conclude your testimony?	
8		Yes it does, however I reserve the right to supplement my testimony as additional issues	
9		and facts arise during the course of this proceeding. Thank you.	

# Exhibit A



#### Excellence Delivered As Promised

January 20, 2017

#### VIA EMAIL

Mr. William C. Packer Regional Controller Aqua Pennsylvania, Inc. 762 W. Lancaster Ave Bryn Mawr, PA 19010

Re: Fair Market Value Appraisal

Dear Mr. Packer:

In response to your request, Gannett Fleming Valuation and Rate Consultants, LLC is pleased to submit this cost proposal to provide Aqua Pennsylvania Wastewater, Inc. ("Aqua") a fair market value appraisal of Limerick Township's sewage collection and treatment system assets ("Wastewater System") as of December 31, 2016.

#### SCOPE OF SERVICES

Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett") proposes to conduct a fair market value appraisal of the Wastewater System in compliance with the Uniform Standards of Professional Appraisal Practices, employing the cost, market and income approaches. It should be noted that Gannett will utilize asset cost information provided by Pennoni Associates Inc.'s engineering assessment of the Wastewater System's assets.

Fair market value is defined as "the price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts."

As stated, the standard of value for this engagement is fair market value. The premise of value is going concern. The going concern premise of business value assumes that the business will continue running normally using all of its assets to produce income and will continue operating beyond the valuation date.

Mr. William C. Packer Bryn Mawr, PA 19010

- 2 -

January 20, 2017

Gannett will value the Wastewater System's assets as a group under the premise that they collectively comprise an ongoing operating business enterprise. In accordance with 66 Pa. C.S. Section 1329 the original source of funding for any part of the assets of the selling utility will not be relevant to determination of the value of said assets.

We will accept all information and data provided by the Wastewater System and Aqua as it pertains to this assignment "as is" after a limited review. That is, we will neither audit nor verify any data, original cost study, financial records or operating data provided for this assignment.

#### SITE INSPECTION

We will visit or inspect the Wastewater System's facilities and rely on the information provided by Pennoni Associates Inc.'s engineering assessment of the Wastewater System's assets provided by the Wastewater System and Aqua.

#### REPORT

We will prepare a written document to substantiate our opinion. Our appraisal will be developed consistent with the Uniform Standards of Professional Appraisal Practices. Our valuation will include a detailed analysis and will be presented in a narrative comprehensive, "stand-alone" document for your use. The estimate of value that results from a valuation engagement will be expressed as a conclusion of value to be used for the purposes stated above.

Although our valuation is intended to estimate fair market value, we assume no responsibility for the inability of a seller or buyer to obtain a sale or purchase contract at that price.

#### **QUALIFICATIONS**

Since 1915, Gannett and its predecessors have been helping clients in public pricing policy and related financial matters for managerial purposes, before regulatory commissions and in courts of law. Our staff has considerable experience in providing an array of specialized financial services to support the core needs and objectives of our clients.

Our specialized financial services encompass utility valuations, economic valuation studies, cost of capital studies, depreciation studies, rate studies, lead lag studies, analyses of public utility accounting systems, debt financing reports, economic and demographic studies, financial decision studies, optimum capital structure, debt service levels, dividend policy, private placement of debt, financial benchmarking, and conducting property inventories.

Mr. William C. Packer Bryn Mawr, PA 19010

- 3 -

January 20, 2017

We design each study and its related report to meet the specific requirements of our clients. These studies require objective analyses of basic data, informed professional judgment, and clear presentation of the results. Our staff includes professionals specialized in public utility accounting and ratemaking, valuation, cost of capital, lead lag, depreciation, associated technical services, and financial analysis. We are experienced utility valuation experts who determine fair market value using the cost, market and income approaches in accordance with 66 Pa. C.S. Section 1329. We are a registered Municipal Advisor with the Securities & Exchange Commission (SEC); and are a subsidiary of Gannett Fleming, Inc.

Gannett is approved as a "utility valuation expert" by the PUC within the context of 66 Pa. C.S. Section 1329, Valuation of Acquired Water and Wastewater Systems.

#### FIDUCIARY DUTY

Gannett has a fiduciary duty to, and will, provide a thorough, objective, and fair market valuation using the cost, market and income approaches in accordance with 66 Pa. C.S. Section 1329 and Pennsylvania laws.

Gannett attests that it does not derive any material financial benefit from the sale of, or purchase of, a selling utility other than fees for services rendered. Gannett also verifies it does not have any immediate family members that are directors, officers or employees of either an acquiring public utility, entity or selling utility within a 12-month period of the date of hire to perform an appraisal. We further affirm that Gannett is not directly or indirectly owned, partnered or in any way affiliated with a water/wastewater distribution company.

#### BASIS FOR COMPENSATION

Gannett will perform the above services, and other related services that you may authorize, based on hourly billing rates for our personnel in effect when we perform the work, plus the reimbursement of direct expenses. Direct expenses include transportation, meals, lodging and incidental expenses incurred while traveling and any other expenses required as a result of the assignment that are not incidental to the normal conduct of business. Attached are our billing rates for this project. We will render invoices monthly for services performed during the preceding month.

Based on our experience, we estimate the cost for a complete study will range from \$35,000 to \$45,000. The actual charges for the study will, of course, depend on the time required to complete the assignment and the extent to which data is provided. The availability and quality of the required data sources of information will affect the final cost.

Mr. William C. Packer Bryn Mawr, PA 19010

-4-

January 20, 2017

#### SCHEDULE

The fair market value appraisal will be completed within ninety (90) days of our receipt our signed proposal and the receipt of requested data.

#### **PROPOSAL**

Based on the understanding outlined in this letter, we propose that Aqua Pennsylvania Wastewater, Inc. retain Gannett Fleming Valuation and Rate Consultants, LLC to perform the services as outlined in this letter. If this proposal is satisfactory to you, please so indicate by signing the original proposal and returning it to me.

We thank Aqua for this opportunity to provide valuation services in connection with the fair market value appraisal of Wastewater System's assets. We look forward to acceptance of our proposal and to a successful project.

Respectfully Submitted,

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

QQ1908 500

HAROLD WALKER, III Manager, Financial Studies

HW:amp

Accepted and agreed on behalf of:

Aqua Penns	yivania wastewater, inc.
By: <i>し</i>	Villiam C. Tavkr
Print Name:	William C. Packer
Print Title:_	Regional ControllER
Date:	2/21/17

## GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

#### BILLING RATES

#### EFFECTIVE DECEMBER 31, 2016

Personnel	Hourly <u>Rate</u>
SUPERVISORY STAFF P. R. Herbert, Chairman and President J. J. Spanos, Senior Vice President and Treasurer C. R. Clarke, Director, Western U.S. Services H. Walker, III, Manager, Financial Studies J. F. Wiedmayer, Jr., Project Manager, Depreciation C. E. Heppenstall, Project Manager, Rate Studies N. W. Allis, Supervisor, Depreciation Studies	\$255.00 250.00 250.00 230.00 200.00 175.00
STAFF Analysts and Engineers Associate Analysts and Engineers Assistant Analysts and Engineers Senior Technicians Support Staff	170.00 160.00 140.00 105.00 105.00

# Exhibit B





#### INVOICE

#### Excellence Delivered As Promised

#### Gannett Fleming Valuation and Rate Consultants, LLC

ACH/EFT Payment Information:

ABA: 031312738

Account No.: 5003165655

Account Name: Gannett Fleming Companies

Aqua Pennsylvania, Inc.

Attn: William C. Packer, Manager of Rates

762 Lancaster Avenue Bryn Mawr, PA 19010

**Check Payment Information:** 

**Gannett Fleming Companies** 

PO Box 829160

Philadelphia, PA 19182-9160

Project: 062054

**Invoice No:** 062054\*2422 **Invoice Date:** May 9, 2017

Federal EIN: 46-4413705

Send Remit Info: AccountsReceivable@gfnet.com

Invoice Period: March 4, 2017 through March 31, 2017

Project Manager:

Harold Walker III

hwalker@gfnet.com

610 650-8101

Valuation of Limerick Township Sewer System

#### Summary of Current Charges

Phase 000

- VALUATION-LIMERICK TWP SEWER SYSTEM

15,315.00

**Total Charges** 

\$ 15,315.00

Total Due This Invoice .....

\$15,315.00



Phase 000 -- Valuation-LimerickTwpSwrSys

#### Excellence Delivered As Promised

**Project**: 062054 **Invoice No**: 062054\*2422

Invoice Date: May 9, 2017

#### Gannett Fleming Valuation and Rate Consultants, LLC

Labor Costs			
Labor Classification	Hours	 Rate	 Amount
Assistant Analyst	11.50	\$ 140.00	\$ 1,610.00

 Assistant Analyst
 11.50
 \$ 140.00
 \$ 1,610.00

 Harold Walker
 45.00
 230.00
 10,350.00

 John J. Spanos
 13.00
 250.00
 3,250.00

 Support Staff
 1.00
 105.00
 105.00

Total Labor Costs \$ 15,315.00

Total Phase -- 000 \$ 15,315.00



#### INVOICE

#### Excellence Delivered As Promised

#### Gannett Fleming Valuation and Rate Consultants, LLC

ACH/EFT Payment Information:

ABA: 031312738

Account No.: 5003165655

Account Name: Gannett Fleming Companies

Aqua Pennsylvania, Inc.

Attn: William C. Packer, Manager of Rates

762 Lancaster Avenue Bryn Mawr, PA 19010

**Check Payment Information:** 

Gannett Fleming Companies

PO Box 829160

Philadelphia, PA 19182-9160

Project: 062054

Invoice No: 062054\*2039

Invoice Date: November 17, 2016

Federal EIN: 46-4413705

Send Remit Info: AccountsReceivable@gfnet.com

Invoice Period: October 1, 2016 through October 28, 2016

Project Manager:

Harold Walker III

hwalker@gfnet.com

610 650-8101

Valuation of Limerick Township Sewer System

#### Summary of Current Charges

Phase 000

- VALUATION-LIMERICK TWP SWR SYS

9,997.50

**Total Charges** 

\$ 9,997.50

Total Due This Invoice .....

\$9,997.50



#### Excellence Delivered As Promised

**Project**: 062054 **Invoice No**: 062054\*2039

Invoice Date: November 17, 2016

#### Gannett Fleming Valuation and Rate Consultants, LLC

Labor Costs  Labor Classification	Hours		Rate	,	Amount	
Associate Analyst	8.50	\$	150.00	\$	1,275.00	0
Harold Walker	32.00		225.00		7,200.00	
John J. Spanos	6.00		245.00		1,470.00	
Support Staff	0.50		105.00		52.50	
	Total Labor	Costs				\$ 9,997.50
	Total Phase	000			•	\$ 9,997.50





#### Excellence Delivered As Promised

#### Gannett Fleming Valuation and Rate Consultants, LLC

**ACH/EFT Payment Information:** 

ABA: 031312738

Account No.: 5003165655

Account Name: Gannett Fleming Companies

Aqua Pennsylvania, Inc.

Attn: William C. Packer, Manager of Rates

762 Lancaster Avenue Bryn Mawr, PA 19010

**Check Payment Information:** 

**Gannett Fleming Companies** 

PO Box 829160

Philadelphia, PA 19182-9160

Project: 062054

Invoice No: 062054\*2169

Invoice Date: January 16, 2017

Federal EIN: 46-4413705

Send Remit Info: AccountsReceivable@gfnet.com

Invoice Period: October 29, 2016 through December 30, 2016

Project Manager:

Harold Walker III

hwalker@gfnet.com

610 650-8101

Valuation of Limerick Township Sewer System

#### **Summary of Current Charges**

Phase 000

- VALUATION-LIMERICK TWP SWR SYS

3,522.50

Total Charges

\$ 3,522.50

Total Due This Invoice .....

\$3,522.50



Phase 000

#### Excellence Delivered As Promised

Project: 062054 Invoice No: 062054\*2169 Invoice Date: January 16, 2017

#### Gannett Fleming Valuation and Rate Consultants, LLC

Valu	ation-LimerickTwpSwrSys					
	Labor Costs					
	Labor Classification	Hours		Rate	 Amount	
	Associate Analyst	2.00	୍ଚ \$	150.00	\$ 300.00	
	Harold Walker	13.00		225.00	2,925.00	
	John J. Spanos	1.00		245.00	245.00	
	Support Staff	0.50		105.00	52.50	
		Total Labor C	osts			\$ 3,522.50
		Total Phase	- 000			\$ 3,522.50





#### INVOICE

#### Excellence Delivered As Promised

#### Gannett Fleming Valuation and Rate Consultants, LLC

**ACH/EFT Payment Information:** 

ABA: 031312738

Account No.: 5003165655

Account Name: Gannett Fleming Companies

Aqua Pennsylvania, Inc.

Attn: William C. Packer, Manager of Rates

762 Lancaster Avenue Bryn Mawr, PA 19010

**Check Payment Information:** 

Gannett Fleming Companies

PO Box 829160

Philadelphia, PA 19182-9160

Project: 062054

**Invoice No:** 062054\*2316 **Invoice Date:** March 29, 2017

Federal EIN: 46-4413705

Send Remit Info: AccountsReceivable@gfnet.com
Invoice Period: February 4, 2017 through March 3, 2017

Project Manager:

Harold Walker III

hwalker@gfnet.com

610 650-8101

Valuation of Limerick Township Sewer System

#### **Summary of Current Charges**

Phase 000

- VALUATION-LIMERICKTWPSWRSYS

10,052.50

**Total Charges** 

\$ 10,052.50

Total Due This Invoice .....

\$10,052.50



#### Excellence Delivered As Promised

**Project**: 062054 **Invoice No**: 062054\*2316

Invoice Date: March 29, 2017

\$ 10,052.50

#### Gannett Fleming Valuation and Rate Consultants, LLC

Labor Costs  Labor Classification	Hours	Rate	4	Amount	
Assistant Analyst	13.50	\$ 140.00	\$	1,890.00	
Harold Walker	32.00	230.00		7,360.00	
John J. Spanos	3.00	250.00		750.00	
Support Staff	0.50	105.00		52.50	
			***************************************		

Total Phase -- 000

# Exhibit C

#### 1.) <u>Limerick Cost of Service</u>

Revenue O&M Depreciation Taxes Other income Taxes^	Years 1 - :	3 (midpoint Year 2) 4,771,000 2,060,000 2,661,000 90,000 (615,000)	\$	2,388,000 2,784,000 90,000	Notes  "includes growth estimate year through year seven "3% CAGR "3% CAGR "3% Composite depr on rate base + capex @ 2.5% composite rate ""Estimate Payroll Taxes & Regulatory Assessments ""25% Federal & 9.9% State
Wiscours Layon	•	(0.0,000)	*	(110,000)	00%, dana a 0.00% dana
Operating Income	\$	575,000	\$	673,506	
Required Operating Income	\$	5,047,770	\$	4,427,010	
Operating Income Deficiency	\$	4,472,770	\$	3,753,504	
Gross Revenue Converion Factor		1.738962		1.738962	
Revenue Increase	\$	7,778,000	\$	6,527,000	
Increase applied to Twp customers	\$		\$	4,650,000	
Impact to existing customers	\$	7,778,000	\$	1,877,000	
Existing Customers		455,000		455,000	
Cost per month per customer	\$	1.42	\$	0.34	
Rate Base	\$	72,111,000		63,243,000	^Projected rate base through year 7 (capex less depreciation)
Interest Expense		1,442,220		1,264,860	
^ includes Interest Expense syncronized with rate	base of \$75.1M				

#### 2.) Rate of Return

	Ratio	Cost Rate	WACC
Debt	50.00%	4.00%	2.00%
Equity	50.00%	10.00%	5.00%
	100.00%		7.00%

#### 3.) Gross Revenue Conversion Factor

Dollar of Revenue		1.0000
Less: Gross Receipts (Revenue) Tax	0.00%	0.0000
Less: Reg Assesments	1.20%	0.0120
Less: Bad Debts	0.50%	0.0050
State Taxable Income		0.983000
State Income Tax	9.9999%	0.0983
Federal Taxable Icome		0.884700983
Federal Tax Rate	35.00%	
Federal Income Tax		0.309645
Net Revenue Dollar		0.57505563895
Gross Revenue Conversion Factor		1.73896217
EFT	41.4999%	

#### 1.) <u>Limerick Cost of Service</u>

	2018	2019		2020		2021	2022	2023		2024	2025		2026	
	Year 1	Year 2		Year 3		Year 4	Year 5	Year 6		Year 7	Year 8			Notes
Revenue	\$ 4,437,000	\$ 4,771,000	\$ .	4,840,000	\$	4,888,000	\$ 5,112,000	\$ 5,314.000	\$	5,516,000	\$ 5,724,000	\$		*Includes growth estimate year through year seven
O&M	2,000,000	2,060,000		2,121,800		2,185,454	2,251,018	2,318,548		2,388,105	2,459,748			"3% CAGR
Depreciation	2,628,500	2,661,000		2,711,000		2,736,000	2,761,000	2,776,000		2,783,500	2,791,000			***3.5% composite depr on rate base + capex @ 2.5% composite rate
Taxes Other	90,000	90,000		90,000		90,000	90,000	90,000		90,000	90,000			****Estimate Payroli Taxes & Regulatory Assessments
Income Taxes^	\$ (726,635)	\$ (615,116)	\$	(626,977)	\$	(629,439)	\$ (559,447)	\$ (491,807)	\$	(419,342)	\$ (345,191)	\$	(278,095)	*****35% Federal & 9.99% State
Operating Income	\$ 445,135	\$ 575,116	\$	544,177	\$	505,985	\$ 569,430	\$ 621,259	\$	673,738	\$ 728,444	\$	773,055	
Required Operating Income	\$ 5,143,005	\$ 5,047,735	\$	4,997,965	\$	4,876,445	\$ 4,753,175	\$ 4,600,855	\$	4,427,010	\$ 4,252,640	\$	4,077,745	
Operating Income Deficiency	\$ 4,697,870	\$ 4,472,619	\$	4,453,788	\$	4,370,460	\$ 4,183,745	\$ 3,979,596	\$	3,753,272	\$ 3,524,196	\$	3,304,690	
Gross Revenue Conversion Factor	1.738962	1.738962		1.738962		1.738962	1.738962	1.738962		1.738962	1.738962		1.738962	
Revenue Increase	\$ 8,169,000	\$ 7,778,000	\$	7,745,000	\$	7,600,000	\$ 7,275,000	\$ 6,920,000	\$	6,527,000	\$ 6,128,000	\$	5,747,000	
Increase applied to Twp customers	\$	\$	\$		S	4.650.000	\$ 4.650.000	\$ 4.650.000	\$	4.650.000	\$ 4.650.000	\$	4.650.000	
Impact to existing customers	\$ -	\$ 7.778.000	\$	7.745.000	S	2.950.000	\$ 2.625.000	\$ 2,270,000	\$	1.877.000	\$ 1,478,000	\$	1.097.000	
Existing Customers	455,000	455,000		455,000		455,000	455,000	455,000		455,000	455,000		455,000	
Cost per month per customer	\$ -	\$ 1.42	\$	1.42	S	0.54	\$ 0.48	\$ 0.42	\$	0.34	\$ 0.27	\$	0.20	
Capital Investment	\$ 1,000,000	\$ 1,300,000	\$ 2	2,000,000	\$	1,000,000	\$ 1,000,000	\$ 600,000	\$	300,000	\$ 300,000	\$	300,000	
Rate Base \$ 75,100,000 Interest Expense ^ tocludes Interest Expense syncronized with rate base of \$	73,471,500 1,469,430 M	\$ 72,110,500 1,442,210	\$ 7	71,399,500 1,427,990	\$	69,663,500 1,393,270	\$ 67,902,500 1,358,050	\$ 65,726,500 1,314,530	\$ 9	53,243,000 1,264,860	\$ 60,752,000 1,215,040	\$ 8	58,253,500 1,165,070	*Projected rate base through year 7 (capex less depreciation)

#### 2.) Rate of Return

	Ratio	Cost Rate	WACC
Debt	50.00%	4.00%	2.00%
Equity	50.00%	10.00%	5.00%
	100.00%		7.00%

#### 3.) Gross Revenue Conversion Factor

Dollar of Revenue		1.0000
Less: Gross Receipts (Revenue) Tax	0.00%	0.0000
Less: Reg Assesments	1.20%	0.0120
Less: Bad Debts	0.50%	0.0050
State Taxable Income		0.983000
State Income Tax	9.9999%	0.0983
Federal Taxable Icome		0.884700983
Federal Tax Rate	35.00%	
Federal Income Tax		0.309645
Net Revenue Dollar		0.57505563895
Gross Revenue Conversion Factor		1.73896217
EFT	41.4999%	

# Exhibit D

#### 1.) <u>Limerick Cost of Service</u>

	Years 1 - 3 (mid		Years 4 - 10 (mid	point Year 7)	Notes
Revenue	\$	4,771,000	\$	5,516,000	
M&O		2,060,000		2,388,000	**3% CAGR
Depreciation		2,280,000		2,770,000	***3.5% composite depr on rate base + capex @ 2.5% composite rate
Taxes Other		90,000		90,000	****Estimate Payroll Taxes & Regulatory Assessments
Income Taxes <sup>^</sup>	\$	(373,000)	\$	(424,005)	*****35% Federal & 9.99% State
Operating Income	\$	714,000	\$	692,005	
Required Operating Income	\$	4,343,290	\$	4,513,950	
Operating Income Deficiency	\$	3,629,290	\$	3,821,945	
Gross Revenue Converion Factor		1.738962		1.738962	
Revenue Increase	\$	6,311,000	\$	6,646,000	
Increase applied to Twp customers	\$	-	\$	4,650,000	
Impact to existing customers	\$	6,311,000	\$	1,996,000	
Existing Customers		455,000		455,000	
Cost per month per customer	\$	1.16	\$	0.37	
Rate Base	\$	62,047,000		64,485,000	^Projected rate base through year 7 (capex less depreciation)
Interest Expense		1,240,940		1,289,700	
^ includes Interest Expense syncronized with rate bas	e of \$60M				
Estimated Current Monthly Rates			\$	38	
Estimated Targeted Monthly Rate			\$	70	

#### 2.) Rate of Return

	Ratio	Cost Rate	WACC
Debt	50.00%	4.00%	2.00%
Equity	50.00%	10.00%	5.00%
	100.00%		7.00%

#### 3.) Gross Revenue Conversion Factor

Dollar of Revenue		1.0000
Less: Gross Receipts (Revenue) Tax	0.00%	0.0000
Less: Reg Assesments	1.20%	0.0120
Less: Bad Debts	0.50%	0.0050
State Taxable Income		0.983000
State Income Tax	9.9999%	0.0983
Federal Taxable Icome		0.884700983
Federal Tax Rate	35.00%	
Federal Income Tax		0.309645
Net Revenue Dollar		0.57505563895
Gross Revenue Conversion Factor		1.73896217
EFT	41.4999%	

1.)	Limerick Cost	

Revenue O&M Depreciation Taxes Other Income Taxes^	2018 <u>Year.1</u> \$ 4,437,000 2,000,000 2,173,500 90,000 \$ (433,68)	Year.2 Y 3 \$ 4,771,000 \$ 4,3 6 2,060,000 2 9 2,279,500 2,3 9 90,000	020 2021 021 2 2021 021,000 \$ 4,888,000 021,600 2,185,454 03,000 2,501,500 090,000 90,000 135,617) \$ (487,958)	2,251,018 2,600,000 90,000	2023 <u>Year.6</u> \$ 5,314,000 \$ 2,318,548 2,688,500 90,000 \$ (448,252) \$	2,388,105	2025 2026 Year.8 Year.9 5,724,000 \$ 5,917,00 2,459,748 2,533,540 2,850,500 2,872,000 90,000 90,000 (383,014) \$ (321,118	) "3% CAGR ) "3.5% camposite depr on rate base + capox @ 2.5% composite rate ) ""Estimate Payrof Taxes & Regulatory Assessments
Operating Income	s 607,18	\$ 714,767 \$	\$60,817 \$ 599,004	\$ 638,217	\$ 665,204 \$	692,232 \$	706,767 \$ 742,578	3
Required Operating Income	\$ 4,264,85	\$ 4,343,290 \$ 4,	62,080 \$ 4,503,975	\$ 4,538,975	\$ 4,539,780 \$	4,513,915 \$	4,363,380 \$ 4,183,340	
Operating Income Deficiency	\$ 3,657,668	\$ 3,628,523 \$ 3	301,263 \$ 3,904,971	\$ 3,900,758	\$ 3,874,576 \$	3,821,683 \$	3,656,613 \$ 3,440,76	2
Gross Revenue Conversion Factor	1.73896	2 1,738962 1	738962 1.738962	1.738962	1.738962	1.738962	1,738962 1.73896	2
Revenue Increase	\$ 6,361,000	\$ 6,310,000 \$ 6	10,000 \$ 6,791,000	\$ 6,783,000	\$ 6,738,000 \$	6,646,000 &	6,359,000 \$ 5,983,000	)
Increase applied to Twp customers Impact to existing customers Existing Customers Cost per month per customer	\$ - \$ . 455,000 \$ .		- \$ 4,650,000 \$10,000 \$ 2,141,000 55,000 455,000 1.21 \$ 0.39	\$ 2,133,000 465,000	\$ 4,650,000 \$ \$ 2,088,000 \$ 455,000 \$ 0.38 \$	1,996,000 \$ 455,000	4,650,000 \$ 4,650,000 1,709,000 \$ 1,333,000 455,000 455,000 0.31 \$ 0.2	
Capital Investment	\$ 1,000,000	\$ 1,300,000 \$ 2,0	00,000 \$ 1,000,000	\$ 1,000,000	\$ 600,000 \$	300,000 \$	300,000 \$ 300,000	
Regulatory Asset Rate Base \$ 60,000,000 Interest Expense * Includes Informat Expense syncronized with rate base on	2,100,000 \$ 60,926,500 1,218,530	\$62,047,000 \$63,	00,000 2,100,000 44,000 \$.64,342,500 74,880 1,286,850		2,100,000 \$ 64,854,000 1,297,080		400,000 52,334,000 \$ 59,762,000 1,246,680 1,795,240	Projected rate base through year 7 (capex first depreciation)

#### 2.) Rate of Return

	Ratio	Cost Rate	WACC	
Debt	50.00%	4.00%	2.00%	
Equity	50.00%	10.00%	5.00%	
	100.00%		7.00%	•

#### 3.) Gross Revenue Conversion Factor

Dollar of Revenue		1.0000
Less: Gross Receipts (Revenue) Tax	0.00%	0.0000
Less: Reg Assesments	1.20%	0.0120
Less: Bad Debts	0.50%	0.0050
State Taxable income		0.983000
State Income Tax	9.9999%	0.0983
Federal Taxable (come		0.884700983
Federal Tax Rate	35.00%	
Federal Income Tax		0.309645
Net Revenue Dollar		0.57505563895
Gross Revenue Conversion Factor		1.73896217
EFT	41.4999%	

Customer Class			Customer Count			ļ				
	3/31/2016	6/30/2016	9/30/2016	12/31/2016	TOTAL					
Residential	4,765	4,805	4,858	4,870	19,298					
Commercial	314	314	315	315	1,258					
Apartment	210	209	210	210	839					
School	14	14	14	14	56					
Church	9	9		9	36	i				
Public		4	1	4	16	1				
	5,316	5,355	5,410	5,422	21,503	1				
		3,35		5,122						
			Billable Gallons				Average n	er Customer		
	3/31/2816	6/30/2016	9/36/2016	12/31/2016	TOTAL.	3/31/2616	6/30/2016	9/30/2016	12/31/2016	To
Residential	55,967,989	59,762,888	63,263,435	56,354,761	235,349,073	11,775	12,471		11,598	_
Commercial	21,186,650	22,793,006	30,443,513	22,741,370	97,164,539	35,608	38,308		38,221	
Apartment	9,239,718	9,448,534	11,226,946	10,111,326	40,026,524	8,070	8,252	9,805	8,831	
School	1,833,200	2,024,800	2,178,300	2,305,700	8,342,000	114,575	126,550	136,144	144,106	
Church	73,660	67,400	87,900	107,000	335,300	14,600	13,480	17,580	21,400	
Public	947,216	1,694,704	2.015,984	869,908	5,527,812	236,804	423,676	503,996	217,477	
	89,247,773	95,791,332	109,216,078	92,490,065	386,745,248	421,432	622,737	731,743	441,633	
			S.Amount			ļ				
	3/31/2016	6/30/2016	9/30/2016	12/31/2016	TOTAL	1				
Residential	599,854.01	625,186.74	653,429.84	608,500.88	2,486,971,47	1				
Commercia!	167,758.50	177,583.21	227,618.64	177,743.77	750,704.12	1				
Apartment	114,790,58	113,387.98	121,494,56	115,226.24	464,899.36	1				
School	12,418.03	13,655.76	14,689,25	15,503.84	56,266.88	i				
Church	1,033.93	946.20	1,122.43	1,236.90	4,339.46	i				
Public	6.262.90	11.091.68	13.167.15	5,763.50	36.285.23	1				

				Number of Well
	:	Total Number of		Customers
	Total Number of	Purchased	Total Number of	included in
	Customers	EDU's	Billable EPU's	Billable EDU's
Residential	4,882	5,337	5,390	519
Commercial	315	1,658	672	77
Apartment	210	1,189	1,180	35
School	14	189	16	
Church:	9	13	10	5
Public	4	42	4	
	5,434	8,428	7.272	636

	Limerick's Customer Projected Growth														
1600		Lim	erick's Chapter 94 Re	rports			Lime	rick's Projected Growt							
201	7 Growth	2018 Growth	2019 Growth	2020 Growth	2021 Growth	2022 Growth	2023 Growth	2024 Growth	2825 Growth	2026 Growth					
1	465	560	357	98	2	139	91	91	103	71					
i	167	322	40	20	40	134	134	134	134	134					
1					• .	0	0	0	0	0					
1		30	35			0	0	0	0	0					
1	-					0	0	0	0	0					
L						0	0		- 0	0					

		1:		hiji is 255920b	Rate Freeze Period							Messense (1994)	1150	Years	4 -	. • 9				-28 E 112/94/24KH 1204/3/F	
	Est	Estimated 2017																			
Residential	1	Revenues	20	18 Billable	21	019 Billable	20	020 Billabic	- 3	2021 Billable	2	2022 Billable		2023 Biliable	2	024 Billable	2	825 Billable	202	Billable	
Base rate of \$84.30 per quarter for 0 to 1,000 cubic feet or 0 to 7,481 gallons x 4 quarters	8	1,643,000	S	1,832,000	\$	1,952,000	s	1,985,000	\$	1,986,000	8	2,033,000	8	2.064.000	S	2,095,000	S	2,130,000	\$	2,154,000	
Consumption charges of \$4.84 per 100 cubic feet for usage above the first 1,000 cubic feet or \$6.46 per																					
1,000 gallons for usage above the first 7,481 gallons x 4 quarters	\$	597,000	s	666,000	2	710,000	2	722,000	•	722,000	2	739,000	8	750.000	2	761,000	\$	774,000	2	783,000	
Base rate of \$85.00 per quarter for users not served by the Public Water Company	2	176,000		176,000	2	176,000	s	176,000		176,000		176,000		176,000	s	176,000		176,000	Š	176,000	
	-				-		-		-		-	,	-		-						
Computical																					
Base rate of \$84.30 per quarter for 0 to 1.000 cubic feet or 0 to 7.48) isslines x 4 quarters		201.000		310,000	c	323,000	•	330,000	¢	343,000	2	388,000	•	433.000	¢	478,000	2	523,000	2	568.000	
Consumption charges of \$4.84 per 100 cubic feet for usage above the first 1,000 cubic feet or \$6.46 per		201,000	-	3130	-		-				-		-		-		-		-		
1.000 galions for usage above the first 7.481 galions x 4 quarters		513.000	¢	790.000		824.000	•	841,000		875,000	¢	990,000	¢	1.105.000		1.220,000	2	1.335.000		1,450,000	
Base rate of \$85.00 ner marter for users not served by the Public Water Company	š	26,000		26,000	š	26,000		26,000		26,000		26,000		26.000		26,000		26.000		26,000	
They then to approve for defined for mentality and only in a filterior. Astron. Califfornia.		20,000		20,000	•	20,000		20,000	•	20,000	*	20,000	٠	20,000		20,000		20,000		20,000	
Aparticol																					
Base rate of \$84.30 per quarter for 0 to 1.000 cubic feet or 0 to 7.481 pallons x 4 quarters	\$	386,000		386,000	•	386.000	2	386.000		386,000	2	386,000	c	386,000	5	386,000	2	386,000	2	386,000	
Consumption charges of \$4.84 per 100 cubic feet for usage above the first 1,000 cubic feet or \$6.46 per		300,000		240,000		200,000		500,000		500,000		200,000		500,000		500,000		500,000		1.4-5(0.00	
1.000 gallons for usage above the first 7.481 gallons x 4 quarters		37.000		37.000		37.000		37.000		37.000		37,000		37,000		37,000		37.000		37.000	
Base rate of \$85.00 ner quarter for users not served by the Public Water Company	,	12,000		12,000		12,000		12,000		12,000		12,000		12,000		12.000		12,000		12,000	
Base rate of \$65.00 per quarter for users not served by the Public water Company		12,000	9	12,000	3	12,600	2	12,000	,	12,000	,	12,000	8	12,000	3	12,000	3	12,000	,	12,000	
School																					
Base rate of \$84.30 per quarter for 0 to 1.000 cubic feet or 0 to 7.481 rallons x 4 quarters		5,000		15,000	s	27.000		27,000		27,000		27,000		27.000		27,000		27,000		27.000	
Consumption charges of \$4.84 per 100 cubic feet for usage above the first 1,000 cubic feet or \$6.46 per		3,000		15,000		27,000	3	27,000	,	27,000		27,000	,	27,000	3	27,000		27,000		27,000	
1.000 gallons for usage above the first 7.481 gallons x 4 quarters		51.000		146.000		257,000		257,000		257,000		257,000		257,000		257.000		257.000		257.000	
Base rate of \$85.00 per quarter for users not served by the Public Water Company	,			146,000	s		,		5		2		\$		2		ŝ		S	237,000	
issue late of 9-90700 bet diffaret for reeds not served by the Lifture water Combany	2	-	3			-	3		8	-	2		3		3		3		3		
Church																					
Base rate of \$84.30 per quarter for 0 to 1.000 cubic feet or 0 to 7.481 valious x 4 quarters		2.000		2.000		2.000		2.000		2.000		2,000		2.000		2.600		2.000		2.000	
Consumption charges of \$4.84 per 100 cubic feet for usage above the first 1.000 cubic feet or \$6.46 per	3	2,000		2,000	,	2,000	,	2,000	,	2,000	5	2,000		2,000	3	2,000	3	2,000	9	2,000	
						1.000		1 000		1.000				1 000		1 000		1.000		1.000	
1,000 gallons for usage above the first 7,481 gallons x 4 quarters  Base rate of \$85,00 per quarter for users not served by the Public Water Company		1,000		1,000		1,000		1,000		1,000		1,000		1,000		1,000		2,000		2,000	
Base rate of \$85.06 per quarter for users not served by the Phone water Company	3	2,000	3	2,000	,	2,000	,	2,000	3	2,000	3	2,000	3	2,000	Þ	2,000	,	2,000	3	2,000	
n.e.																					
Public  Base rate of \$84.30 per quarter for 0 to 1,000 cubic feet or 0 to 7,481 gallons x 4 quarters		1.000		1.000		1 000		1.000		1.000		1.000		1.000		1.000		1.000		1.000	
	\$	1,000	8	1,000	S	1,000	2	1,000	δ	1,000	\$	1,000	S	1,000	S	1,000	2	1,000	S	1,000	
Consumption charges of \$4.84 per 100 cubic feet for usage above the first 1,000 cubic feet or \$6.46 per																					
1,000 gallons for usage above the first 7,481 gallons x 4 quarters	S	35,000	s	35,000	8	35,000	\$	35,000		35,000	\$	35,000		35,000		35,000	S	35,000	\$	35,000	
Base rate of \$85.00 per quarter for users not served by the Public Water Company	S	-	5	-	8		S		\$		2		\$		s		2	-	\$		
Total Projected Annal Revenue	8	3,688,000	S	4,437,000	\$	4,771,000	S	4,840,000	\$	4,888,000	S	5,112,000	S	5,314,000	\$	5,516,000	2	5,724,000	2	5,917,000	