

Aqua

St. 1 Direct Testimony of Mark A. Lucca

St. 3 Direct Testimony of Erin M. Feeney

St. 4 Direct Testimony of Mark J. Bubel, Sr.

St. 4-R Rebuttal Testimony of Mark J. Bubel, Sr.

St. 5 Direct Testimony of Robert J. Willert

St. 5-R Rebuttal Testimony of Robert J. Willert

St. 6 Direct Testimony of John J. Pileggi

St. 6-R Rebuttal Testimony of John J. Pileggi

St. 7 Direct Testimony of Michael DiSantis

St. 7-R Rebuttal Testimony of Michael DiSantis
(Public and Highly Confidential)

St. 9 Direct Testimony of Dylan W. D'Ascendis

St. 9-R Rebuttal Testimony of Dylan W. D'Ascendis

Aqua Cross-Examination Exhibits

Ex. 1 Lower Chichester Answer to Aqua Interrogatory Set
XII-8

Ex. 2 Lower Chichester Answer to Aqua Interrogatory Set
XII-2

Ex. 3 Lower Chichester Answer to Aqua Interrogatory Set
XII-6

Ex. 4 Lower Chichester Answer to Aqua Interrogatory Set
XII-7

Ex. 5 Edgmont Answer to Aqua Interrogatory Set XI-8

Ex. 6 Edgmont Answer to Aqua Interrogatory Set XI-9

Ex. 7 Edgmont Answer to Aqua Interrogatory Set XI-2

Ex. 8 Edgmont Answer to Aqua Interrogatory Set XI-7

- Ex. 9 SWDCMA Answer to Aqua Interrogatory Set XIII-1
- Ex. 10 SWDCMA Answer to Aqua Interrogatory Set XIII-4
- Ex. 11 SWDCMA Answer to Aqua Interrogatory Set XIII-5
- Ex. 12 SWDCMA Answer to Aqua Interrogatory Set XIII-7
- Ex. 13 Upland Answer to Aqua Interrogatory Set XIV-2
- Ex. 14 Upland Answer to Aqua Interrogatory Set XIV-7
- Ex. 15 Upland Answer to Aqua Interrogatory Set XIV-4

Investigation and Enforcement

- St. 1 Direct Testimony of Lisa A. Gumby with Exhibit 1
- St. 1-R Rebuttal Testimony of Lisa A. Gumby
- St. 1-SR Surrebuttal Testimony of Lisa A. Gumby
- Office of Consumer Advocate
- St. 1 Direct Testimony of Ralph Smith with Attachment A
and Exhibits RCS-1 through RCS-8
- St. 1-SR Surrebuttal Testimony of Ralph Smith with
Exhibit RCS-9

Office of Small Business Advocate

- St. 1 Direct Testimony of Brian Kalcic with Exhibit
BK-1
- St. 1-S Surrebuttal Testimony of Brian Kalcic

Delaware County

- St. 1 Direct Testimony of Stan C. Faryniarz with
Exhibits SCF-1 and SCF-2
(Public and Highly Confidential)
- St. 1-R Rebuttal Testimony of Stan C. Faryniarz
- St. 1-SR Surrebuttal Testimony of Stan C. Faryniarz
- St. 2 Direct Testimony of Brian P. Zidek with Exhibits
BPZ-1 through BPZ-3

Delaware County Hearing Exhibits

Ex. 1 Aqua Responses to Delaware County Interrogatories
Set X-1 through 5

Ex. 2 7/16/19 Letter of Intent from Lucca to DELCORA
Board of Directors

Ex. 3 DELCORA Response to Delaware County Interrogatory
Set IX-9

Sunoco Partners Marketing & Terminals

St. 1 Direct Testimony of Edward Human

St. 2 Direct Testimony of Howard Woods with Appendices
A through C

St. 3 Direct Testimony of Kevin Smith
(Public and Highly Confidential)

St. 2-SR Surrebuttal Testimony of Howard Woods with
Exhibit HJW-1-SR

St. 3-SR Surrebuttal Testimony of Kevin Smith
(Public and Highly Confidential)
with Exhibits KS-1-SR through KS-3-SR
(Highly Confidential)

Kimberly Clark

St. 1 Direct Testimony of Thomas Brooks with Exhibits
TB-1 through TB-3

St. 2 Direct Testimony of Eric Wentz with Exhibits
EW-1 and EW-2

St. 1-SR Surrebuttal Testimony of Thomas Brooks

St. 2-SR Surrebuttal Testimony of Eric Wentz

Edgmont

St. 1 Direct Testimony of Samantha Reiner

Lower Chichester

St. 1 Direct Testimony of Joseph Possenti, Jr., with
Schedule JP-1

SWDCMA

St. 1 Direct Testimony of Cecilia Nelson with Schedule
CN-1

Upland

St. 1 Direct Testimony of Michael Ciach

Municipal Protestants

Ex. 1 DELCORA Response to OCA Interrogatory Set
III-12

Ex. 2 DELCORA Admissions

Ex. 3 Aqua Admissions

Ex. 4 DELCORA Response to Kimberly Clark Interrogatory
Set I-32

Ex. 5 Aqua Response to Kimberly Clark Interrogatory
Set II-12

Ex. 6 Aqua and DELCORA Response to SWDCMA Interrogatory
Set I-2

Ex. 7 Aqua and DELCORA Response to Upland Interrogatory
Set I-7

Ex. 8 Aqua Response to SWDCMA Interrogatory Set I-8 by
Pileggi

Ex. 9 Aqua Response to Sunoco Data Request

Ex. 10 Aqua Response to Upland Interrogatory Set II-1
by Pileggi - Corrected

EXHIBIT U1

TESTIMONY OF MARC A. LUCCA

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

AQUA STATEMENT NO. 1

**DIRECT TESTIMONY OF
MARC A. LUCCA**

**With Regard To
An Overview of Aqua Pennsylvania Wastewater, Inc.
Overview and Reasons for Transaction
Fitness
Public Benefits of the Transaction**

March 3, 2020

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	OVERVIEW OF AQUA PA AND AQUA	6
III.	OVERVIEW AND REASONS FOR THE PROPOSED TRANSACTION	7
IV.	FITNESS.....	9
V.	PUBLIC INTEREST	10
VI.	CONCLUSION.....	14

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARC A. LUCCA

1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is Marc A. Lucca. My business address is 762 West Lancaster Avenue, Bryn
4 Mawr, Pennsylvania 19010.

5
6 **Q. By whom are you employed and in what capacity?**

7 A. I am President of Aqua Pennsylvania Wastewater, Inc. (“Aqua” or the “Company”). I am
8 also President of Aqua Pennsylvania, Inc. (“Aqua PA”). Aqua PA is the parent company
9 to Aqua.

10
11 **Q. Please provide a brief description of your education and work experience.**

12 A. I graduated from Temple University with a Bachelor of Science degree in Environmental
13 Engineering Technology. I obtained my Master of Engineering Degree from The
14 Pennsylvania State University. I also completed my Master of Business Administration
15 at Drexel University. I am a licensed Professional Engineer in Pennsylvania and
16 California.

17 Prior to joining Aqua PA, I worked in management positions for the Marina Coast
18 Water District in Marina, California; the Santa Clara Water Valley District in San Jose,
19 California; and in the engineering department at American Water Works and at its
20 California subsidiary. I joined Aqua PA in 2007 as its Vice President of Production
21 overseeing the Aqua PA’s treatment plants and wells. I served as Vice President of
22 Production until 2015 when I became Vice President of Network (Distribution)

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARC A. LUCCA

1 overseeing Aqua PA's water distribution system. In 2016, I was named President of
2 Aqua PA.

3
4 **Q. What are your duties as President of Aqua?**

5 A. As President of Aqua PA and Aqua, I am responsible for the overall leadership,
6 management and operations of Aqua PA and Aqua, which serves approximately 430,000
7 water customers and 35,000 wastewater customers across the Commonwealth.

8
9 **Q. Have you previously testified before the Pennsylvania Public Utility Commission**
10 **(“PUC” or the “Commission”)?**

11 A. No.

12
13 **Q. What is the purpose of your testimony?**

14 A. The purpose of my testimony is to: (1) provide an overview of the Company; (2)
15 provide an overview of the reasons for the proposed transaction (“Proposed Transaction”)
16 and merger of operations between Aqua and the Delaware County Regional Water
17 Quality Control Authority (“DELCORA”); (3) present an overview of the plan to expand
18 the Western Regional Treatment Plant, which will enable DELCORA to end reliance on
19 the City of Philadelphia Water Department (“PWD”); and (4) to explain the benefits of
20 the Proposed Transaction.

21
22 **Q. Are you sponsoring any Exhibits with your testimony?**

23 A. No.

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARC A. LUCCA

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Q. Are there any other witnesses submitting testimony with this application?

A. Yes, Aqua is submitting the following statements in support of the Application:

- Aqua Statement No. 2 – Direct Testimony of William C. Packer. Mr. Packer will provide testimony regarding rates and rate impact, discussion of the Company’s proposal to include payments from the DELCORA Customer Trust on the DELCORA customer bills, and provide a summary of affirmative public benefits described in the Proposed Transaction.
- Aqua Statement No. 3 – Direct Testimony of Erin M. Feeney. Ms. Feeney will provide testimony regarding legal and financial fitness, the Asset Purchase Agreement (“APA”) rate provision and the Section 1329 process, including Utility Valuation Expert (“UVE”) fees and transaction and closing costs.
- Aqua Statement No. 4 – Direct Testimony of Mark J. Bubel, Sr. Mr. Bubel will provide testimony regarding the specifics of the system being acquired from an operations/engineering perspective and Aqua’s prospective capital plans.
- Aqua Statement No. 5 – Direct Testimony of Robert Willert. Mr. Willert will provide testimony regarding the background and benefits of the Proposed Transaction from DELCORA’s perspective.
- Aqua Statement No. 6 – Direct Testimony of John Pileggi. Mr. Pileggi will provide testimony regarding DELCORA’s current rate structure in support of Mr. Packer’s direct testimony.

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARC A. LUCCA

- 1 • Aqua Statement No. 7 – Direct Testimony of Michael DiSantis. Mr. DiSantis will
2 provide testimony regarding DELCORA’s current operations and information on
3 its systems.
- 4 • Aqua Statement No. 8 – Direct Testimony of Harold Walker III. Mr. Walker will
5 provide testimony regarding the appraisal of the DELCORA wastewater system
6 assets conducted on behalf of the Company.
- 7 • Aqua Statement No. 9 – Direct Testimony of Dylan D’Ascendis. Mr. D’Ascendis
8 will provide testimony regarding the appraisal of the DELCORA system assets
9 conducted on behalf of DELCORA.

10
11 **Q. Has the Company filed an application with the Commission for regulatory approval**
12 **to acquire DELCORA’s wastewater system assets?**

13 A. Yes. Aqua filed its Application on March 3, 2020.
14

15 **Q. What is Aqua seeking in its Application?**

16 A. There are three requests. First, Aqua is requesting approval of the Proposed Transaction
17 under Section 1102 of the Public Utility Code, 66 Pa. C.S. § 1102, similar to many
18 requests that come before the Commission. Second, pursuant to Act 12 of 2016 (“Act
19 12” or the “Act”), 66 Pa. C.S. § 1329, Aqua is seeking to utilize fair market value for the
20 determination of the ratemaking rate base of the DELCORA wastewater system assets.
21 Third, Aqua is requesting that the Commission approve, if necessary, its APA with
22 DELCORA, as well as a pro-forma Memorandum of Understanding between Aqua and
23 DELCORA and the assignment of 163 contracts under Section 507, 66 Pa. C.S. § 507.

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARC A. LUCCA

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Q. What does Section 1329 require to be included in an application?

A. Section 1329 requires that an application include (1) copies of two fair market value appraisals based off a common engineering listing of assets, (2) the purchase price, (3) ratemaking rate base, (4) transaction and closing costs, and (5) the proposed tariff. A rate stabilization plan could also be required if it is applicable to the transaction.

Q. What is the purpose of Section 1329 as addressed by the Commission?

A. As stated by the Commission, “Section 1329 works to: (1) provide certainty as to the value of acquired utility property; (2) remove regulatory barriers to the prudent sale of public water and wastewater assets; (3) protect a Seller from having to offer public assets for sale at below-market rates; and (4) allow a Buyer to recover market-based investment in those public assets through regulated rates.”¹ I also agree with the Commission that Section 1329 “encourages a realistic approach to the sale of public assets based upon the fair market value of those assets.”² Moreover, as further explained by the Commission:

Section 1329 recognizes that no reasoned argument would propose that these public assets are of marginal value simply because the book value and the Commission’s traditional rate setting methodology dictate as much. Rather, the valuation methods of Section 1329 provide municipalities and authorities with a wholistic recognition of the fair market value of the public assets they seek to sell based on a balancing of accepted business valuation principles, specifically, the cost, market, and income approaches. 66 Pa. C.S. § 1329(a). Thus, for sale purposes, Section 1329 works to value the public assets as the businesses they are as opposed to what their value might be under regulatory accounting for depreciated utility assets.³

¹ *Implementation of Section 1329 of the Public Utility Code*, Docket No. M-2016-2543193 Tentative Supplemental Implementation Order at 4 (Sep. 20, 2018) (hereinafter “TSIO”).
² TSIO at 7.
³ TSIO at 6.

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARC A. LUCCA

...

Section 1329 enables a Seller to price its public assets at a market value based on reasonable business valuation principles and enables a Buyer to recover its investment in those public assets at that market-based value.⁴

Q. What does the Commission require for approval of a Section 1329 Application?

A. In its Final Implementation Order entered October 27, 2016, in Docket No. M-2016-2543193 (“Final Implementation Order”), the Commission referenced the checklist in the Tentative Implementation Order for items to include with a Section 1329 application for it to be processed in a six-month time frame. This checklist was subsequently updated in March 2017. The Commission released its Final Supplemental Implementation Order on February 28, 2019 in Docket No. M-2016-2543193, which included an updated checklist, standard data requests (“SDR”), jurisdictional exceptions, and form testimony for UVEs. Aqua’s Application includes a checklist with references indicating where in the Application the required information can be found.

II. OVERVIEW OF AQUA PA AND AQUA

Q. Please provide a general overview of Aqua PA and Aqua.

A. Aqua PA is the second largest investor owned regulated water/wastewater utility operating in the Commonwealth of Pennsylvania. Aqua PA provides water and wastewater utility service to approximately 465,000 customers, consisting of 430,000 water customers and 35,000 wastewater customers. Aqua PA employs approximately 600 highly trained utility professionals. In addition, Aqua PA is one of eight regulated

⁴ TSIO at 7.

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARC A. LUCCA

1 subsidiaries, which brings to bear its own financial, technical, and managerial resources
2 to assist in our mission.

3 Aqua is a subsidiary of Aqua PA and is engaged in the business of collecting,
4 treating, transporting, and disposing of wastewater for the public. Aqua has operating
5 divisions headquartered in Sharon, Shamokin, Honesdale, Limerick, Media and southeast
6 PA, with Aqua's headquarters located in Bryn Mawr, PA. Aqua provides wastewater
7 service to approximately 35,000 customers in Adams, Bucks, Carbon, Chester, Clarion,
8 Clearfield, Delaware, Lackawanna, Luzerne, Monroe, Montgomery, Pike, Schuylkill,
9 Venango, and Wyoming Counties. Aqua has extensive experience in providing
10 wastewater service to customers throughout the Commonwealth. Aqua operates 37
11 wastewater treatment plants ("WWTP") throughout the Commonwealth of Pennsylvania,
12 and 21 systems of Aqua's Southeast Division are in proximity to DELCORA's system
13 allowing for operational efficiencies.

14
15 **III. OVERVIEW AND REASONS FOR THE PROPOSED TRANSACTION**

16 **Q. Please provide an overview of the Proposed Transaction.**

17 A. In the summer of 2019, Aqua and DELCORA entered into discussions for a sale of the
18 assets of DELCORA to Aqua. The Proposed Transaction would seek to provide Aqua
19 and DELCORA and their customers' benefits through meeting necessary capital and
20 financial obligations, growth in overall customers, and economies of scale from similar
21 geographic areas served. After arms-length negotiations concluded, Aqua and
22 DELCORA entered into an APA on September 17, 2019, and a First Amendment to APA
23 on February 24, 2020, providing for the sale of the assets, properties and rights of the

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARC A. LUCCA

1 wastewater system. The purchase price was \$276,500,000. According to the APA, the
2 acquired DELCORA customers will be charged DELCORA's existing base rates upon
3 closing. Aqua's tariff rules and regulations will apply following closing. Aqua will
4 offer employment to all of the DELCORA employees, subject to onboarding
5 requirements.

6
7 **Q. Why was DELCORA exploring a sale of its assets?**

8 A. As explained by Mr. Willert in Aqua Statement No. 5, DELCORA was facing increased
9 costs related to its contribution to PWD's long-term control plan ("LTCP") of
10 approximately \$606 million to continue to send wastewater flows to PWD. DELCORA
11 therefore sought options to mitigate these costs to its customers and to improve the
12 overall quality of the wastewater treatment in southern Delaware County and its
13 customers in Chester County. DELCORA, in a sense, wanted to control its own destiny
14 for the future costs that would be necessary to run its wastewater operations.

15 DELCORA and Aqua began discussions that ultimately led to the Proposed
16 Transaction, which brings to DELCORA Aqua's expertise in business operations,
17 production and treatment of wastewater and engineering as applied to design,
18 construction and start-up of pipe main and treatment plant expansion.

19
20 **Q. Why did Aqua decide to proceed with the Proposed Transaction?**

21 A. Aqua moved forward with this Proposed Transaction because it made economic and
22 business sense for Aqua, DELCORA, and their respective customers. Aqua and
23 DELCORA share similar service types and geographical locations. Due to the similar

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARC A. LUCCA

1 service areas and types, both organizations would be able to leverage the economies of
2 scale and the combined expertise of both entities. Other benefits will be outlined more
3 specifically below, including Aqua's expertise in implementing large-scale projects and
4 compliance with Pennsylvania Department of Environmental Protection ("DEP") and US
5 Environmental Protection Agency regulations. Moreover, the Proposed Transaction will
6 bring substantial public benefits that will be realized by both Aqua's existing customers
7 and DELCORA customers. These substantial public benefits are discussed further below
8 and in Aqua Statement No. 2, and Aqua Statement No. 5.

9
10 **Q. Can you elaborate on Aqua's experience in implementing large-scale improvement**
11 **projects, including proposed plant expansion and pipe installation?**

12 A. Yes. Aqua and Aqua PA's capital plan includes thousands of miles of pipe replacement
13 over the last two decades years, plant upgrades and plant expansion, pump station repairs,
14 and other infrastructure investment. Aqua has substantial experience in both continuing
15 facility operations and maintaining regulatory compliance when performing and
16 completing substantial plant upgrades. For example, Aqua is currently undergoing a
17 significant plant expansion in its Media wastewater treatment plant, to improve treatment
18 quality at the plant. This plant remained in service during this multi-year construction
19 period.

20
21 **IV. FITNESS**

22 **Q. Is Aqua fit to acquire the DELCORA Wastewater System?**

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARC A. LUCCA

1 A. Yes. I have been advised by counsel that, as a certificated provider of utility service,
2 Aqua's fitness is presumed. However, financial and legal fitness are addressed further in
3 Aqua Statement No. 3, the Direct Testimony of Erin M. Feeney. Operational fitness is
4 addressed further in Aqua Statement No. 4, the Direct Testimony of Mark J. Bubel, Sr.
5

6 **V. PUBLIC INTEREST**

7 **Q. Please explain generally why the Proposed Transaction provides substantial**
8 **affirmative public benefits and is in the public interest regarding consolidation?**

9 A. The Commission has a long-standing record of support for consolidation/regionalization
10 of water/wastewater systems. The Commission understands that in doing so, the utility
11 industry will realize the benefits of consolidated management practices, economies of
12 scale, and the resulting greater customer/environmental/economic benefits. The
13 Commission has stated that "acquisitions of smaller systems by larger more viable
14 systems will likely improve the overall long-term viability of the water and wastewater
15 industry. Additionally, these types of acquisitions will also enhance the quality of
16 ratepayers' daily lives, promote community economic development, and provide
17 environmental enhancements."⁵ Ultimately, these benefits inure to customers both
18 existing and acquired. Although this proceeding does not involve a small system, the
19 Proposed Transaction embodies all of the principles noted in the Commission's policy
20 statement, and is fully consistent with Aqua PA's successful acquisition of numerous
21 water/wastewater utilities in its over 130 years of operation.

⁵ 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).

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARC A. LUCCA

1
2 **Q. Please discuss Aqua's track record of acquiring and improving wastewater systems**
3 **in the Commonwealth.**

4 A. Aqua currently provides utility service to approximately 35,000 wastewater customers in
5 the Commonwealth and has years of experience operating wastewater treatment and
6 collection systems in a safe, reliable and efficient manner. Moreover, Aqua has the
7 managerial, technical, and financial resources to continue to operate, maintain and
8 improve the DELCORA wastewater system.

9 Aqua has acquired 15 wastewater systems over the past 10 years.⁶ Many of these
10 systems required significant investment to correct service and environmental issues.
11 Other systems did not need substantial capital investment. Aqua and Aqua PA are
12 essentially the compilation of smaller systems that have been acquired over the last 130
13 years and make both utilities what they are today. The inherent combining of systems
14 and customers – both viable and smaller non-viable -- provides stability in the day to day
15 utility operations, in that, these systems do not all require major capital investments at the
16 same time and, therefore, the financial impacts of various discrete projects and
17 investments can be spread over the long term operations of the acquiring utility as a
18 whole. Both types of systems, viable and non-viable, are consistent with the
19 Commission's policy statements regarding acquisitions. The Proposed Transaction is
20 also consistent with the Commission's supported policy of consolidation and
21 regionalization.

⁶ Cheltenham (2019); East Bradford, Limerick (2018); Tobyhanna, Avon Grove (2017); Emlenton, Honeycroft (2016); Bunker Hill (2015); Penn Township (2014); Treasure Lake (2013); Sage Hill, Kidder Township, Beech Mountain, Village at Valley Forge (2012); and Stony Creek (2010).

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARC A. LUCCA

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Q. Will DELCORA’s customers benefit from the Proposed Transaction?

A. Yes. DELCORA’s customers will become part of a larger-scale, efficiently operated, water and wastewater utility. Aqua has operations in nearby and overlapping service areas and will be able to merge and integrate DELCORA’s customers by folding them into a larger-scale, efficiently operated water and wastewater utility that over time will likely yield further efficiencies and improve long-term viability as envisioned in the Commission policy statement. The Proposed Transaction will not have any immediate impact on the rates of either DELCORA’s customers or Aqua’s existing customers. Moreover, as explained in Aqua Statement No. 6, DELCORA sets its budget each year prior to December 1 and has increased rates charged to customers in each year. Through the Proposed Transaction, Aqua will implement DELCORA’s existing base customer rates, which will remain in effect until Aqua’s next base rate case is filed and concluded. In addition, the WRTP expansion and any associated force main project would be fully reviewed in Aqua’s next base rate case.

Aqua is projecting lower operating and maintenance costs that will likely be realized through reductions in cost for wastewater treatment through the investment in the expansion of the WRTP and force main to divert flows to the WRTP from PWD, as well as efficiencies in administrative and general costs, such as insurance, auditing, legal among others.

Q. What customer service enhancements and protections will be provided by Aqua?

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARC A. LUCCA

1 A. Aqua has procedures in place under Chapter 14, 66 Pa. C.S. 1401 *et seq.*, that provide for
2 billing, payment, collection, termination and reconnection of service, payment
3 arrangements, medical certifications, and formal and informal complaint procedures. By
4 DELCORA becoming part of a regulated public utility, these protections will be available
5 to DELCORA's customers.

6
7 **Q. Will the DELCORA customers be able to enroll in Aqua's Helping Hand program**
8 **for low-income customers?**

9 A. Yes. Aqua's Helping Hand program is designed to assist the Company's residential low-
10 income payment troubled customers with a payment arrangement, conservation education
11 and assistance, and arrearage forgiveness. Aqua has also agreed to enhancements to the
12 Helping Hand program in its most recent rate case, which includes a grant program for
13 these customers.

14
15 **Q. Will Aqua's existing customers benefit from the acquisition?**

16 A. Yes. The acquisition of the DELCORA Wastewater system is significant to Aqua's
17 existing wastewater platform. As discussed in Aqua Statement No. 2, the addition of the
18 DELCORA customers will create the equivalent size of Aqua PA's Main Division that it
19 has had in its water operations for many years. The addition of the DELCORA
20 Wastewater system will increase Aqua's customer base by 45%. By virtue of the Aqua's
21 larger combined customer base, future infrastructure investments across the
22 Commonwealth driven by normal replacement cycles, emergency repairs, emergency

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARC A. LUCCA

1 response or compliance with new environmental regulations will be shared at a lower
2 incremental cost per customer for all of Aqua's customers over time.

3
4 **VI. CONCLUSION**

5 **Q. Does this conclude your testimony?**

6 Yes, it does. However, I reserve the right to supplement my testimony as additional
7 issues and facts arise during the course of this proceeding.

EXHIBIT U3

TESTIMONY OF ERIN M. FEENEY

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

AQUA STATEMENT NO. 3

**DIRECT TESTIMONY OF
ERIN M. FEENEY**

**With Regard To
Financial and Legal Fitness of Aqua
APA Rate Provision and Rate Stabilization
An Overview of the Section 1329 Process
UVE Fees
Transaction and Closing Costs**

March 3, 2020

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	LEGAL AND FINANCIAL FITNESS	3
III.	APA RATE PROVISIONS AND RATE STABILIZATION PLAN.....	5
IV.	SECTION 1329 FAIR MARKET VALUE CONSIDERATIONS	6
V.	UVE FEES	8
VI.	TRANSACTION AND CLOSING COSTS.....	9
VII.	CONCLUSION.....	9

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF ERIN M. FEENEY

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Erin M. Feeney. My business address is 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010.

Q. By whom are you employed and in what capacity?

A. I am employed by Aqua Pennsylvania, Inc. ("Aqua PA") as Manager of Rates and Planning. Aqua PA is the parent company to Aqua Pennsylvania Wastewater, Inc. ("Aqua" or "Company").

Q. Please describe your education and business experience.

A. I graduated from La Salle University in 2012 with a Bachelor of Science degree in Business Administration, with a major in Accounting. I have also completed the Utility Rate School course sponsored by the National Association of Regulatory Utility Commissioners.

I have been employed by Aqua PA or Aqua Services, Inc. ("Aqua Services") since 2009. Throughout my university education, I worked at Aqua Services part-time in a variety of departments, including Finance Projects, Tax, and Financial Planning and Analysis. Upon graduation, I was hired as a full-time Financial Analyst in the Financial Planning and Analysis ("FP&A") department, and in 2014 I was promoted to a Financial & Systems Analyst. My duties in the FP&A department included developing, preparing and maintaining financial reports, variance analysis and other financial models while closely supporting the budgeting and long-term planning needs of Aqua America's

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF ERIN M. FEENEY

1 subsidiaries. In 2016, I transferred to Aqua PA's Rates & Planning Department as a
2 Finance & Rate Analyst II. My duties in the Rates & Planning department included
3 assisting in the preparation of rate filings, quarterly and annual filings for Distribution
4 System Improvement Charge ("DSIC") surcharges, earnings report filings and tariff
5 updates. In addition, I built and maintained financial reports, variance analysis, ad hoc
6 reports, and other complex financial models while streamlining these processes and
7 automating reports. In 2019, I was promoted to my current position of Manager of Rates
8 and Planning for Aqua PA.

9
10 **Q. What are your duties as the Manager of Rates and Planning for Aqua PA?**

11 A. My duties primarily include the preparation of various financial regulatory filings
12 submitted with the Pennsylvania Public Utility Commission ("PUC" or the
13 "Commission"). Those filings include, but are not limited to, the following: Quarterly
14 Earnings Reports, Distribution System Improvement Charge ("DSIC") Surcharge filings,
15 water and wastewater tariff compliance filings, and other regulatory compliance filings
16 upon request of the PUC. My duties also include the preparation of base rate cases and
17 supporting those applications as a primary accounting witness. I report directly to the
18 Vice President and Controller of Aqua PA, who I assist in the oversight and direction of
19 regulatory accounting matters for Aqua PA.

20
21 **Q. Have you previously testified before this Commission?**

22 A. Yes. I have testified before the Commission in Aqua PA and Aqua's last rate case at
23 Docket No. R-2018-3003558 and R-2018-3003561.

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF ERIN M. FEENEY

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Q. What is the purpose of your testimony?

A. The purpose of my testimony is as follows: (1) to address Aqua’s legal and financial fitness to own and operate the DELCORA wastewater facilities and equipment (“System”), which are proposed to be purchased in accordance with the terms and conditions of the Asset Purchase Agreement (“APA”) dated as of September 17, 2019, as amended, between Aqua and DELCORA (“Proposed Transaction”); (2) to address the rate provision in the APA and Section 1329 rate stabilization; (3) to provide an overview of the Public Utility Code Section 1329 process; (4) to support the fees of the Utility Valuation Experts (“UVE”) fees; and (5) to support transaction and closing costs.

Q. Are you sponsoring any Exhibits with your testimony?

A. No.

Q. Did Aqua file an Application with the Commission for regulatory approval to acquire the System?

A. Yes. The Application was filed on March 3, 2020, pursuant to Sections 1102, 1329 and 507 of the Public Utility Code. I address the Section 1329 process later in this testimony.

II. LEGAL AND FINANCIAL FITNESS

Q. Please describe the Company’s legal fitness to own and operate the system.

A. Aqua is a public utility lawfully operating under Commission granted certificates of public convenience. There are no pending legal proceedings challenging Aqua’s

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF ERIN M. FEENEY

1 certificated rights to provide safe and adequate service to customers. The Company is
2 legally fit.

3
4 **Q. Please describe the Company's financial fitness to own and operate the System.**

5 A. Aqua PA, the parent company to Aqua, is a Class A water utility in the Commonwealth
6 of Pennsylvania and the largest water and wastewater subsidiary in the Aqua family, with
7 total utility plant assets of \$4.9 billion and annual revenues of \$472 million in 2019. In
8 2019, Aqua PA had operating income of approximately \$251 million and net income of
9 \$194 million. Aqua PA's cash flows from operations equaled approximately \$268
10 million. Aqua is a Class A wastewater utility in the Commonwealth of Pennsylvania,
11 with total utility plant assets of \$282 million and annual revenues of \$21 million. Aqua
12 PA has an A+ rating from Standard and Poor's Rating Service and has approximately
13 \$1.703 billion in outstanding long-term debt at a weighted average interest rate of
14 approximately 4.3%. Aqua PA also utilizes low-cost long-term debt financing
15 instruments through the Pennsylvania Infrastructure Investment Authority ("Pennvest"),
16 representing about 2% of Aqua PA's total debt portfolio. In addition to Aqua PA's
17 access to long-term debt, Aqua PA has its short-term credit facility of \$100 million and
18 has access to equity capital. Aqua, as a subsidiary of Aqua PA, has access to all of Aqua
19 PA's financing capabilities. By these measures, Aqua is financially fit.

20
21 **Q. Please explain how Aqua plans to fund the Proposed Transaction.**

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF ERIN M. FEENEY

1 A. The Proposed Transaction will be funded using existing short-term credit lines. The
2 short-term credit funding will be converted to a mix of long-term debt and equity capital
3 shortly after closing.

4
5 **Q. Do you anticipate the Transaction will negatively affect Aqua PA's corporate credit**
6 **rating?**

7 A. No. Aqua PA does not anticipate that the Transaction will negatively affect its corporate
8 credit rating.

9
10 **III. APA RATE PROVISIONS AND RATE STABILIZATION PLAN**

11 **Q. Please explain the rate provisions in paragraph 7.04 of the APA included as Exhibit**
12 **B to the Application.**

13 A. Paragraph 7.04 of the APA provides that Aqua shall implement DELCORA's sanitary
14 wastewater rates in effect at closing, as presented in APA Schedule 7.04(a) and continue
15 to charge those rates until the conclusion of Aqua's next base rate case following closing.
16 The Company may apply PUC permitted or required surcharges or pass-through costs
17 (e.g., DSIC and/or State Tax Adjustment Surcharge) to the DELCORA Base Rates after
18 Closing.

19
20 **Q. What is a rate stabilization plan as defined in Section 1329(g) of the Public Utility**
21 **Code?**

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF ERIN M. FEENEY

1 A. A rate stabilization plan is a plan that will hold rates constant or phase rates in over a
2 period of time after the next base rate case. This Application neither includes a request or
3 proposal for a rate stabilization plan nor is one included in the proposed tariff.

4
5 **Q. Is Aqua requesting the implementation of a DSIC for DELCORA customers at this**
6 **time?**

7 A. No. Aqua intends to amend its Long-Term Infrastructure Improvement Plan (“LTIIIP”)
8 after closing to include the DELCORA system in the LTIIIP and file the amended LTIIIP
9 with the PUC. If the PUC approves the amended LTIIIP, Aqua will begin charging a
10 DSIC to DELCORA customers.

11
12 **IV. SECTION 1329 FAIR MARKET VALUE CONSIDERATIONS**

13 **Q. Is Aqua proposing that its Application be evaluated utilizing the Fair Market Value**
14 **provisions of Section 1329 of the Public Utility Code?**

15 A. Yes. Specifically, the Company is requesting that the ratemaking rate base of the System
16 be based on the lesser of the average of the Fair Market Value Appraisals included in the
17 Application, or the purchase price, pursuant to Section 1329 of the Public Utility Code.

18
19 **Q. Has Aqua prepared the Application in compliance with the Commission’s Final**
20 **Implementation Order and Final Supplemental Implementation Order addressing**
21 **the implementation of Section 1329?**

22 A. Yes. Aqua has complied with all required documentation according to the PUC’s
23 application checklist including, but not limited to, the Engineering Assessment of Assets,

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF ERIN M. FEENEY

1 responses to Standard Data Requests, testimony supporting the Application, and two
2 independent Fair Market Value appraisals.

3
4 **Q. Please provide an overview of the valuation process.**

5 A. Following the execution of the APA, the Company and DELCORA agreed to engage
6 Pennoni Associates Inc., with support from Weston Solutions, Inc., to complete the
7 Engineer's Assessment. Application Exhibit D. Both parties engaged their respective
8 UVEs to perform a Fair Market Value analysis of the System in accordance with the
9 Uniform Standards of Professional Appraisal Practice ("USPAP"), utilizing the cost,
10 market, and income approaches. Aqua engaged the services of Gannett Fleming
11 Valuation and Rate Consultants, LLC ("Gannett") and has attached to the Application
12 their Fair Market Value Appraisal as Exhibit Q. DELCORA engaged the services of
13 ScottMadden, Inc. ("ScottMadden") and their Fair Market Value Appraisal is attached to
14 the Application as Exhibit R. Both firms have been pre-certified as authorized UVEs by
15 the PUC and are on the list of qualified appraisers maintained by the PUC.

16
17 **Q. Please describe the conclusions of the two appraisals used to determine the fair**
18 **market value of the System.**

19 A. The two appraisals used the USPAP employing the cost, market, and income approaches
20 to arrive at the fair market value of the System. The DELCORA-sponsored appraisal
21 performed by ScottMadden arrived at a System value of \$308,194,006. The Company-
22 sponsored appraisal performed by Gannett arrived at a System value of \$408,883,000.

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF ERIN M. FEENEY

1 Therefore, the fair market value as defined in Section 1329 of the Public Utility Code is
2 the average of these two appraisals, which is \$358,538,503.

3
4 **Q. Pursuant to Section 1329 of the Public Utility Code, what is the resulting rate base**
5 **determination for the System?**

6 A. According to Section 1329, the ratemaking rate base is the lesser of either the purchase
7 price in the APA, which is \$276,500,000, or the fair market value which is \$358,538,503.
8 In this instance, since the purchase price is lower than the fair market value, the
9 ratemaking rate base for the System is \$276,500,000.

10
11 **V. UVE FEES**

12 **Q. Please state the total of the UVEs' fees incurred by the Company.**

13 A. The UVEs' fees for the Company's appraisal received as of the date of the Application
14 totaled \$31,250. The Company's UVE fees will be included in the transaction and
15 closing costs of this Proposed Transaction.

16
17 **Q. Are the UVEs' fees are reasonable?**

18 A. Yes. Based on the scope of work, the methods used as accepted industry practice, and
19 that the UVEs' fees were less than 5% of the fair market value benchmark noted in the
20 Commission's Final Implementation Order and Final Supplemental Implementation
21 Order, I believe the fees are reasonable; however, the Commission will review and
22 determine these fees as part of the transaction and closing costs in Aqua's next base rate
23 case.. Per the Commission's Section 1329 Final Implementation Order, Final

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF ERIN M. FEENEY

1 Supplemental Implementation Order and checklist, the contract engaging Gannett, along
2 with Gannett's invoices are included as Application Exhibit S1. The contract engaging
3 DELCORA's UVE, ScottMadden, along with ScottMadden's invoices are included as
4 Application Exhibit S2.

5
6 **VI. TRANSACTION AND CLOSING COSTS**

7 **Q. Please comment on the transaction and closing costs?**

8 A. The Company anticipates that the transaction and closing costs for the Proposed
9 Transaction will be approximately \$750,000 including the Company's UVE fees. The
10 exact closing costs will be determined at closing.

11
12 **VII. CONCLUSION**

13 **Q. Does this conclude your testimony?**

14 Yes, it does. However, I reserve the right to supplement my testimony as additional
15 issues and facts arise during the course of this proceeding.

EXHIBIT V

TESTIMONY OF MARK J. BUBEL, SR.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

AQUA STATEMENT NO. 4

**DIRECT TESTIMONY OF
MARK J. BUBEL, SR.**

**With Regard To
Operations
Combined System
Capital
Technical Fitness
DEP Requirements**

March 3, 2020

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	OPERATIONS.....	2
III.	COMBINED SYSTEMS	6
IV.	CAPITAL PROJECTS	7
V.	ENVIRONMENTAL COMPLIANCE.....	10
VI.	TECHNICAL FITNESS	10
VII.	CONCLUSION.....	12

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARK J. BUBEL, SR.

1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is Mark J. Bubel, Sr. My business address is 762 West Lancaster Avenue,
4 Bryn Mawr, Pennsylvania 19010.

5
6 **Q. By whom are you employed and in what capacity?**

7 A. I am employed by Aqua Pennsylvania, Inc., (“Aqua PA”) as a Project Engineer III.

8
9 **Q. Please provide a brief description of your education and work experience.**

10 A. I received a Bachelor of Science Degree (B.S.) in Civil Engineering in 1980 from Lehigh
11 University and a Master’s Degree in Civil Engineering (M.C.E.) with a concentration in
12 Environmental Engineering in 1983 from Villanova University. I have worked in various
13 engineering roles and have over 38 years of experience in environmental engineering
14 related to municipal and industrial wastewater treatment and operations. I have worked at
15 Aqua since 2003 in roles related to wastewater treatment facilities including planning,
16 design, start-up, and operational troubleshooting. I am a Registered Professional Engineer
17 in Pennsylvania, Delaware, Maryland, North Carolina, and Florida. I am also a Licensed
18 Water and Wastewater Operator in Pennsylvania.

19
20 **Q. Have you previously testified before the Public Utility Commission (“PUC” or the**
21 **“Commission”)?**

22 A. Yes. I provided testimony in Aqua Pennsylvania Wastewater, Inc.’s (“Aqua” or the
23 “Company”) New Garden, Limerick, East Bradford, Cheltenham and East Norriton

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARK J. BUBEL, SR.

Public Utility Code Section 1329 Application proceedings at Docket Nos. A-2016-2580061, A-2017-2605434, A-2018-3001582, A-2019-3008491, and A-2019-3009052, respectively. I also provided testimony in Aqua PA and Aqua's most recent base rate case proceeding at Docket Nos. R-2018-3003558 and R-2018-3003561.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is as follows: (1) to address the operation of the Delaware County Regional Water Quality Control Authority ("DELCORA") Wastewater System ("System") following closing; (2) to explain the capital requirements of the System; (3) to describe Aqua's technical fitness to operate and maintain the System.

Q. Are you sponsoring any Exhibits with the Company's filing?

A. Yes. Attached to my testimony as Appendix A is DELCORA's capital plan that Aqua will be implementing.

II. OPERATIONS

Q. Please state how many miles the System in Delaware County is from Aqua's existing service territory in Delaware County.

A. Aqua and DELCORA have wastewater systems in close proximity to each other. Additionally, Aqua PA provides water service to several of DELCORA's retail end user customers. The table below shows the distance in miles between Aqua's closest systems and DELCORA's Western Regional Wastewater Treatment Plant ("WRTP"):

Delaware County:

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARK J. BUBEL, SR.

Aqua System	Distance (miles)
Media Wastewater Treatment Facility (“WWTF”)	6
Willistown Woods WWTF	12
Aqua Headquarters to DELCORA Main Office	14

Q. Please state how many miles the System in Chester County is from Aqua’s existing service territory in Chester County.

A. The table below shows the distance in miles between Aqua’s closest treatment plants and DELCORA’s Pocopson service area and Springhill Farms service area:

Chester County (Pocopson):

Aqua System	Distance (miles)
Bridlewood WWTF	3
Brandywine River Estates WWTF	2

Chester County (Springhill Farms):

Aqua System	Distance (miles)
Penn Oaks WWTF	3
Bridlewood WWTF	4

Q. Please state the elevations of the DELCORA WWTFs, the City of Philadelphia Water Department (“PWD”) Southwest Water Pollution Control Plant (“SWPCP”), and Aqua’s Requested Territory.

A. DELCORA WWTFs:

- WRTP: elevation generally varies between EL 2.0 and EL 5.0.
- Pocopson Preserve (Corinne Village): elevation generally varies between EL 303 and EL 383.

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARK J. BUBEL, SR.

- 1 • Pocopson Riverside (Sheeder Tract): elevation generally varies between EL 178 and
2 EL 240.

- 3 • Springhill Farms: elevation generally varies between EL 343 and EL 346.

4 PWD SWPCP: elevation generally varies between EL 6.0 and EL 11.

5 Requested Territory: The Requested Territory elevation as set forth in Exhibits A2
6 through A7 generally varies as follows:

- 7 • Exhibit A2 (Sheet 1 Pocopson)
- 8 ○ Pocopson Preserve (Corrine Village) – EL 327 to EL 374
- 9 ○ Pocopson Riverside (Sheeder Tract) EL 209 to EL 288
- 10 • Exhibit A3 (Sheet 2 Springhill Farms) – EL 355 to EL 374
- 11 • Exhibit A4 (Sheet 3 Edgmont) – EL 262 to EL 399
- 12 • Exhibit A5 (Sheet 4 Rose Valley Borough) – EL 100 to EL 182
- 13 • Exhibit A6 (Sheet 5 Chester City)
- 14 ○ Westerly Service Area Border EL 30
- 15 ○ Northerly Service Area Border EL 79
- 16 ○ Easterly Service Area Border EL 34
- 17 ○ Southerly Service Area Border EL 11
- 18 • Exhibit A7 (Sheet 6 Force Main) – EL 12 to EL 22.
- 19

20 **Q. Will the System be physically interconnected with Aqua's system or be operated as**
21 **a standalone system?**

22 A. The System is presently intended to be operated as a standalone system within Aqua's
23 existing service territory.

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARK J. BUBEL, SR.

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Q. Please describe how Aqua will integrate the operation of the System into its current operations.

A. As described in more detail in the Direct Testimony of Marc A. Lucca (Aqua Statement No. 1), Aqua’s headquarters are located in its southeastern division office and the operation of the System will be overseen from that office. Aqua has agreed to keep the DELCORA office and operations centers in the City of Chester for a period of 25 years following closing of the Proposed Transaction.

Q. Are the DELCORA customers to be obtained in the Proposed Transaction currently Aqua PA water customers?

A. Yes. Some of the DELCORA customers are currently also Aqua PA water customers. Customers will be combined Aqua water and wastewater customers after closing of the Proposed Transaction in Pocopson Preserve (Corinne Village), Pocopson Riverside (Sheeder Tract), Rose Valley Borough and Edgmont Township.

Q. Will other Aqua PA employees assist in the operation of the System, if needed?

A. Yes. Aqua PA employees will be able to assist, if needed, and will provide support through engineering and field service functions.

Q. Please explain the support services Aqua Services, Inc. (“Aqua Services”) will provide to the DELCORA customers and the System.

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARK J. BUBEL, SR.

1 A. Aqua Services provides expertise in a variety of areas to the water and wastewater
2 subsidiaries. Aqua Services will provide support to the operation of the System in
3 accounting and financial, administrative, communications, corporate secretarial, customer
4 service and billing, engineering, fleet services, human resources, information systems,
5 operations, regulatory compliance, rates and regulatory, risk management, water quality,
6 legal, and purchasing, contracts and sales of real estate. These services would be in
7 addition to and in support of the services provided by DELCORA's existing employees.

8
9 **Q. Is the System similar to other wastewater systems owned and operated by Aqua?**

10 A. Yes. The WRTP and Springhill Farms WWTF are both activated sludge wastewater
11 treatment facilities similar to Aqua's Bridlewood, Media, and Penn Oaks WWTFs.
12 Pocopson Preserve (Corinne Village)¹ and Pocopson Riverside (Sheeder Tract)² are
13 treatment lagoon systems, similar to Brandywine River Estates, Peddlers View, which are
14 spray irrigation effluent disposal and New Daleville, Bridlewood, Sage Hill, and
15 Honeycroft, which are drip irrigation effluent disposal.

16
17 **III. COMBINED SYSTEMS**

18 **Q. Are there combined wastewater and stormwater systems within the System and how**
19 **will these be addressed post-closing of the Proposed Transaction?**

20 A. Yes. The City of Chester has combined sewers system pipe. A combined system is
21 where sanitary wastewater and stormwater flow into the same pipes and get treated at the

¹ Pocopson Preserve is a treatment lagoon system with drip irrigation effluent disposal.

² Pocopson Riverside is a treatment lagoon system with spray irrigation effluent disposal.

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DIRECT TESTIMONY OF MARK J. BUBEL, SR.

1 WRTP. Aqua has included a tariff supplement as Exhibit G to the Application. Aqua's
2 current tariff includes a definition of wastewater that applies to combined sewers.

3
4 **Q. How will Aqua address the combined systems?**

5 A. Aqua will continue to implement DELCORA's Long Term Control Plan ("LTCP"),
6 which is currently under review by the Pennsylvania Department of Environmental
7 Protection ("DEP") and the Environmental Protection Agency ("EPA"), in compliance
8 with the existing Consent Decree requirements.

9
10 **IV. CAPITAL PROJECTS**

11 **Q. Historically, what has been the relationship between DELCORA and PWD?**

12 A. As explained in the direct testimony of Mr. Willert (Aqua Statement No. 5), the DEP
13 required that wastewater systems within southern Delaware County not operate
14 individual treatment plants, but should instead tie into larger conveyance systems that
15 would send wastewater flows to the DELCORA WRTP or to PWD's Southwest
16 Treatment Facility. DELCORA constructed a pipeline in the early 1970s that accepts
17 wastewater flows from the large municipal authority's transmission lines and conveys
18 that wastewater to PWD for flows emanating from the Eastern Region. DELCORA and
19 PWD entered into an agreement in 1974 that provides for DELCORA to send flows to
20 PWD.

21
22 **Q. What are the future plans for the System in relation to PWD?**

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARK J. BUBEL, SR.

1 A. Aqua intends to upgrade DELCORA's WRTP and facilities to divert flow from Eastern
2 Region to the WRTP. Aqua plans to complete these upgrades prior to the expiration of
3 the existing agreement with PWD, which ends in 2028.

4
5 **Q. How will wastewater be treated after the relationship between Aqua and PWD**
6 **ends?**

7 A. As stated above, Aqua will upgrade its existing facilities to ensure adequate capacity to
8 divert flow from the Eastern Region to the WRTP. This will require the construction of a
9 new pipeline, upgrading the three existing pump stations to convey flow, construction of
10 equalization storage tanks, and upgrading the WRTP by the construction of an increased
11 capacity activated sludge treatment system as well as a wet weather flow treatment.

12
13 **Q. What are the benefits of not renewing the treatment agreement with PWD and,**
14 **instead, installing a new pipeline, completing pump station upgrades, adding**
15 **equalization storage, and upgrading the WRTP?**

16 A. These planned capital projects will remove significant and increasing costs from
17 DELCORA's customers who would otherwise have to contribute to PWD's LTCP.
18 Currently, DELCORA estimates that contributions to PWD's LTCP will be
19 approximately \$606 million over the next 22 years. Aqua estimates the cost of
20 completing the WTRP plant expansion and force main installation to be approximately
21 \$450 million. The elimination of the treatment expense to PWD will allow DELCORA
22 to control its own destiny and offset the potential risk of future increases. By investing

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DIRECT TESTIMONY OF MARK J. BUBEL, SR.

capital now to expand the WRTP, Aqua will be able to better control treatment costs to the benefit of the acquired DELCORA customers.

Q. How will the Proposed Transaction further those benefits?

A. The Proposed Transaction will allow Aqua to bring its extensive experience with large scale replacement projects to the table and will be able to leverage Aqua PA and Aqua's purchasing power for the benefit of the DELCORA customers.

Q. In addition to the construction of the new pipeline and upgrades to the WRTP, is Aqua planning any capital projects over the next 10 years?

A. Yes. Aqua will implement DELCORA's planned capital program for routine plant upgrades, collection system work and pump station upgrades. Some of those projects include collection system and pump station upgrades as well as more routine upgrades to the WRTP based on the useful life of various system components. These capital projects are set forth in Appendix A to my testimony.

Q. Do you foresee any other projects that would be required in the immediate future, and does Aqua plan any other physical, operational, and managerial changes after closing of the Proposed Transaction?

A. Replacement and upgrade of facilities will continue beyond Aqua's capital plan based on facility age and expected facility life span. As mentioned above, there are planned capital improvements. The System will be operated under Aqua's Southeastern Division, while

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARK J. BUBEL, SR.

maintaining the office and operations centers currently in place in DELCORA's service territory.

V. ENVIRONMENTAL COMPLIANCE

Q. Are any current environmental noncompliance issues for the System.

A. Yes. Environmental compliance issues are discussed in the direct testimony of Mr. DiSantis (Aqua Statement No. 7).

Q. How will Aqua address these noncompliance issues?

A. Aqua will work with the DELCORA operations and engineering staff to address environmental compliance issues, such as sanitary sewer overflows and similar compliance issues. DELCORA has an experienced team of wastewater operations, engineering, and support staff, and the merger of the expertise and knowledge of Aqua and DELCORA employees will allow for quality service to be provided to all customers.

VI. TECHNICAL FITNESS

Q. Do you believe Aqua is technically fit to own and operate the System?

A. Yes. Aqua PA and Aqua are Class A utilities that already have certificates to operate throughout the Commonwealth and have acquired many water and wastewater systems in the last three decades. Aqua will provide quality and reliable wastewater service to the DELCORA customers via Aqua's operational expertise as well as engineering support local to the System. Aqua has expertise in troubleshooting mechanical equipment as well as wastewater treatment processes, as well as operating wastewater collection,

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DIRECT TESTIMONY OF MARK J. BUBEL, SR.

1 conveyance, and treatment systems. Aqua strives to ensure that its collection,
2 conveyance, treatment, and pumping systems provide continuous, safe and reliable
3 service. Aqua has worked with the Commission and statutory advocates to acquire and
4 improve troubled wastewater systems (e.g., Washington Park Wastewater, Docket No.
5 A230550F2000).

6 In addition, Aqua was appointed receiver for the North Heidelberg Sewer
7 Company system in Berks County by the Commission effective March 5, 2018. Aqua
8 took over daily wastewater operations of the facility serving approximately 274
9 customers on March 5, 2018. Aqua has provided operations service and improvements to
10 the system to ensure quality and reliable service.

11
12 **Q. Does Aqua have emergency preparedness measures and safety programs in place?**

13 A. Yes. Aqua currently has emergency preparedness measures in place in order to ensure
14 security and continued service in emergency circumstances.

15 Aqua and Aqua PA maintain safety programs that entail basic safety training in
16 all the major categories operators and management personnel are required to complete
17 including, but not limited to, confined space training, back and lifting safety, work zone
18 traffic control, excavation safety awareness, and fall protection training. DELCORA's
19 former customers will be the beneficiaries of Aqua's safety program and procedures.

20
21 **Q. Can Aqua provide adequate wastewater collection, treatment, or disposal capacity**
22 **to meet present and future customer demands, including those of the DELCORA**
23 **customers?**

AQUA PENNSYLVANIA WASTEWATER, INC.
DIRECT TESTIMONY OF MARK J. BUBEL, SR.

1 A. Yes. Aqua can provide adequate wastewater service for present and future customers,
2 including the DELCORA customers. As discussed above, Aqua will be implementing
3 capital projects to expand the capacity of the WRTP to take flows from the Eastern
4 region. Aqua will continue to make improvements to its system to ensure any future
5 customer demands are met.

6
7 **VII. CONCLUSION**

8 **Q. Does this conclude your testimony?**

9 A. Yes, it does. However, I reserve the right to supplement my testimony as additional
10 issues and facts arise during the course of this proceeding.

WRTP	Location	Project Name	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	Reserved	Reserved	Total	
Electrical	Substation #1		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -					\$ -	
	Substation #2 (old sub-2 & sub-3)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -					\$ -	
	Substation #3 (old sub-4)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -					\$ -	
	Primary Switchgear		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -					\$ -	
	Plant Electrical Distribution		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -					\$ -	
	General/Multiple		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -					\$ -	
	Rehab Electrical Switchgear & Subs		\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -	\$ 750,000			\$ 2,250,000	
Misc.	Pit 1 (Valve)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -					\$ -	
	Pit 2 (Mag Meter)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -					\$ -	
	Pit 3 (Mag Meter)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -					\$ -	
	Trucked Waste Receiving Stations		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -					\$ -	
	Hauled Waste ID Charge		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -					\$ -	
	RAD Screening		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -					\$ -	
	Pit 5 (Potable Water)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -					\$ -	
	Bulkhead		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -					\$ -	
	Inspection and Repairs		\$ -	\$ -	\$ 49,524	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 63,207	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -	\$ -	\$ -			\$ 112,731
	WRTP Bulkhead Coating (may move to			\$ -	\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -	\$ -	\$ -			\$ 250,000	
	WRTP Outfall Extension)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -	\$ -	\$ -			\$ -	
	S-2 (Plant Outfall)		\$ -	\$ -	\$ 4,500,000	\$ 4,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -	\$ -	\$ -			\$ 9,000,000	
	WRTP Outfall Extension			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -	\$ -	\$ -			\$ -	
	Ash Lagoon Effluent Box		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -	\$ -	\$ -			\$ -	
	Utility Water		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -	\$ -	\$ -			\$ -	
	Utility Water Shutoff, Valves, VFDs		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -	\$ -	\$ -			\$ -	
	General Valves & Equipment																										\$ -
	WRTP Gates - Aeration Gates, Chlorine		\$ 3,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -	\$ -	\$ -			\$ 3,000,000
	Tanks, Grit, Primary Gates																										
	Valve Replacement & Maintenance																										
	Program																										\$ 3,372,737
	Yard Piping		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -	\$ -	\$ -				\$ -
	Equipment & Vehicles		\$ 534,456	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -	\$ -	\$ -				\$ -
Equipment		\$ 386,936	\$ 71,288	\$ 476,598	\$ 75,629	\$ 288,814	\$ -	\$ -	\$ -	\$ -	\$ 741,647	\$ 173,017	\$ 270,917	\$ -	\$ 264,263	\$ 101,640				\$ 1,067,657	\$ 107,830					\$ 4,026,236	
2019 Projects	Roof Replacement																									\$ -	
	EPS-1 Building Roof		\$ 11,435	\$ 23,556	\$ 12,131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 47,122	
	B-3 Building Roof		\$ 78,614	\$ 161,945	\$ 83,402	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 323,961	
	B-4 Building Roof		\$ 71,468	\$ 147,223	\$ 75,820	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 294,510	
	PS-1 & PS-2 Building Roof		\$ 6,480	\$ 13,348	\$ 6,874	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 26,702	
	PS-3 Building Roof		\$ 18,820	\$ 38,769	\$ 19,966	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 77,554	
	PS-4 Building Roof		\$ 9,529	\$ 19,630	\$ 10,109	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 39,268	
	PS-5 Building Roof		\$ 11,435	\$ 23,556	\$ 12,131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 47,122	
	Aeration Blower Building Roof		\$ 28,587	\$ 58,889	\$ 30,328	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 117,804	
	Admin Building Roof		\$ 25,252	\$ 52,019	\$ 26,790	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 104,060	
	B-4																									\$ -	
	T-26 Grease Handling Feed to Incinerator		\$ 569,262	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 569,262	
	ET-1, ET-2, ET-3, ET-4 Concrete Tank																										
	Rehab		\$ 500,000	\$ 1,112,025	\$ 679,636	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 2,291,660	
	Relocate Gravity Belt Thickener in B-4			\$ 392,595		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 392,595	
	B-4 Odor Control System and B-4																										
	Modifications		\$ -	\$ 530,537	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 530,537	
	B-3																										
	Ash Handling System Upgrades		\$ -	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 1,500,000	
	Site																										
	Hauled Waste Kiosk and Upgrades			\$ 212,296	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 212,296	
	2019 Bond	Site																									\$ -
		Hauled Waste Office		\$ -	\$ 0	\$ -	\$ 1,380,933	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 1,380,933	
Miscellaneous Energy Upgrades - Ph. 2			\$ 1,075,621	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 1,075,621		
Grit Handling			\$ -	\$ -	\$ 274,893	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 274,893		
Substation #2 Replacement			\$ -	\$ -	\$ 822,595	\$ 847,273	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 1,669,868		
LTCP Yard Piping			\$ -	\$ -	\$ -	\$ 564,134	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 564,134		
Future Bond																										\$ -	
Building B-2 and Laboratory		\$ -	\$ -	\$ -	\$ -	\$ 1,258,664	\$ 2,592,847	\$ 1,335,316	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 5,186,827			

		Location	Project Name	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	Reserved	Reserved	Total	
Eastern Service Area (Central)	Darby Creek Pump Station & Forcemain			\$ -	\$ -	\$ 366,122	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,964,443	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ -		
		DCPS - Upgrades		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ 2,330,565	
		DCPS Bar Screen		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ -
	Muckinipates Pump Station & Forcemain			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 627,082	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 400,000	\$ -	\$ -	\$ -					\$ -	\$ -				\$ -
		Muckinipates PS Upgrade		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ 1,027,082
		Muck 15 KVA Switchgear		\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -			
	Central Delaware County Pump Station & Forcemain			\$ -	\$ -	\$ -	\$ -	\$ 1,295,763	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ -
		Central Delco PS - Upgrade		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 256,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ 1,295,763
		CDPS Controls		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ 256,000
		CDPS (Pump Rebuild)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ -
		CDPS Bar Screen		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -			
	Misc.	Eastern Air Release Valves (phase work)		\$ -	\$ -	\$ -	\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ 250,000
			Eastern Force Mains		\$ 1,000,000	\$ -	\$ -	\$ -	\$ 250,000	\$ 2,600,000	\$ 2,600,000	\$ 2,600,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -			
		Eastern Force Main Rehab - WRTP to Darby						\$ -	\$ -	\$ -	\$ 12,000,000	\$ 12,000,000	\$ 12,000,000	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ 36,000,000
	Future Bond	Remote Operations	Remote treatment plants upgrades and rehab						\$ 927,925	\$ 955,762	\$ 984,435	\$ 1,013,968	\$ 1,044,387															\$ -
																												\$ 4,926,478
																												\$ -
	Rose Valley	WWTP	Rose Valley EQ Tank		\$ -	\$ -	\$ -	\$ 2,252,244	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ -
																												\$ 2,252,244
		Brookhaven Road Pump Station & Forcemain	Pump Replacement		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ -					\$ -	\$ -				\$ -
																												\$ 100,000
		Old Mill Pump Station & Forcemain	Old Mill Pump Station Upgrade			\$ 909,838	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ -
																												\$ 1,159,838
		Longpoint Lane Ejector Station & Forcemain	Pump Replacement		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ -
																												\$ 30,000
Forestview Siphon Station & Forcemain																											\$ -	
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				0	
Collection System	Old Mill Force Main Replacement Rose Valley Vernon Run Repair				\$ 2,082,519																						\$ -	
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ 2,082,519	
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ -
Pocopson	Riverside WWTP																									\$ -		
		Repairs and Maintenance		\$ 168,826	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 226,888	\$ -	\$ -	\$ -					\$ -	\$ -				\$ 395,715
	Collection System																									\$ -		
	Repairs and Maintenance		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ 287,416				\$ 387,416	
Springhill Farms	WWTP																									\$ -		
		Spring Hill Farms		\$ 650,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ 650,000
	Collection System																									\$ -		
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	\$ -				\$ -	
Additional Significant Projects	TOTAL Existing Assets - 2019 Capital Plan			\$ 14,962,200	\$ 14,995,092	\$ 17,169,801	\$ 20,922,071	\$ 9,075,591	\$ 13,678,412	\$ 27,416,940	\$ 19,728,889	\$ 19,549,775	\$ 5,426,129	\$ 4,397,890	\$ 3,386,381	\$ 14,012,090	\$ 23,284,468	\$ 24,499,458	\$ 22,879,544	\$ 18,631,000	\$ 20,351,369	\$ 16,189,650	\$ 15,592,470	\$ 14,594,850	\$ -	\$ -	\$ 340,744,069	
	Eastern Service Area Wet Weather			\$ 896,000	\$ 2,240,000	\$ 4,928,000	\$ 31,360,000	\$ 22,400,000	\$ 22,400,000	\$ 112,000,000	\$ 138,880,000	\$ 112,000,000															\$ 447,104,000	
	Chester LTCP Implementation - See Note 1			\$ 6,960,000	\$ 6,960,000	\$ 6,960,000	\$ 6,960,000	\$ 6,960,000	\$ 10,440,000	\$ 10,440,000	\$ 10,440,000	\$ 10,440,000	\$ 10,440,000													\$ 87,000,000		
	Buried Pipeline Rehabilitation			\$ 3,126,119	\$ 3,219,903	\$ 3,316,500	\$ 3,415,995	\$ 3,518,475	\$ 3,624,029	\$ 3,732,750	\$ 3,844,733	\$ 3,960,075	\$ 4,078,877	\$ 4,201,243	\$ 4,327,280	\$ 4,457,099	\$ 4,590,812	\$ 4,728,536	\$ 4,870,392	\$ 5,016,504	\$ 5,166,999	\$ 5,322,009	\$ 5,481,669	\$ 5,646,119			\$ 89,646,119	
	Ammonia Permit Improvements																										\$ 100,000,000	
																											\$ -	
Grand total				\$ 25,944,320	\$ 27,414,995	\$ 32,374,301	\$ 62,658,066	\$ 41,954,066	\$ 50,142,442	\$ 153,589,690	\$ 172,893,622	\$ 145,949,849	\$ 19,945,006	\$ 18,599,133	\$ 25,713,661	\$ 36,469,189	\$ 45,875,280	\$ 47,227,995	\$ 45,749,936	\$ 23,647,504	\$ 25,518,368	\$ 21,511,659	\$ 21,074,140	\$ 20,240,969	\$ -	\$ -	\$ 1,064,494,188	
Cumulative total				25,944,320	53,359,314	85,733,615	148,391,681	190,345,747	240,488,189	394,077,878	566,971,500	712,921,349	732,866,355	751,465,488	777,179,149	813,648,338	859,523,617	906,751,612	952,501,548	976,149,051	1,001,667,420	1,023,179,079	1,044,253,219	1,064,494,188				

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

AQUA STATEMENT NO. 4-R

**REBUTTAL TESTIMONY OF
MARK J. BUBEL, SR.**

**With Regard To
Industrial Pretreatment
Environmental Permitting
E.O. 12803
CWA Financing**

October 20, 2020

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	RESPONSE TO KIMBERLY CLARK WITNESS ERIC WENTZ	2
III.	RESPONSE TO SPMT WITNESS HOWARD WOODS.....	5
IV.	CONCLUSION.....	13

AQUA PENNSYLVANIA WASTEWATER, INC.
REBUTTAL TESTIMONY OF MARK J. BUBEL, SR.

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Mark J. Bubel, Sr. My business address is 762 West Lancaster Avenue,
Bryn Mawr, Pennsylvania 19010.

Q. By whom are you employed and in what capacity?

A. I am employed by Aqua Pennsylvania, Inc., (“Aqua PA”) as a Project Engineer III.

Q. Are you the same Mark J. Bubel, Sr. who submitted direct testimony in this proceeding?

A. Yes. I submitted direct testimony with Aqua Pennsylvania Wastewater, Inc.’s (“Aqua” or the “Company”) Application to the Pennsylvania Public Utility Commission (“PUC” or the “Commission”) on March 3, 2020.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to address portions of the direct testimony of Kimberly-Clark Pennsylvania, LLC and Kimberly Clark Corporation (“Kimberly Clark”) witness Mr. Eric Wentz, and Sunoco Partners Marketing & Terminals, L.P. (“SPMT”) witness Howard J. Woods, Jr.

Q. Are you sponsoring any Exhibits with your rebuttal testimony?

A. No.

AQUA PENNSYLVANIA WASTEWATER, INC.
REBUTTAL TESTIMONY OF MARK J. BUBEL, SR.

II. RESPONSE TO KIMBERLY CLARK WITNESS ERIC WENTZ

Q. Please summarize the portions of Mr. Wentz's issues you will address.

A. Mr. Wentz states on p.10 of his testimony that he is concerned that Aqua may not be eligible to administer Delaware County Regional Water Quality Control Authority's ("DELCORA") Industrial Pretreatment Program ("IPP") or obtain National Pollution Discharge Elimination System ("NPDES") permits to operate the Western Regional Treatment Plan ("WRTP").

Q. Do you agree with Mr. Wentz's statements regarding the IPP?

A. No. Following the closing of the Proposed Transaction, Aqua will be responsible for administering the IPP. While primary supervision of the IPP would be moved from the United States Environmental Protection Agency ("EPA") to the Pennsylvania Department of Environmental Protection ("DEP"), Aqua plans to operate and implement the pretreatment program functionally equivalent to how it is operated today.

DEP requires privately-owned treatment works to implement IPPs in NPDES permits. The NPDES requirement to regulate Industrial Users ("IUs") within the service area makes those IUs subject to requirements that principally mirror the current DELCORA pretreatment program, governed by federal regulations, and that leaves IUs in essentially the same position as they are at present. Accordingly, upon the finalization of the Proposed Transaction, Aqua plans to operate the pretreatment program as it is currently performed. The primary difference in program oversight is that all pretreatment activities are reported to DEP in lieu of EPA, to which Publicly Owned Treatment Works ("POTW") programs currently report. *See, e.g.* PADEP-issued NPDES Permit No.

AQUA PENNSYLVANIA WASTEWATER, INC.
REBUTTAL TESTIMONY OF MARK J. BUBEL, SR.

1 PA0026859 (Pennsylvania American Water Company, Coatesville STP (2019); NPDES
2 Permit No. PA0026972 (Pennsylvania American Water Company, Exeter SPT (2013);
3 *see also* W. Va. DEP-issued NPDES Permit No. WV0022314 (Fayetteville STP) (all
4 requiring IPPs). The NPDES requirements to regulate IUs within the system impose the
5 same substantive discharge limitations applicable to those IUs today under the different
6 mechanism of federal pretreatment regulations.

7
8 **Q. Are the concerns expressed by Mr. Wentz in reliance on the April 16, 1987**
9 **memorandum entitled “Permit Implications of Privatization” reasonable?**

10 A. No. As Mr. Wentz acknowledges in his direct testimony on p. 12, line 11-13, the cited
11 passages in the 1987 document are not self-explanatory and do not contain any specific
12 insight into the DELCORA-Aqua transaction. More importantly, the 1987 document
13 itself does nothing more than affirm the well-understood reality that privately-owned
14 wastewater treatment plants are subject to different provisions and requirements of the
15 Clean Water Act and its regulations than publicly-owned treatment plants.

16 Aqua and DELCORA have acknowledged these differences, and are working
17 with DEP and EPA to ensure that Aqua’s NPDES permit reflects these differences,
18 including differences regarding industrial pretreatment. Whereas industrial users and
19 DELCORA have been subject to federal pretreatment regulations, Aqua and its industrial
20 users will be subject to a pretreatment program as a requirement of Aqua’s NPDES
21 permit. Aqua and DELCORA do not expect that any of the distinctions between public
22 and private ownership will result in any material difference to the CWA obligations
23 imposed upon Aqua or its industrial users. Mr. Wentz did not offer any specific example

AQUA PENNSYLVANIA WASTEWATER, INC.
REBUTTAL TESTIMONY OF MARK J. BUBEL, SR.

1 of an additional burden that might be imposed on Aqua's industrial users, and the 1987
2 document provides none. Moreover, since 1987 numerous publicly-owned treatment
3 works have been sold to private owners, and DEP and EPA have addressed the sort of
4 transitional issues speculated upon by Mr. Wentz in many cases, including by
5 incorporating industrial pretreatment obligations into the new private owner's NPDES
6 permit.

7
8 **Q. Do you agree with Mr. Wentz's statement that Aqua would not be able to obtain a**
9 **NPDES permit to operate the WRTP?**

10 A. No. Transfer of an NPDES permit by DEP involves submission of a 5-page DEP Permit
11 Transfer Form completed by both the current Permittee, DELCORA, and the proposed
12 Permittee, Aqua, and submission of a \$200.00 transfer fee. The transfer parties must also
13 submit other documentation including, but not limited to, a copy of the current NPDES
14 permit, a topographic map identifying the discharge points, and Electronic Discharge
15 Monitoring Report ("eDMR") registration documents and Trading Partner Agreement.
16 This paperwork is submitted in duplicate to the appropriate DEP Regional Office; in the
17 case of DELCORA, it would be submitted to the Southeast Regional Office of DEP in
18 Norristown, PA.

19
20 **Q. Has Aqua acquired and transferred NPDES permits from other municipalities or**
21 **municipal authorities through other acquisitions?**

AQUA PENNSYLVANIA WASTEWATER, INC.
REBUTTAL TESTIMONY OF MARK J. BUBEL, SR.

1 A. Yes. Aqua has transferred 9 NPDES permits from municipalities or municipal authorities
2 over the last 22 years. In all the 9 instances, we were able to obtain the necessary
3 NPDES permit.

4
5 **Q. Does Mr. Wentz recommend alternatives if the Commission approves Aqua's**
6 **Application?**

7 A. Yes. While Mr. Wentz recommends the Commission deny the Application, in the
8 alternative, Mr. Wentz recommends that Aqua confirm its ability to administer the IPP
9 and obtain all necessary NPDES Permits.

10
11 **Q. Will Aqua confirm its ability to administer the IPP and obtain all necessary NPDES**
12 **permits?**

13 A. Yes. Aqua confirms that it will be able to administer the IPP imposing pretreatment
14 requirements functionally equivalent to those in effect today and obtain all necessary
15 NPDES permits. Aqua and DELCORA are working with EPA and DEP to transfer and
16 obtain all necessary NPDES permits and to incorporate pretreatment requirements into
17 Aqua's NPDES permit.

18
19 **III. RESPONSE TO SPMT WITNESS HOWARD WOODS**

20 **Q. Please summarize the portions of Mr. Woods' testimony you will address.**

21 A. On p. 40-42 of his direct testimony, Mr. Woods testified that the impact on the Combined
22 Sewer Overflow ("CSO") Control Program through loss of POTW status could adversely
23 affect the charges levied upon SPMT and that the regulatory conditions under which

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REBUTTAL TESTIMONY OF MARK J. BUBEL, SR.

1 SPMT operates will change significantly through the loss of POTW status if the WRTP is
2 transferred to Aqua; that if the WRTP's status is changed from a POTW to public utility
3 ownership, it will change infrastructure funding available to the Commonwealth of
4 Pennsylvania under the CWA; and that the EPA and the federal Office of Management
5 and Budget ("OMB") must review and approve the Proposed Transaction.
6

7 **Q. Please describe Mr. Woods' concerns regarding the CSO Control Program.**

8 A. Mr. Woods stated that the CSO program only applies to POTWs and DELCORA's
9 existing NPDES permit includes discharges from the WRTP and from 26 additional
10 outfalls. Mr. Woods stated that it is not clear how the discharge points will be regulated
11 if the POTW designation is changed to a privately-owned treatment works. Mr. Woods
12 described that certain guidance is established by EPA for POTWs to meet the goals of the
13 CWA like implementing regulatory and operational controls and in maximizing the
14 volume of storm flows treated at POTWs to provide primary treatment prior to discharge
15 and allowing secondary treatment bypass. Mr. Woods stated that this guidance and
16 remedy is not available to privately-owned treatment works. Mr. Woods concludes that a
17 private system may then be required to separate all sanitary and storm sewers to eliminate
18 CSOs or provide full treatment of storm flows, which would increase the capital costs of
19 DELCORA's Long-Term Control Plan ("LTCP"). Finally, Mr. Woods stated that
20 indirect dischargers may face additional liability from pollutants in CSOs under Aqua
21 ownership.
22

AQUA PENNSYLVANIA WASTEWATER, INC.
REBUTTAL TESTIMONY OF MARK J. BUBEL, SR.

1 **Q. How would the ownership and administration of the Combined System differ under**
2 **Aqua's ownership?**

3 A. DELCORA's obligations with respect to CSO are governed by the process set forth in a
4 Consent Decree entered in the United States District Court for the Eastern District of
5 Pennsylvania in 2015 (Docket No. 2:15-cv-4652) among DELCORA, EPA and DEP.
6 Among other things, the Consent Decree requires DELCORA to submit for approval by
7 EPA and DEP a LTCP revision that will set forth DELCORA's CSO obligations.
8 DELCORA has submitted the LTCP revision and EPA and DEP are expected to approve
9 that LTCP in the near future, at which time it will be incorporated into DELCORA's
10 obligations under the Consent Decree. The Consent Decree contains provisions that will
11 allow a party that acquires the DELCORA system to be substituted for DELCORA as the
12 party obliged to fulfill the CSO obligations imposed by the LTCP and the Consent
13 Decree. Aqua and DELCORA have approached EPA and DEP to discuss the transfer of
14 the DELCORA system to Aqua, and intend to petition EPA and DEP to allow Aqua to be
15 substituted for DELCORA in accordance with the terms of the Consent Decree at or near
16 the time of closing of the Proposed Transaction. Upon substitution, Aqua will be obliged
17 to perform the LTCP, but will be the beneficiary of the work done by DELCORA to
18 establish the limits of the CSO obligations. Thus, Aqua does not expect that its
19 acquisition of the DELCORA system will lead to the imposition of CSO obligations
20 greater than those that would be imposed on DELCORA.

AQUA PENNSYLVANIA WASTEWATER, INC.
REBUTTAL TESTIMONY OF MARK J. BUBEL, SR.

1 **Q. Please describe Mr. Woods’ concerns related to infrastructure funding under the**
2 **Clean Water Act (“CWA”) as a result of the DELCORA system no longer being**
3 **classified as a POTW if the Proposed Transaction is approved.**

4 A. Mr. Woods stated that federal funds are appropriated under the CWA to fund
5 infrastructure improvements needed across the United States. The Commonwealth of
6 Pennsylvania derives a portion of the monies appropriated for the infrastructure needs.
7 Mr. Woods stated that, by DELCORA no longer being classified as a POTW, the overall
8 share of funds provided to Pennsylvania will drop when the system comes under Aqua
9 ownership. Finally, Mr. Woods stated that Aqua will not have access to loans at below
10 market rates to fund the infrastructure improvements under the CWA’s financing
11 assistance.

12
13 **Q. Do you agree with Mr. Woods’ conclusions regarding federal funds provided under**
14 **the CWA?**

15 A. No. Mr. Woods notes that by removing the infrastructure needs of DELCORA under
16 CWA funding, Pennsylvania as a whole will receive less funds from the CWA funds, but
17 Mr. Woods fails to take into account that the infrastructure needs of Pennsylvania as a
18 whole under the CWA funding program will similarly be reduced. In simple terms, any
19 reduction in available infrastructure funds will be offset by the reduction in the
20 infrastructure demand from Pennsylvania as a result of excluding the DELCORA system.
21 However, I note that even if DELCORA remained eligible for infrastructure funds, I have
22 significant doubt that the available funds would be sufficient to support the infrastructure
23 needs of the DELCORA system.

AQUA PENNSYLVANIA WASTEWATER, INC.
REBUTTAL TESTIMONY OF MARK J. BUBEL, SR.

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Q. Is Mr. Woods correct that the DELCORA system, under Aqua ownership, would not be eligible to receive below market financing under the CWA for infrastructure improvements?

A. Yes. Aqua would not be eligible for CWA State Revolving Fund financing; however, as set forth in the rebuttal testimony of Mr. Packer, Mr. Woods’ analysis of DELCORA’s lower cost of capital is offset by the benefits that the DELCORA customers will receive through, among other things, the economies of scale in being part of a larger overall wastewater utility. Further, the CWA State Revolving Fund comes with a number of administrative requirements which impose higher costs that offset the benefits of below-market interest rates. There are also administrative fees, the need for preliminary engineering reports, and other requirements that impose time and costs to the use of such funds. My understanding is that many public utilities avoid CWA State Revolving Fund borrowing for these reasons. We believe most of the CWA State Revolving Fund dollars provided annually go to smaller utilities that cannot readily access market funding.

Q. What is Executive Order 12803 (“EO”)?

A. The EO allows for disposition or transfer of an infrastructure asset, such as by sale or by long-term lease, from a State or local government to a private party. The EO, issued in 1992 by then-President George H. W. Bush, was intended to encourage state and local governments to sell publicly-owned assets as a means of raising funds to meet budget deficits and to increase operating efficiency similar to the objectives of the Pennsylvania General Assembly in enacting Section 1329. The EO encourages privatization of water

AQUA PENNSYLVANIA WASTEWATER, INC.
REBUTTAL TESTIMONY OF MARK J. BUBEL, SR.

1 supply facilities and wastewater treatment facilities, directing federal agencies to work
2 with state and local officials who might be interested in selling such assets, and adjusting
3 financial incentives to enable local governments to retain the proceeds from the sale of
4 facilities that were constructed using federal assistance.

5
6 **Q. What were the purposes of the EO?**

7 A. The EO was established for the following five purposes: (1) assist local privatization
8 initiatives; (2) remove federal barriers to privatization; (3) increase the financial
9 incentives for state and local governments by relaxing federal repayment requirements;
10 (4) protect the public interest by ensuring reasonable user charges; and (5) establish
11 guarantees that the facility will continue to be used for its intended purpose.”¹ The EO
12 sets out guidelines and processes for how federal agencies should review proposals to
13 privatize infrastructure assets, like water and wastewater facilities, that have been
14 constructed by state and local governments with federal and/or local funds.

15
16 **Q. What is your understanding of Witness Woods’ criticism with respect to the EO and**
17 **the Proposed Transaction between DELCORA and Aqua?**

18 A. Mr. Woods understands the EO to be currently in effect. (SPMT Statement No. 2, p 45,
19 line 6). Based upon Mr. Woods’ interpretation of DELCORA’s 2019 Audit, he concludes
20 that federal funds were used to finance certain unspecified facilities covered by a 1973
21 Agreement between DELCORA and Sun Oil Company of Pennsylvania and a 2009

¹ *Draft Guidance on the Privatization of Federally Funded Facilities*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, OFFICE OF WATER (September, 1999) at 14-15. As noted later in this testimony, this Draft Guidance is no longer in effect.

AQUA PENNSYLVANIA WASTEWATER, INC.
REBUTTAL TESTIMONY OF MARK J. BUBEL, SR.

1 Agreement between DELCORA and Southwest Delaware County Municipal Authority.
2 (SPMT Statement No. 2, p. 45, lines 7-11), and then criticizes Aqua and DELCORA for
3 failing to address in testimony the process and requirements of the EO. (SPMT
4 Statement No. 2, pp. 45-49).

5
6 **Q. In what respect does Mr. Woods believe that Aqua and DELCORA have failed to**
7 **satisfy the requirements of the EO?**

8 A. Mr. Woods' criticisms are broad and expansive, but he generally finds, among other
9 things, that (i) neither the Transfer Price nor the amount of the locally funded shares of
10 the relevant assets have been established in this proceeding (SPMT Statement No. 2, p.
11 47, lines 19-20); (ii) the EPA has not approved the Proposed Transaction (SPMT
12 Statement No. 2, p. 47, lines 1-5); and (iii) neither the Director of the OMB nor the
13 Administrator of the EPA has determined the appraised value for the assets to be
14 transferred under the Proposed Transaction. (SPMT Statement No. 2, p. 46, lines 6-12).

15
16 **Q. Do you agree with Mr. Woods' testimony with respect to the EO?**

17 A. In part. Aqua agrees that this 28-year-old EO remains on the books and is in effect.
18 Aqua understands that DELCORA obtained EPA construction grants to construct certain
19 DELCORA wastewater facilities under the then-effective EPA construction grant
20 program.

AQUA PENNSYLVANIA WASTEWATER, INC.
REBUTTAL TESTIMONY OF MARK J. BUBEL, SR.

1 **Q. Is there a clearly delineated process by which the EO is to be implemented by the**
2 **EPA and grant recipients in connection with assets that have received prior EPA**
3 **construction grants?**

4 A. To Aqua's knowledge, there are very few details on the process to be used at the EPA to
5 discharge whatever interest the EPA/federal government may still retain with respect to
6 the wastewater assets that were constructed with funds from the EPA construction grant
7 program. While the EPA issued draft Guidance in 1999 that I referenced above, that
8 Guidance has been withdrawn and is no longer applicable to the EO. Indeed, Aqua
9 understands the EPA has not dealt with a wastewater privatization in connection with
10 facilities funded under the EPA construction grant program since the early 2000's.
11 However, Aqua understands the process involves DELCORA – as the asset owner and
12 recipient of the grant funds – applying for a waiver of the EO requirement with the EPA's
13 Region 3 office in Philadelphia. The local EPA Region 3 officials will coordinate with
14 higher level EPA staff in Washington, DC to evaluate the waiver request.

15
16 **Q. What rules would apply to the process to obtain a waiver of the EO and procure a**
17 **discharge of the EPA's interest in the wastewater assets that were constructed with**
18 **funds provided by the EPA's construction grant program?**

19 A. The obligation to seek EPA authorization of the Proposed Transaction is driven by the
20 EO, the initial EPA construction grant program rules, and the Federal grant regulations
21 found in Title 2 CFR. The regulations in effect at the time the grant was issued, and the
22 language of the grant's program rules, will be used to effect the required waiver and the
23 discharge of the EPA's interest in the assets funded by the grant.

AQUA PENNSYLVANIA WASTEWATER, INC.
REBUTTAL TESTIMONY OF MARK J. BUBEL, SR.

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Q. Will DELCORA and Aqua commence discussions with the EPA to address the requirements of the EO and the process you described above?

A. Yes. DELCORA and Aqua will take the necessary steps to obtain a waiver from EPA of the EO requirements.

Q. Do you expect obtaining the EPA’s sign-off under and/or waiver of the EO to have any material impact on this proceeding or closing of the Proposed Transaction?

A. Not at all. While the timing of the process is currently uncertain due to the lack of recent requests to privatize wastewater assets that are the subject of EPA construction grants, Aqua believes the EPA is committed to working with DELCORA and Aqua timely and expeditiously, consistent with the spirit and purpose of the EO, which is to facilitate and promote the privatization of infrastructure.

IV. CONCLUSION

Q. Does this conclude your rebuttal testimony?

A. Yes, it does. However, I reserve the right to supplement my testimony as additional issues and facts arise during the course of this proceeding.

EXHIBIT W1

TESTIMONY OF ROBERT WILLERT

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

AQUA STATEMENT NO. 5

**DIRECT TESTIMONY OF
ROBERT WILLERT
EXECUTIVE DIRECTOR
DELCORA**

**With Regard To
Description of DELCORA and Its Wastewater System
Overview of DELCORA's Sale Process
Public Benefits of the Proposed Transaction
DELCORA Customer Trust**

March 3, 2020

AQUA STATEMENT NO. 5
DIRECT TESTIMONY OF ROBERT WILLERT

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	DESCRIPTION OF DELCORA AND ITS WASTEWATER SYSTEM	3
III.	BENEFITS OF THE PROPOSED TRANSACTION	5
IV.	CONCLUSION.....	14

AQUA STATEMENT NO. 5
DIRECT TESTIMONY OF ROBERT WILLERT

1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is Robert Willert. My business address is 100 East Fifth Street, Chester, PA
4 19013.

5

6 **Q. In what capacity are you affiliated with the Delaware County Regional Water
7 Quality Control Authority (“DELCORA”)?**

8 A. I am the Executive Director of DELCORA.

9

10 **Q. Please provide a brief description of your education and work experience.**

11 A. I graduated from Saint Joseph’s University with a Bachelor of Science degree in 1981. I
12 have served as DELCORA’s Executive Director since January 2015. Prior to that, I was
13 the Township Manager for Concord Township, Delaware County from 2003 to 2014,
14 where my duties included oversight of the township’s ownership and operation of a 1.2
15 million gallons per day (“MGD”) wastewater treatment plant. I was also a member of
16 DELCORA’s Board of Directors from 2002 to 2014. As a board member, I served on the
17 Operations & Engineering committee from 2002-2012, the Finance committee from
18 2002-2014, the Strategic Planning and Goals committee from 2013-2014, as Legal
19 Liaison from 2009-2014, and as the 2014 Human Resources & Administration Chairman.

20

21 **Q. Have you testified before the Pennsylvania Public Utility Commission (“PUC” or
22 the “Commission”) before?**

23 A. No.

AQUA STATEMENT NO. 5
DIRECT TESTIMONY OF ROBERT WILLERT

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Q. On whose behalf are you testifying in this proceeding?

A. My testimony is on behalf of DELCORA and in support of Aqua Pennsylvania Wastewater, Inc. (“Aqua”) in this proceeding.

Q. What is the purpose of your direct testimony?

A. The purpose of my testimony is as follows: (1) to provide a description of DELCORA and its sanitary wastewater collection and conveyance system (the “System”) and (2) to provide a description of the anticipated benefits of the sale of the System assets to Aqua under and in accordance with an Asset Purchase Agreement (“APA”) between DELCORA and Aqua dated September 17, 2019, as amended via Amendment No. 1 to the APA on February 24, 2020 (the “Proposed Transaction”).

In particular, I will focus on the numerous benefits of the Proposed Transaction that are most important to DELCORA and the customers who use the System, including:

- After paying off outstanding debt, the majority of the sale proceeds will be placed into an irrevocable trust dedicated to provide customer assistance payments to DELCORA customer bills, which will benefit customers for years to come. A primary focus for DELCORA was on mitigating future bill impacts for its customers. As will be explained in greater detail, under the outlined plan, the Proposed Transaction results in the least impact and cost increase to customers than the other alternative courses of action considered by DELCORA;
- Aqua, and Aqua Pennsylvania, Inc. (“Aqua PA”), are familiar with the area as it currently serves nearly 500,000 people in Delaware County and approximately

AQUA STATEMENT NO. 5
DIRECT TESTIMONY OF ROBERT WILLERT

200,000 people in Chester County, which provides economies of scale, including operational efficiencies, combined billing processes and capital replacement planning and execution;

- Customers will benefit from Aqua's long-standing capital improvement programs, its experience in improving and correcting systems with compliance issues, and its capability to make long-term investments in necessary capital improvements to the wastewater system;
- DELCORA's customers will benefit from protections provided by the Commission's regulations including access to Helping Hand and operational functions performed by Aqua's team of experienced water and wastewater professionals;
- Aqua has committed to preserving the jobs of DELCORA's employees; and
- Aqua has a proven record of environmental stewardship for the operation of wastewater systems.

Q. Are you sponsoring any Exhibits with your testimony?

A. No.

II. DESCRIPTION OF DELCORA AND ITS WASTEWATER SYSTEM

Q. Please provide a general overview of DELCORA.

A. DELCORA was created October 20, 1971, by a resolution of the Council of the County of Delaware, Pennsylvania, under the authority of the Municipality Authorities Act of 1945. DELCORA has since been serving Delaware and Chester County residents for over four decades by collecting, conveying and treating wastewater in a safe and effective

AQUA STATEMENT NO. 5
DIRECT TESTIMONY OF ROBERT WILLERT

1 manner that prevents contamination of streams, rivers, and general water supply.

2 Through its extensive infrastructure, DELCORA has worked diligently to ensure that its
3 customers of Delaware and Chester Counties are provided quality wastewater service by
4 meeting and, in many cases, exceeding the water discharge mandates set by the
5 Pennsylvania Department of Environmental Protection (“DEP”) and the US
6 Environmental Protection Agency (“EPA”).

7
8 **Q. Please provide an overview of DELCORA’s wastewater system.**

9 A. DELCORA owns and operates an extensive system of pump stations, force mains, and
10 sewers that provide the core infrastructure for the transmission of wastewater to treatment
11 facilities in Delaware County and the City of Philadelphia. DELCORA also owns and
12 operates smaller systems in Chester County. DELCORA owns and operates over 180
13 miles of sewer infrastructure, the vast majority of which are sanitary in nature. These
14 flows are directed to two treatment facilities: one in Delaware County, and one in
15 Philadelphia. DELCORA currently serves approximately 16,000 customers, and overall
16 collects, conveys and treats approximately 197,000 Equivalent Dwelling Units (“EDUs”)
17 from all classes, including retail, wholesale, municipal, industrial, and commercial.

18 DELCORA’s system is divided into two service areas: Eastern and Western. The
19 facility located in, and owned by, Philadelphia – the Philadelphia Water Department’s
20 (“PWD”) Southwest Water Pollution Control Plant (“SWPCP”) – primarily serves the
21 Eastern service area, and the facility in Delaware County owned by DELCORA –
22 Western Regional Treatment Plant (“WRTP”) – primarily serves the Western service
23 area. The dividing line between the two areas generally tracks along Chester Creek.

AQUA STATEMENT NO. 5
DIRECT TESTIMONY OF ROBERT WILLERT

1
2 **Q. Is it always the case that water flow in the Eastern service area goes to the PSWPCP**
3 **and water flow in the Western service area goes to the WRTP?**

4 A. Not necessarily. In 2004, DELCORA undertook a diversion project to accommodate
5 increased water flows in DELCORA's Eastern service area. As a result, dry weather
6 flow and flow in a wet weather event less than 20 MGD from the Central Delaware
7 County Authority (located in the Eastern service area) goes to the WRTP. When a rain
8 event occurs, any water flow in excess of 20 MGD is split between service areas.
9

10 **III. BENEFITS OF THE PROPOSED TRANSACTION**

11 **Q. What prompted DELCORA to explore a sale of its wastewater system?**

12 A. Like many municipalities and authorities throughout the Commonwealth, DELCORA is
13 facing significant infrastructure improvements, increased expenses and more stringent
14 environmental regulations. DELCORA did not arrive at the decision to sell the System
15 lightly. The decision was the result of a confluence of factors and careful deliberation by
16 DELCORA in order to determine a path forward that would continue to provide safe and
17 reliable service while mitigating future rate increases. As described below, there were
18 two factors that primarily contributed to the decision: (1) the prohibitively high expense
19 that DELCORA will face if it continues to have its Eastern service area treated by PWD;
20 and (2) the costs DELCORA will incur to repair its Delaware County infrastructure in
21 order to comply with current requirements and regulations set out by the EPA. Given
22 these facts and circumstances, DELCORA began considering a partnership with a utility

AQUA STATEMENT NO. 5
DIRECT TESTIMONY OF ROBERT WILLERT

1 like Aqua that has extensive experience in large scale capital investment projects over
2 multi-year periods.

3
4 **Q. Please provide a general overview of DELCORA's current reliance on PWD's**
5 **treatment of its wastewater.**

6 A. DELCORA has worked with PWD via a contractual relationship since the 1970s. When
7 three of DELCORA's treatment plants in its Eastern service area were taken out of
8 service in the early 1970s, DELCORA contracted with PWD to treat its wastewater in
9 that service area.

10 DELCORA's initial contract with PWD was originally for a term of at least thirty
11 years, running through 2004. Through various amendments, DELCORA and PWD
12 extended the contract until 2013. In 2013, DELCORA and PWD entered into a new 15-
13 year contract, which will expire in 2028.

14
15 **Q. What is DELCORA's plan for treatment in the Eastern service area after 2028?**

16 A. DELCORA intends to leave PWD and expand our operational capacities, upgrading the
17 WRTP and conveying all wastewater from the Eastern service area to it.

18
19 **Q. Please provide background on DELCORA's decision to leave PWD.**

20 A. Like other wastewater providers that send flow to PWD, DELCORA has proactively
21 endeavored to act in the best interests of its customers in planning for future capacity
22 needs controlled by PWD and federal environmental regulations. In 2004, the time when
23 DELCORA's initial contract with PWD would have expired, PWD began discussions

AQUA STATEMENT NO. 5
DIRECT TESTIMONY OF ROBERT WILLERT

1 with the EPA about its own system capabilities and Long-Term Control Plan (“LTCP”).
2 Because of the uncertainty involved in that process, PWD informed DELCORA that it
3 did not wish to enter into another long-term contract. Instead, PWD and DELCORA
4 extended the terms of the then-existing contract, agreeing to revisit the issue once PWD
5 had a better idea of the costs involved of any LTCP that would result from its discussions
6 with the EPA.

7 PWD and the EPA ultimately agreed upon a LTCP. Subsequently, and in
8 connection with that, PWD and DELCORA agreed on a new fifteen-year contract in
9 2013. As part of that contract, DELCORA agreed to pay a share of the costs involved
10 with the implementation of the LTCP. At the time, PWD stated that it would implement
11 the LTCP by way of a 25-year capital investment plan, the total costs of which were
12 estimated to be approximately \$2.4 billion. Based on flow and the capacity of PWD’s
13 system, PWD projected that this would result in a cost to DELCORA of \$178 million
14 over 25 years.

15 At the same time, DELCORA engaged an engineering consultant to perform an
16 analysis of what it would cost if it disconnected from PWD and expanded the WRTP.
17 The analysis concluded that it would cost \$350-\$400 million. Based on those projected
18 costs as compared to the projected costs provided by PWD at the time, DELCORA
19 decided to remain in partnership with PWD. DELCORA entered into the new 15-year
20 agreement with PWD as a result.

21 This changed in December 2017, when PWD informed DELCORA that its
22 projected costs for its LTCP had dramatically increased to approximately \$4.5 billion.
23 PWD revised its estimate of DELCORA’s share of those costs to approximately \$606

AQUA STATEMENT NO. 5
DIRECT TESTIMONY OF ROBERT WILLERT

1 million. This was only an estimate and was provided without any assurance that those
2 costs would not actually be higher than projected. In addition, PWD stated that it would
3 now take 25 years from 2017 (until 2042) to implement the plan. As a result, DELCORA
4 took another look at whether it would make more sense from a cost perspective for it to
5 end its partnership with PWD and expand its operational capabilities at the WRTP.
6 DELCORA determined that this was indeed the case.

7
8 **Q. Has DELCORA had its own interactions with the EPA?**

9 A. Yes, and these interactions impacted DELCORA's decision to explore a sale of its
10 System. DELCORA has been faced with the challenge of how to maintain the excellent
11 quality of services it provides to its customers while now incurring the significant
12 expenses that come with compliance with significant EPA requirements.

13 DELCORA's first long-term control plan for Delaware County was approved by
14 the EPA and implemented in 1999. In 2008, DELCORA received correspondence from
15 the EPA requesting information pursuant to Section 308 of the Clean Water Act, which
16 provides the authority for the EPA to make such a request due to suspected non-
17 compliance with NPDES permit limits. After DELCORA complied with this request, the
18 EPA informed DELCORA that it was not in compliance with the Clean Water Act.

19 During the ensuing years, DELCORA and the EPA engaged in discussions as to
20 what a new long-term control plan would entail. Initially, DELCORA focused on
21 remedying wet weather issues in its Western service area, particularly in Chester.
22 DELCORA's initial projections indicated that the repairs needed in Chester would cost a
23 reasonable amount of approximately \$12 million. Ultimately, however, DELCORA

AQUA STATEMENT NO. 5
DIRECT TESTIMONY OF ROBERT WILLERT

1 came to realize that the costs involved to remedy the wet weather issues identified by the
2 EPA were considerably more. At the moment, the LTCP projects that it would cost \$87
3 million dollars over 15 years. The LTCP is currently under review with the DEP and
4 EPA and is not final.

5
6 **Q. How did these issues lead to the transaction with Aqua?**

7 A. Due to the challenges described above (both with respect to the PWD and the EPA), in
8 2018 DELCORA began to explore alternative solutions to address the infrastructure
9 challenges and likely rate impacts. That process involved meeting with municipalities
10 and stakeholders, as well as determining how much investment would be needed to leave
11 PWD at the end of DELCORA's current contract with it in 2028. In order to be in a
12 position to do that, an immediate investment of \$450 million is required in order to (a)
13 build a new pipeline to convey all wastewater from the Eastern service area to the WRTP,
14 and (b) upgrade and upsize the WRTP so that it can accommodate this increase in
15 volume. This process will take approximately eight years, which is why DELCORA
16 must begin working toward these goals immediately to be positioned to disconnect from
17 PWD in 2028.

18 As a result, in the summer of 2019, DELCORA entered into discussions with
19 Aqua for the purchase of DELCORA's system. Aqua is a large provider of
20 water/wastewater utility service in Delaware and Chester Counties, making it a logical
21 partner for DELCORA.

22 The parties sought a partnership whereby they would both realize benefits from
23 necessary capital and financial obligations, growth in overall customers, and economies

AQUA STATEMENT NO. 5
DIRECT TESTIMONY OF ROBERT WILLERT

1 of scale from similar geographic areas served. After arms-length negotiations,
2 DELCORA and Aqua entered into the APA on September 17, 2019.

3
4 **Q. Did DELCORA bid out the sale of its System?**

5 A. No. DELCORA decided not to bid out the sale of the System because it did not want to
6 engage in a bidding war that would lead to a scenario that could ultimately be detrimental
7 to customers. In our view, a bidding process would not guarantee the best outcome for
8 our customers and would likely only focus on a result promoting the highest possible
9 purchase price. Instead, the transaction with Aqua will create a DELCORA Customer
10 Trust Fund (“Trust”) that will provide for customer assistance payments to be applied to
11 the DELCORA customer bills. At the same, time, the transaction will preserve jobs and
12 maintain the high quality of service to which our customers are accustomed. DELCORA
13 wanted to find the right partner, one with financial fitness and significant operational
14 capabilities along with a fair price for the System.

15
16 **Q. What is the purchase price agreed upon by DELCORA and Aqua?**

17 A. \$276.5 million.

18
19 **Q. How will the proceeds be used?**

20 A. The sale proceeds will first be used to satisfy DELCORA’s outstanding debt. Once that
21 occurs, the bulk of the sale proceeds will be placed into the irrevocable Trust. Our goal,
22 through Trust payments to customers, is that bills for DELCORA customers will be
23 stabilized at an annual increase of 3% for 8-12 years.

AQUA STATEMENT NO. 5
DIRECT TESTIMONY OF ROBERT WILLERT

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Q. How did DELCORA communicate the Proposed Transaction with stakeholders?

A. DELCORA engaged in a robust communications and outreach effort. I note that in 2016, DELCORA initially began having meetings related to the costs of its own LTCP. Meetings were held for the purpose of informing DELCORA’s stakeholders about the process that it was undertaking with respect to the LTCP. More recently, DELCORA held a series of meetings in September and October 2019, including multiple public meetings, to discuss the Proposed Transaction with stakeholders. This process included conducting over 20 meetings with employees, municipal officials and the Delaware County Council, and two public meetings with customers.

Q. Please further describe the benefits of the Proposed Transaction.

A. The impact on bills for DELCORA’s customers was one of the driving forces behind this transaction and is the primary benefit. The majority of the sale proceeds will be placed in an irrevocable trust for the benefit of DELCORA’s customers. It is my understanding that this is a relatively unique feature for a transaction of this nature and provides a substantial benefit to our customers. Given the considerable remedial costs expected over the next 15 years, rates will be increasing no matter who owns and operates the System.

Q. Please explain how the Proposed Transaction addresses future bill impacts for DELCORA customers.

AQUA STATEMENT NO. 5
DIRECT TESTIMONY OF ROBERT WILLERT

1 A. The Proposed Transaction creates an irrevocable trust fund that will contain the majority
2 of the sale proceeds, which will be used to ensure that DELCORA customer bills will
3 increase gradually for an extended period of time. I am not a lawyer, but I have been
4 advised that the Commission does not have jurisdiction over the Trust. However, as this
5 is a component of the Proposed Transaction, I will give a general overview. The Trust's
6 sole purpose is to make monetary distributions to be applied to DELCORA customer bills
7 as a customer assistance payment for the benefit of the DELCORA customers.

8 The Trust will be established as an irrevocable trust to ensure that the money
9 contributed to it will only ever be used for the benefit of DELCORA's customers. It will
10 have one independent, institutional trustee. The Trust will automatically terminate when
11 all money has been distributed for DELCORA customer bills and related expenses.

12 In summary, the impact of the Trust is expected to be a significant benefit to
13 DELCORA customers, particularly when compared with the bills that DELCORA's
14 customers would face if it either remained with the PWD or ended its partnership with
15 PWD but did not enter into the Proposed Transaction with Aqua.

16
17 **Q. How will the proceeds of the Trust be distributed to DELCORA customers?**

18 A. The Trust will be set up to provide monetary distributions to be applied to DELCORA
19 customer bills as a customer assistance payment line item. These payments will be for
20 the benefit of the DELCORA customers during the existence of the Trust.

21
22 **Q. Please describe any further benefits from the Proposed Transaction.**

AQUA STATEMENT NO. 5
DIRECT TESTIMONY OF ROBERT WILLERT

1 A. First, Aqua already has an operational presence in the areas currently served by
2 DELCORA. By merging its existing operations with DELCORA's System, Aqua will be
3 able to create a larger-scale, efficiently operated water and wastewater utility.
4 Operational efficiencies will include combined billing processes and capital replacement
5 planning and execution. It is my understanding that the efficiencies and long-term
6 viability will only increase over time. Due to the fact that Aqua already serves nearly
7 500,000 people in Delaware County and approximately 200,000 people in Chester
8 County, it has strong existing community relationships as well.

9 Second, Aqua was chosen as a partner for this transaction because it is uniquely
10 qualified to address needed capital improvements and build the infrastructure needed to
11 disconnect from PWD in 2028. Aqua has significant experience in large scale, complex
12 projects, such as the one that is needed to be in a position to leave PWD. DELCORA's
13 customers will benefit from Aqua's experience and fitness in deploying resources
14 towards capital improvements, as well as its experience in improving and correcting
15 systems with compliance issues.

16 Third, although DELCORA's customers currently receive excellent service, they
17 will receive enhanced customer service from Aqua, including protections provided by the
18 Commission's regulations including access to Helping Hand and operational functions
19 performed by Aqua's team of experienced water and wastewater professionals.

20 Fourth, Aqua has made a commitment to preserving jobs by hiring all DELCORA
21 employees. It is of critical importance to us to be able to proceed in a way that is in the
22 best interest of our customers while, at the same time, avoiding employment disruption

AQUA STATEMENT NO. 5
DIRECT TESTIMONY OF ROBERT WILLERT

1 for our employees to the greatest extent possible. We are extremely pleased to see that
2 Aqua has committed to this.

3 Finally, the Proposed Transaction provides environmental benefits. In addition to
4 Aqua's proven record for environmental stewardship, disconnecting from PWD and
5 partnership with Aqua will provide for water discharge into the Delaware River at a
6 location that is less environmentally sensitive.

7
8 **Q. Do you believe that the Proposed Transaction is in the public interest?**

9 A. Yes. For the reasons set forth above, I believe that the Proposed Transaction is in the
10 public interest. I urge the Commission to approve the Proposed Transaction.

11
12 **IV. CONCLUSION**

13 **Q. Does this conclude your testimony?**

14 A. Yes, it does. However, I reserve the right to file additional testimony at a later date as
15 may be necessary or appropriate.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

AQUA STATEMENT NO. 5-R

**REBUTTAL TESTIMONY OF
ROBERT WILLERT
EXECUTIVE DIRECTOR
DELCORA**

October 20, 2020

1 **REBUTTAL TESTIMONY OF**
2 **ROBERT WILLERT**

3 **Q. Please state your name and business address for the record.**

4 A. My name is Robert Willert. My business address is 100 East Fifth Street, Chester, PA
5 19013.

6
7 **Q. In what capacity are you affiliated with the Delaware County Regional Water Quality**
8 **Control Authority (“DELCORA”)?**

9 A. I am the Executive Director of DELCORA.

10
11 **Q. Are you the same Robert Willert who previously submitted prepared direct testimony**
12 **in this proceeding?**

13 A. Yes. I prepared direct testimony which is identified as Aqua Statement No. 5.

14
15 **Q. What is the purpose of your rebuttal testimony?**

16 A. My Rebuttal Testimony responds to the direct testimony submitted by the following
17 parties: (1) the Bureau of Investigation and Enforcement (“I&E”), (2) the Office of
18 Consumer Advocate (“OCA”); and (3) the County of Delaware, Pennsylvania (the
19 “County”).

20
21 **RESPONSE TO I&E**

22 **Q. Have you had the opportunity to review the testimony submitted by I&E?**

23 A. Yes.

1 **Q. What is DELCORA’s response to I&E’s recommendation that the Proposed**
2 **Transaction not be permitted to close until Aqua and DELCORA provide the**
3 **Commission with a “guarantee” that the pending litigation in the Delaware County**
4 **Court of Common Pleas (the “Delaware County CCP Action”) involving the County**
5 **will not change (1) DELCORA’s status as a bona fide seller and (2) will not result in**
6 **any change to the terms of the Asset Purchase Agreement (“APA”)?**

7 **A.** A guarantee of that nature is not necessary. The Delaware County CCP Action involves
8 two matters that are not jurisdictional to the Commission: (i) the County’s legal challenges
9 to the Trust and (ii) the County’s efforts to terminate DELCORA. While it is the case that
10 DELCORA has filed a counterclaim that seeks a declaratory judgment that the APA is
11 valid, this is being sought in order to confirm that, pursuant to Pennsylvania’s Municipality
12 Authorities Act, 53 Pa.C.S. §§ 5601 *et seq.* (the “MAA”), the County cannot terminate
13 DELCORA in an effort to avoid the APA. Rather, according to what my counsel has
14 advised me, under the MAA, the County must assume all of DELCORA’s obligations
15 under the APA before it can terminate DELCORA. Put another way, the only relief that
16 could even conceivably arise from the Delaware County CCP Action that would impact
17 the APA is the substitution of the County for DELCORA as a party to the APA in
18 connection with the County’s termination of DELCORA. In such circumstance, the
19 County would be required to honor and discharge all of DELCORA’s obligations under
20 the APA. The County, however, has consistently refused to commit to assuming
21 DELCORA’s obligations under the APA, and will be unable to terminate DELCORA as a
22 result, making I&E’s recommendation a moot point.

1 **Q. I&E Witness Gumby states that the customer bill assistance payment from the Trust**
2 **should not be placed on bills to DELCORA customers. Do you agree?**

3 A. I do not agree. As a threshold matter, it is my understanding that Aqua will be addressing
4 the legality of placing the customer bill assistance payment on bills. Beyond the issue of
5 legality, we determined that doing this is in the customers' best interests, as it will
6 maximize the amount of money that is available in the Trust to use for this purpose. If the
7 Trust funds are not distributed in this manner, it will cause an administrative burden on
8 DELCORA that will increase the costs of making these distributions. The prospect of
9 distributing funds via sending checks to each customer is not just daunting, but is
10 impractical. Placing the distributions on customer bills will allow for near-instantaneous
11 distributions to occur and will do so transparently by allowing customers to see exactly
12 how much they are receiving and the impact to their bills.

13 Additionally, without Aqua's participation, the customer bill assistance payment
14 cannot be tailored to the amount of Aqua rate changes, i.e., the 3% increase limit.

15
16 **RESPONSE TO OCA**

17 **Q. Have you had the opportunity to review the testimony submitted by the OCA?**

18 A. Yes.
19

20 **Q. What is DELCORA's response to OCA's proposed condition that DELCORA must**
21 **demonstrate that it has the legal authority to transfer its assets?**

22 A. DELCORA was created pursuant to the MAA and is thus governed by its statutory
23 provisions. The MAA specifically authorizes authorities "[t]o acquire, purchase, hold,

1 lease as lessee and use any franchise, property, real, personal or mixed, tangible or
2 intangible, or any interest therein necessary or desirable for carrying out the purposes of
3 the authority, and to sell, lease as lessor, transfer and dispose of any property or interest
4 therein at any time acquired by it.” 53 Pa.C.S. 5607(d)(4). It is thus clear that DELCORA
5 has the legal authority to transfer its assets.
6

7 **Q. What is DELCORA’s response to OCA’s proposed condition that DELCORA must**
8 **“provide clarity as to how the DELCORA Rate Stabilization Fund Trust Agreement**
9 **(the “Trust Agreement”) between DELCORA as Settlor and Univest Bank and Trust**
10 **Co. as Trustee, with the Effective Date of December 27, 2019 will function to insulate**
11 **DELCORA wastewater customers from rate increases?”**

12 A. DELCORA has already provided such clarity as part of the Application. As a summary,
13 the sale proceeds (less DELCORA’s financial obligations) will be placed into the Trust at
14 closing of the Proposed Transaction. If Aqua applies for and receives permission from the
15 Commission to increase rates, the Trust proceeds will be used to provide customer bill
16 assistance payments to DELCORA customers. The customer bill assistance payments will
17 be reviewed and approved by DELCORA and distributed by the Trustee. This will
18 continue as long as funds remain in the Trust.
19

20 **Q. Do you agree with Mr. Smith’s recommendation that the issues raised by the resale**
21 **customers regarding their agreements should be resolved before the Proposed**
22 **Transaction can close?**

1 A. No, I do not. My understanding is that assigned contracts are assigned and consent is
2 received at or around closing of the Proposed Transaction, which can occur after PUC
3 approval is granted.

4 Nonetheless, Section 2.06 of the APA provides that if—at closing of the Proposed
5 Transaction—there is no mutual agreement between the resale customers and
6 DELCORA/Aqua to assign the service agreements requiring mutual consent (i.e.,
7 “Nonassignable Assets”), then DELCORA will continue to be the legal owner of the
8 Nonassignable Assets after closing. However, Aqua will become the economic/beneficial
9 owner of the Nonassignable Assets and provide service to these customers as an
10 agent/subcontractor of DELCORA. Significantly, the resale customers have failed to cite
11 any specific prohibition of this arrangement in any of the service agreements for
12 Nonassignable Assets.

13 Therefore, even if the resale customers and DELCORA/Aqua cannot reach an
14 agreement regarding their service agreements, the Proposed Transaction should be able to
15 close pursuant to Section 2.06 of the APA. Under those circumstances, DELCORA will
16 ultimately be responsible for providing service and fulfilling its obligations under the
17 applicable service agreement as legal owner and counterparty under the service
18 agreements; however, Aqua will act as DELCORA’s agent and/or subcontractor to provide
19 such services and perform DELCORA’s obligations under the service agreements.

20
21 **RESPONSE TO THE COUNTY**

22 **Q. Have you had the opportunity to review the testimony submitted by the County?**

23 A. Yes.

1
2 **Q. How does DELCORA respond to the County’s testimony that it views the sale process**
3 **as “secretive?”**

4 A. I could not disagree more with that inaccurate characterization. As discussed in my direct
5 testimony, this sale process was open and transparent. In 2016, DELCORA started holding
6 meetings related to the costs of its own Long-Term Control Plan (“LTCP”). More recently,
7 DELCORA held a number of meetings in September and October 2019, including multiple
8 public meetings, to discuss the Proposed Transaction with stakeholders. We conducted
9 over 20 meetings with employees, municipal officials and the Delaware County Council,
10 and two public meetings with customers. This was an arms-length transaction conducted
11 in an open, transparent, and fair process.
12

13 **Q. How does DELCORA respond to the County’s testimony that characterizes this as a**
14 **“no-bid” sale process?**

15 A. As discussed in my direct testimony, our goal was not to get the highest price for
16 DELCORA’s system. The goal was to get the best price for our ratepayers, which involved
17 balancing our desire to maximize the amount of money that would be placed in the Trust
18 with the recognition that a higher sales price would ultimately result in higher rates in the
19 future (which even the County’s own expert, Daymark, recognizes). Soliciting bids would
20 have undercut this goal. We chose to collaborate and work with Aqua due to the obvious
21 synergies and numerous public benefits that such a relationship would provide for both
22 parties.
23

1 **Q. Do you agree with County Witness Zidek that the Commission should require**
2 **DELCORA to issue a request for proposal (“RFP”) for the DELCORA system?**

3 A. No, I do not. While I am not an attorney, our attorneys tell me that there is nothing in the
4 law that requires this. We were not looking for the highest possible purchase price. In
5 addition to finding a local partner with an excellent track record for capital investment and
6 compliance, our goal was to get the best price that was optimized to ensure that customers
7 would not pay higher rates than necessary.

8
9 **Q. Do you agree with County Witness Faryniarz that the purchase price indicates that**
10 **the Proposed Transaction was not conducted at arms’ length?**

11 A. No, absolutely not. The negotiation of the purchase price was done at arms’ length at all
12 points in time, and was arrived at in order to do what was best for our customers. While a
13 higher purchase price would have resulted in more money in the Trust, it would have also
14 resulted in higher rates for customers. We worked with our own financial advisor to
15 develop the purchase price and corresponding potential rate impacts. Our projections
16 supported the purchase price that we negotiated as being best for our customers, both now
17 and over time.

18
19 **Q. Was DELCORA required to receive County approval prior to entering into the APA?**

20 A. No. While I am not an attorney, our attorneys tell us that that DELCORA is explicitly
21 empowered to sell its assets and enter into contracts by which it will do so pursuant to the
22 MAA.

1 **Q. Please respond to County Witness Zidek’s statement that DELCORA did not seek**
2 **County Council approval or provide detailed information regarding the Proposed**
3 **Transaction during DELCORA Board or County Council meetings.**

4 A. As stated above, DELCORA did not seek County approval prior to entering into the APA
5 because it is simply not required. Nonetheless, we were completely transparent with
6 County Council about the Proposed Transaction. We made several public presentations to
7 County Council prior to entering into the APA in order to update it on the process.

8
9 **Q. Does this conclude your testimony?**

10 A. Yes. However, I reserve the right to supplement my testimony as additional issues and
11 facts arise during the course of the proceeding.

EXHIBIT W2

TESTIMONY OF JOHN PILEGGI

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

AQUA STATEMENT NO. 6

**DIRECT TESTIMONY OF
JOHN PILEGGI
CHIEF FINANCIAL OFFICER
DELCORA**

**With Regard To
DELCORA's Rates**

March 3, 2020

AQUA STATEMENT NO. 6
DIRECT TESTIMONY OF JOHN PILEGGI

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	DELCORA’S RATE SETTING PROCESS.....	2
III.	CONCLUSION.....	6

AQUA STATEMENT NO. 6
DIRECT TESTIMONY OF JOHN PILEGGI

1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is John Pileggi. My business address is 100 East Fifth Street, Chester, PA
4 19013.

5
6 **Q. In what capacity are you affiliated with the Delaware County Regional Water
7 Quality Control Authority (“DELCORA”)?**

8 A. I serve as Chief Financial Officer for DELCORA.

9

10 **Q. Please provide a brief description of your education and work experience.**

11 A. I graduated from Saint Joseph’s University with a Bachelor of Science degree, from
12 Loyola College with a Master of Science, and from Drexel University with a Master of
13 Business Administration. I have worked at DELCORA since 2000 in the Accounting
14 Department serving as its Controller since January 2001, and most recently as Chief
15 Financial Officer. Prior to coming to DELCORA, I served as Direct Services Manager
16 for the Community Action Agency of Delaware County, Inc. I have also worked at
17 Better Housing for Chester and Arthur Andersen and Company.

18

19 **Q. Have you testified before the Pennsylvania Public Utility Commission (“PUC” or
20 the “Commission”) before?**

21 A. No.

22

23 **Q. On whose behalf are you testifying in this proceeding?**

AQUA STATEMENT NO. 6
DIRECT TESTIMONY OF JOHN PILEGGI

1 A. My testimony is on behalf of DELCORA and in support of Aqua Pennsylvania
2 Wastewater, Inc. (“Aqua”) in this proceeding.

3
4 **Q. What is the purposes of your direct testimony?**

5 A. The purpose of my testimony is as follows: (1) to discuss how DELCORA establishes its
6 annual rates, and (2) to support Witness Packer’s Direct Testimony Appendix A and
7 Aqua’s proposed tariff which proposes to implement the existing 2020 DELCORA rates.

8
9 **Q. Are you sponsoring any Exhibits with your testimony?**

10 A. No.
11

12 **II. DELCORA’S RATE SETTING PROCESS**

13 **Q. How does DELCORA establish its annual rates?**

14 A. Pursuant to the Municipal Authorities Act, 53 Pa.C.S. § 5607(d)(9), DELCORA sets its
15 rates each year based on two main factors – wastewater flow and costs. DELCORA’s
16 annual budget is completed before December 1 of each year. Consequently, every
17 August, DELCORA engages in an information-gathering process with both its internal
18 operations team and its customers in an effort to project what water flow will be for the
19 upcoming calendar year. In addition, DELCORA obtains expense information in order to
20 project costs for the upcoming year. Once this information is compiled, rates are set that
21 take into account that (a) the rates charged will cover operating expenses and (b) the rates
22 are apportioned fairly in accordance with projected usage. Rates are only set for a

AQUA STATEMENT NO. 6
DIRECT TESTIMONY OF JOHN PILEGGI

1 particular class of customer based on the assets of DELCORA's System that the class of
2 customer actually uses.

3 At the end of the year, DELCORA compares actual costs to budgeted costs, along
4 with actual flow compared to budgeted flow, in order to determine if its budget is in line
5 with actual usage and costs. Once this determination is made, DELCORA will either
6 charge more to certain ratepayers if actual costs are exceeding budgeted costs or issue
7 credits to certain ratepayers if budgeted costs are exceeding actual costs.
8

9 **Q. Does DELCORA have different classes of rates?**

10 A. Yes. Each class of ratepayer is charged a rate based on the actual services and System
11 assets utilized. In total, DELCORA has eleven different rate classes: Western Retail
12 (Residential, Commercial, Marcus Hook, and Minimum Accounts), Western Retail
13 Industrial, Western Wholesale, Western Wholesale Industrial, Chester Ridley Creek,
14 Eastern Authority, Rose Valley, Pocopson Preserve, Pocopson Riverside, Edgmont, and
15 Springhill Farms¹.
16

17 **Q. How many customers does DELCORA serve?**

18 A. DELCORA serves approximately 16,000 customers. However, this number is not
19 necessarily representative of the full extent of DELCORA's service to customers. That is
20 more accurately reflected by the number of Equivalent Dwelling Units ("EDUs")
21 DELCORA serves annually.

¹ DELCORA currently has an agreement for the purchase of Springhill Farms which will conclude in 2020.

AQUA STATEMENT NO. 6
DIRECT TESTIMONY OF JOHN PILEGGI

1 In its Western service area, DELCORA services approximately 15,000
2 retail/residential EDUs, comprised of Chester City, Chester Township, Parkside, Upland,
3 Trainer, Marcus Hook, Pocopson, Pocopson (Chadds Ford Preserve), Ridley Mills, and
4 Springhill Farms. In addition, DELCORA serves approximately 33,000 wholesale EDUs
5 in its Western service area, comprised of Brookhaven Borough, Eddystone Borough,
6 Lower Chichester Township, Middletown Township Sewer Authority, Nether Providence
7 Township, Rose Valley, the Southern Delaware County Authority, and the Southwest
8 Delaware County Municipal Authority.

9 In its Eastern service area, DELCORA services approximately 119,000 EDUs,
10 which is made up of the Central Delaware County Authority, the Muckinipates Authority,
11 the Darby Creek Joint Authority, and the Radnor-Haverford-Marple Authority.

12 DELCORA provides collection and conveyance service to approximately 167,000
13 residential EDUs on an annual basis. However, even this number does not present the
14 complete picture as to DELCORA's service because it does not accurately reflect the
15 wastewater flow of our industrial customers. While these industrial customers are each
16 counted as one DELCORA customer, they collectively account for the equivalent of an
17 additional 30,000 EDUs annually. As a result, the total number of EDUs served by
18 DELCORA on an annual basis is approximately 197,000.

19
20 **Q. What does this equate to in terms of volume?**

21 A. Based on the industry standard of 262.5 gallons per EDU, DELCORA sees a daily flow
22 of approximately 52,000,000 gallons.

AQUA STATEMENT NO. 6
DIRECT TESTIMONY OF JOHN PILEGGI

1 **Q. Can this volume be broken down by class?**

2 A. As part of our budgeting process, we project yearly flow by class. In our 2020 budget,
3 these approximated projections were as follows:

- 4 • Retail: 1,157,279,000 gallons;
- 5 • Retail Industrial: 61,813,000 gallons;
- 6 • Wholesale: 642,702,000 gallons;
- 7 • Western Wholesale: 1,204,150,000 gallons;
- 8 • Wholesale Industrial: 2,881,050,000 gallons;
- 9 • Chester Ridley Creek: 1,569,500,000 gallons;
- 10 • Eastern Authority: 13,048,750,000 gallons;
- 11 • Rose Valley: 36,500,000 gallons;
- 12 • Pocopson: 21,653,625 gallons;
- 13 • Edgmont: 45,625,000 gallons; and
- 14 • Springhill Farms: 35,547,125 gallons.

15 In total, DELCORA's projected flow for 2020 is approximately 20,704,569,750 gallons.

16

17 **Q. Have you reviewed Witness Packer's Appendix A to his direct testimony?**

18 A. Yes.

19

20 **Q. Are the present revenues for DELCORA calculated using the existing 2020 rates**
21 **you described earlier in your testimony?**

22 A. Yes. Based on my review of Appendix A, the present revenues of DELCORA are
23 calculated to be \$70,978,127 million.

AQUA STATEMENT NO. 6
DIRECT TESTIMONY OF JOHN PILEGGI

1

2 **III. CONCLUSION**

3 **Q. Does this conclude your testimony?**

4 A. Yes, it does. However, I reserve the right to file additional testimony at a later date as
5 may be necessary or appropriate.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

AQUA STATEMENT NO. 6-R

**REBUTTAL TESTIMONY OF
JOHN PILEGGI
CHIEF FINANCIAL OFFICER
DELCORA**

October 20, 2020

1 **REBUTTAL TESTIMONY OF**
2 **JOHN PILEGGI**

3 **Q. Please state your name and business address for the record.**

4 A. My name is John Pileggi. My business address is 100 East Fifth Street, Chester, PA 19013.

5
6 **Q. In what capacity are you affiliated with the Delaware County Regional Water Quality**
7 **Control Authority (“DELCORA”)?**

8 A. I serve as Chief Financial Officer for DELCORA.

9
10 **Q. Are you the same John Pileggi who previously submitted prepared direct testimony**
11 **in this proceeding?**

12 A. Yes. I prepared direct testimony which is identified as Aqua Statement No. 6.

13
14 **Q. What is the purpose of your rebuttal testimony?**

15 A. My Rebuttal Testimony responds to the direct testimony submitted by the following
16 parties: (1) Edgemont, Lower Chichester, Southwest Delaware County Municipal
17 Authority, and Upland (the “Municipal Protestants”), (2) Kimberly-Clark Pennsylvania,
18 LLC and Kimberly-Clark Corporation (“Kimberley-Clark”); (3) Sunoco Partners
19 Marketing & Terminals, L.P. (“SPMT”); and (4) Stan Faryniarz (“Witness Faryniarz”) and
20 Howard J. Woods, Jr., P.E. (“Witness Woods”).

21
22 **RESPONSE TO WITNESS FARYNIARZ AND WITNESS WOODS**

23 **Q. Have you had the opportunity to review the testimony submitted by Witness**
24 **Faryniarz and Witness Woods?**

1 A. Yes.

2
3 **Q. Do you agree with Witness Faryniarz's projections for DELCORA's revenue**
4 **requirements during the estimated life of the Trust? If you do not agree, please**
5 **explain why in detail.**

6 A. No. These are not the projections I have prepared and provided in discovery which are
7 attached to my rebuttal testimony JP-6R Schedule A (OCA-III-11). My projections are
8 based on my familiarity with and knowledge of the DELCORA system. They include
9 increases related to infrastructure investment and operations and maintenance expense.
10 Most importantly, Witness Faryniarz does not take into account the significant increase in
11 costs from the Philadelphia Water Department's Long Term Control Plan (the "PWD
12 LTCP") that are projected to be approximately \$86 million between 2020 and 2028. The
13 PWD LTCP costs are in addition to the approximately \$450 million in capital costs being
14 incurred to build infrastructure to divert flow from Philadelphia to Chester between 2020
15 and 2028.

16 Also, in its calculations of future rates DELCORA allows for a debt service reserve
17 fund ("DSRF") in each of its projected debt issues in compliance with its Trust Indenture.
18 Each issue can add a substantial amount to the borrowing. For instance, a \$200 million
19 borrowing may require close to a \$10 million DSRF deposit. DELCORA planned to
20 borrow \$1 billion. That would calculate to be about \$50 million in omitted costs in the
21 Witness Faryniarz analysis.

22 I provided the projections from 2021 to 2025, below, and for Mr. Packer's analysis
23 in WP-2R Schedule A, which I will discuss later in my testimony. Witness Faryniarz

1 ignores the information I provided in OCA-III-11, which shows DELCORA rate increases
2 calculated from 2021 to 2025. Consequently, Witness Faryniarz's annual rate increases
3 for the years of 2021 to 2025 bear no semblance to what DELCORA calculated its rate
4 increases to be as reported in OCA-III-11, i.e.,

5 2021 - 5.66%

6 2022 - 7.33%

7 2023 - 8.31%

8 2024 - 8.10%

9 2025 - 13.23%.

10 In fact, in 2021, Witness Faryniarz shows the revenue needs decreasing in year
11 2021 in spite of the need to fund a \$1 billion capital plan.

12
13 **Q. Why do you believe Witness Faryniarz shows a decrease in DELCORA's revenue**
14 **requirement with no sale in Table 2 of his testimony? And why do you believe this is**
15 **incorrect?**

16 A. Witness Faryniarz includes a decrease in DELCORA's revenue requirement because he
17 has not taken into account the increases in costs that I describe above. The following is
18 excerpted from the Revenue Requirement worksheet calculations of Witness Faryniarz:

	2020	2021	2022	2023
Capital Costs				
Existing Debt Service				
Cash Funded Capital Projects	8,000,000	1,000,000	1,000,000	1,000,000
Projected Debt Service	-	2,539,306	2,539,306	5,526,725
Total Capital Costs	8,000,000	3,539,306	3,539,306	6,526,725

The 2020 capital costs were calculated by DELCORA. The 2021 to 2023 costs were calculated by Witness Faryniarz.

The lower requirements for revenue for capital costs in years 2021 to 2023 represent a fundamental shift in funding strategy between DELCORA and Witness Faryniarz.

For many years DELCORA would fund ongoing capital needs through rates generated from its annual operating budget. The strategy was based on the fact that its cost of borrowing would be greater than its rate of return on investments. Aside from a Penn Vest loan in 2009 at a subsidized borrowing rate for a specific project, DELCORA did not borrow from 2004 to 2013 to minimize borrowing costs.

As the assets aged, the cash from operations proved insufficient. DELCORA borrowed for capital needs in the last 7 years to address major improvements while still trying to balance the funding of smaller capital projects from operations. The \$8,000,000 revenue requirement for capital costs in 2020 is evidence of the strategy.

One of Moody's criteria for rating the financial condition of DELCORA is days-cash-on-hand. One of the reasons DELCORA enjoys such a strong rating is its strong cash reserves.

1 The strategy used by Witness Faryniarz appears to minimize cash from operations
2 and to borrow for capital on an as-needed basis. This would appear to increase borrowing
3 costs and diminish cash reserves, thereby reducing the revenue requirements. I disagree
4 with the use of the strategy.

5
6 **Q. Please expand on your disagreement with Witness Faryniarz's projections of revenue**
7 **requirement.**

8 A. The Trust years include 2026-2028. An estimate of the rate increase for those years was
9 calculated as an average of the rate increase from 2021 to 2025. i.e., 8.53% per year, for
10 2026-2028 and included in Mr. Packer's WCP-2R Schedule A. I agree with Mr. Packer's
11 estimate of 2026-2028 increases. DELCORA projects this to be accurate because the
12 implementation of the capital program to divert flows from Philadelphia Water Department
13 and expand the Western Regional Treatment Plant will require 8-10% increases per year
14 through 2028.

15
16 **Q. Do you agree with Witness Faryniarz's projections for DELCORA's revenue**
17 **requirement during the period after the Trust expires? If you do not agree, please**
18 **explain why in detail.**

19 A. No, I do not agree because Witness Faryniarz's projections in years 2021 to 2025 are too
20 low, as discussed above. Additionally, because these projections serve as the basis for years
21 when the Trust will be projected to have expired from 2029 to 2040, the totals for those
22 years are too low as well.

1 **Q. Do you agree with Witness Woods' projections for DELCORA's revenue**
2 **requirement during the estimated life of the Trust? If you do not agree, please explain**
3 **why in detail.**

4 A. No. I do not agree with Witness Woods' projections. My disagreement is similar to my
5 disagreement with Witness Faryniarz. Witness Woods ignores projections I have prepared
6 and provided in discovery, which are attached to my rebuttal testimony as JP-6R Schedule
7 A (OCA-III-11). My projections are based on my familiarity and knowledge of the
8 DELCORA system. They include increases related to infrastructure investment and
9 operations and maintenance expense. I also disagree for the same reasons stated above,
10 related to PWD LTCP costs and DSRF in the Trust Indenture.

11
12
13 **Q. Please expand on your disagreement with Witness Woods' projections of revenue**
14 **requirement.**

15 A. For similar reasons described above in response to Witness Faryniarz, Witness Woods
16 applies incorrect increases during the projected remaining life of the Trust.

17
18 **Q. Do you agree with Witness Woods' projections for DELCORA's revenue**
19 **requirement during the period after the Trust expires? If you do not agree, please**
20 **explain why in detail.**

21 A. No. Witness Woods' projections are too low because they ignore the revenue requirement
22 increases I provide above and in JP-6R Schedule A, such as infrastructure investment,

1 increasing operations and maintenance expense and other costs of operation. In addition,
2 he shows little inflationary increase from years 2029 to 2040.

3
4 **Q. Do you agree with Witness Woods' projections on Schedule HJW-4 that show no**
5 **revenue requirement increase during the years 2028-2033 and again no revenue**
6 **requirement increase from 2034-2040?**

7 A. No. Due to the apparent omission of significant costs as explained in previous responses,
8 Witness Woods' revenue requirements are understated.

9
10 **Q. Please summarize your review of Witness Faryniarz's and Witness Woods'**
11 **calculation of DELCORA's projected revenue requirement.**

12 A. Both Witness Woods and Witness Faryniarz attempt to recalculate the expected revenue
13 requirement of DELCORA and arrive at two different numbers:

14 Woods = \$111M (2040);

15 Faryniarz = \$143.7M (2040).

16 As stated above, both of these amounts are incorrect and not based on the more accurate
17 and complete projections I have provided.

18
19 **Q. Have you reviewed Witness Packer's WCP-2R Schedule A, and his projections for**
20 **DELCORA's revenue requirement during the life of the Trust and after the Trust**
21 **expires?**

22 A. Yes.

1 **Q. Do you agree with Witness Packer’s calculation of the revenue requirement for**
2 **DELCORA during the life of the Trust and after the Trust expires?**

3 A. Yes. I agree with Witness Packer’s calculations because they represent more accurate
4 projections of DELCORA’s future revenue requirement. These projections reflect cost
5 increases I provided to Mr. Packer for 2021 through 2025 as described above.

6
7 **Q. Please further describe how the calculations show the benefit of the Trust to**
8 **DELCORA customers.**

9 A. The Trust shows tremendous value from 2021 – 2028 by providing DELCORA customers
10 with the customer bill assistance. I agree and support Witness Packer’s analysis that
11 highlights in Columns (E.) and (F.) of WCP-2R Schedule A, that Aqua’s revenue
12 requirement is lower than DELCORA’s revenue requirement over the 20-year period
13 Witness Woods and Witness Faryniarz are projecting.

14
15 **RESPONSE TO MUNICIPAL PROTESTANTS**

16 **Q. Have you had the opportunity to review the testimony submitted by the Municipal**
17 **Protestants?**

18 A. Yes.

19
20 **Q. Do the Municipal Protestants accurately characterize their contributions toward**
21 **future Long-Term Control Plan (“LTCP”) costs?**

1 A. It is true that the Municipal Protestants have been contributing toward these costs in
2 addition to many other customers of DELCORA. While we acknowledge their concerns,
3 the regulatory model provides overall benefits because it mitigates risk and through
4 ratemaking principles previously discussed, like single tariff pricing and consolidated
5 ratemaking, will benefit end user customers over the long-term. While it would be
6 inappropriate to treat the Municipal Protestants' past interest payments as contributions in
7 aid of construction because Section 1329 is a valuation process of tangible assets regardless
8 of their funding source, going forward they will have the benefit of a larger customer base
9 in the event that any of those contributed assets fail or require replacement.

10
11 **Q. Several of the Municipal Protestants express concern with changing how the true-up**
12 **process currently works. Please explain how DELCORA administers the "true-up"?**

13 A. As I addressed in my previous testimony, DELCORA sets its rates each year based on two
14 main factors – wastewater flow and costs. As part of this process, DELCORA projects
15 what it believes wastewater flow and costs will be for the upcoming year. Rates are set for
16 each customer amount based on these projections. At the end of the year, DELCORA
17 compares actual costs to budgeted costs, along with actual flow compared to budgeted
18 flow, in order to determine if its budget is in line with actual usage and costs. Once this
19 determination is made, DELCORA will either charge more to certain ratepayers if actual
20 costs are exceeding budgeted costs or issue credits to certain ratepayers if budgeted costs
21 are lower than actual costs.

1 **Q. Is this materially different from how Aqua anticipates determining rates these**
2 **customers?**

3 A. No. As I understand it, both methods involve a determination of actual wastewater flow.
4 The main difference is that Aqua will not employ a “true-up” process, and will instead
5 charge for flow on an ongoing basis. Put another way, the real difference is the timing of
6 the rate charges, not necessarily the amount. Moreover, cost of service and revenue
7 allocation will be decided by the Commission in Aqua rate cases going forward.

8
9 **RESPONSE TO KIMBERLY-CLARK**

10 **Q. Have you had the opportunity to review the testimony submitted by Kimberly-Clark?**

11 A. Yes.
12

13 **Q. What is the present status of DELCORA’s Service Agreement with Kimberly-Clark?**

14 A. As acknowledged by Kimberly-Clark’s testimony, the most recent service agreement
15 between Kimberly-Clark and DELCORA expired in 2004. While DELCORA has been
16 providing Kimberly-Clark with wastewater service since that time, DELCORA does not
17 presently have a written service agreement with Kimberly-Clark. DELCORA has
18 continued to calculate the annual rates based on the formula it had been using while the
19 contract was in effect. Kimberly-Clark has paid the amounts billed.

20
21 **Q. Are the requirements and rates of Kimberly-Clark determined under DELCORA’s**
22 **pretreatment program’s Rules and Regulations?**

1 A. Yes and no. The environmental requirements for permitted industries are determined under
2 DELCORA's pretreatment program's Rules and Regulations.

3 The billing rates for flow and loadings are determined by DELCORA's rate model
4 and approved by DELCORA's Board of Directors with a rate resolution. DELCORA's
5 pretreatment program's Rules and Regulations do not determine billing rates for flow and
6 loadings.

7
8 **Q. Do you agree with Kimberly-Clark Witness Brooks that the Commission should have**
9 **direct oversight of the Trust?**

10 A. No. The Trust is non-jurisdictional to the PUC and, therefore, the Commission should not
11 have direct oversight responsibilities.

12
13 **RESPONSE TO SPMT**

14 **Q. Have you had the opportunity to review the testimony submitted by SPMT?**

15 A. Yes.

16
17 **Q. Do you agree with SPMT's concerns regarding Executive Order 12803?**

18 A. Partly. Executive Order 12803 ("EO") was issued in 1992. It allows for disposition or
19 transfer of an infrastructure asset, such as by sale or by long-term lease, from a State or
20 local government to a private party. DELCORA obtained EPA construction grants during
21 the 1970's and 1980's to construct DELCORA wastewater facilities in the amount of
22 approximately \$52 million under the then-effective EPA construction grant program. To

1 the extent the EO is applicable to these grants, DELCORA will commence discussions
2 regarding a waiver of the EO requirement with the EPA's Region 3 office in Philadelphia.
3

4 **Q. Do you expect that obtaining the EPA's sign-off under and/or waiver of the EO will**
5 **have any material impact on closing of the Proposed Transaction and this**
6 **proceeding?**

7 A. Not at all. While the timing of the process is currently uncertain due to the lack of recent
8 requests to privatize wastewater assets that are the subject of EPA construction grants, we
9 believe the EPA is committed to working with DELCORA and Aqua timely and
10 expeditiously, consistent with the spirit and purpose of the EO, which is to facilitate and
11 promote the privatization of infrastructure.
12

13 **Q. Does this conclude your testimony?**

14 A. Yes. However, I reserve the right to supplement my testimony as additional issues and
15 facts arise during the course of the proceeding.

EXHIBIT W3

TESTIMONY OF MICHAEL DiSANTIS

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

AQUA STATEMENT NO. 7

**DIRECT TESTIMONY OF
MICHAEL J. DISANTIS
DIRECTOR OF OPERATIONS AND MAINTENANCE
DELCORA**

**With Regard To
Description of DELCORA's System and Operations
Environmental Compliance**

March 3, 2020

AQUA STATEMENT NO. 7
DIRECT TESTIMONY OF MICHAEL J. DISANTIS

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	DESCRIPTION OF DELCORA’S SYSTEM	2
III.	ENVIRONMENTAL COMPLIANCE.....	6
IV.	PROJECTED FUTURE CONNECTIONS.....	9
V.	NPDES AND WATER QUALITY MANAGEMENT	10
VI.	ACT 537 PLANS.....	10
VII.	CONCLUSION.....	11

AQUA STATEMENT NO. 7
DIRECT TESTIMONY OF MICHAEL J. DISANTIS

1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is Michael J. DiSantis. My business address is 100 East Fifth Street, Chester,
4 PA 19013.

5

6 **Q. In what capacity are you affiliated with the Delaware County Regional Water
7 Quality Control Authority (“DELCORA”)?**

8 A. I am the Director of Operations and Maintenance of DELCORA.

9

10 **Q. Please provide a brief description of your education and work experience.**

11 A. I graduated from Villanova University with a Bachelor of Science degree. I have served
12 as DELCORA’s Director of Operations and Maintenance since 2005. I have over forty
13 years of experience in the water and wastewater field working in industrial and municipal
14 applications for both private and public sector organizations, over thirty of which have
15 been in supervision and management. I am a licensed water and wastewater operator,
16 having held a Pennsylvania Wastewater A,E-1,2,3,4 certification since 1989 and a
17 Pennsylvania Water B,E-11,12,13,14 certification since 1999.

18

19 **Q. Have you testified before the Pennsylvania Public Utility Commission (“PUC” or
20 the (“Commission”) before?**

21 A. No.

22

23 **Q. On whose behalf are you testifying in this proceeding?**

AQUA STATEMENT NO. 7
DIRECT TESTIMONY OF MICHAEL J. DISANTIS

1 A. My testimony is on behalf of DELCORA and in support of Aqua Pennsylvania
2 Wastewater, Inc. (“Aqua”) in this proceeding.

3
4 **Q. What is the purpose of your direct testimony?**

5 A. The purpose of my testimony is as follows: (1) to provide a description of DELCORA’s
6 sanitary wastewater collection and conveyance system (the “System”), (2) to describe
7 DELCORA’s environmental compliance, (3) to describe DELCORA’s projected future
8 connections, (4) to describe DELCORA’s water quality management (“WQM”),
9 including its National Pollutant Discharge Elimination System (“NPDES”), permits, and
10 (5) to describe DELCORA’s Official Sewage Facilities Plans under the Pennsylvania
11 Sewage Facilities Act (“Act 537 Plan”).

12
13 **Q. Are you sponsoring any Exhibits with your testimony?**

14 A. No.

15
16 **II. DESCRIPTION OF DELCORA’S SYSTEM**

17 **Q. Please generally describe DELCORA’s System.**

18 A. DELCORA is responsible for the safe collection, transmission, treatment, and discharge
19 of approximately 65 million gallons per day of wastewater generated in southeastern
20 Pennsylvania. DELCORA’s facilities serve residential, commercial, public, and
21 industrial customers in Delaware and Chester Counties. DELCORA services 49
22 municipalities in whole or in part through collection, conveyance and treatment services.

AQUA STATEMENT NO. 7
DIRECT TESTIMONY OF MICHAEL J. DISANTIS

1 DELCORA owns and operates a system consisting of 24 pump stations and over
2 180 miles of gravity collection system mains, interceptor sewers, and force mains for the
3 conveyance of wastewater to DELCORA's Western Regional Treatment Plant located in
4 Delaware County ("WRTP") and to the Philadelphia Water Department's ("PWD")
5 Southwest Water Pollution Control Plant ("SWPCP"). DELCORA owns all or part of the
6 collection systems in the following areas: City of Chester, Chester Township, Borough of
7 Marcus Hook, Borough of Rose Valley, Upland Borough, Parkside Borough, Trainer
8 Borough, Edgmont Township, and Pocopson Township.

9 DELCORA characterizes its service areas as "Eastern" and "Western." The
10 Western Service Area has eighteen (18) pumping stations that are owned and operated by
11 DELCORA. The average annual flow in 2018 for the WRTP was 39.18 million gallons
12 per day ("MGD").

13 The Eastern Service Area has (6) six pumping stations that are owned and
14 operated by DELCORA. The average annual flow in 2018 for the Eastern Service Area
15 was 36.83 MGD. The flow from the Eastern Service Area is split between WRTP and
16 PWD's SWPCP. During 2018, 25.76 MGD from the Eastern Service Area was pumped
17 to the SWPCP.

18
19 **Q. Does DELCORA own and operate other plants besides the WRTP?**

20 **A.** Yes. DELCORA also owns and operates two (2) remote Treatment Plants: Corinne
21 Village (Pocopson Preserve) located in Pocopson Township and Sheeder Tract (Pocopson
22 Riverside) located in Pocopson Township. DELCORA also has an agreement for the
23 purchase of Springhill Farms wastewater system which will conclude in 2020.

AQUA STATEMENT NO. 7
DIRECT TESTIMONY OF MICHAEL J. DISANTIS

1 DELCORA currently operates Springhill Farms which is located in Chadds Ford
2 Township.

3
4 **Q. Please describe any recent plant upgrades.**

5 A. In recent years, all of the WRTP process units and support systems have undergone
6 upgrades, improvements, and rehabilitation to improve effluent quality, reduce treatment
7 costs, and extend the service life. These upgraded systems include, but are not limited to,
8 modifications to the influent screening, pump stations, aeration basins, secondary
9 clarifiers, solids handling system, incinerator upgrades, and the utility water system.

10
11 **Q. Please provide the year of construction and the average annual flows for**
12 **DELCORA's treatment plants.**

13 A. The WRTP was constructed in approximately 1975 and as stated above has been
14 upgraded at various times since then. The WRTP's permitted annual average flow is
15 currently 50 MGD. In 2018 the annual average flow was 39.18 MGD and the 3-month
16 maximum average flow was 40.61 MGD. The WRTP is permitted for a maximum
17 organic loading of 108,000 lbs./day, which applies to loading after primary treatment, and
18 has an influent design loading of 161,000 lbs./day. In 2018, the annual average organic
19 loading was 96,311 lbs./day.

20 The Corinne Village Wastewater Treatment Plant (Pocopson Reserve), built in
21 2010, is permitted at an annual average flow of 0.020 MGD. In 2018, the plant had an
22 annual average flow of 0.013 MGD and a 3-month maximum average flow of 0.014

AQUA STATEMENT NO. 7
DIRECT TESTIMONY OF MICHAEL J. DISANTIS

1 MGD. The Corinne Village Plant is permitted for a maximum organic loading of 50.5
2 lbs./day. In 2018, the annual average organic loading was 34.31 lbs./day.

3 The Sheeder Tract Wastewater Treatment Plant (Pocopson Riverside), built in
4 2008, is permitted at an annual average flow of 0.04515 MGD. In 2018, the plant had an
5 annual average flow of 0.021 MGD and a 3-month maximum average flow of 0.022
6 MGD. The Sheeder Tract Plant is permitted for a maximum organic loading of 96
7 lbs./day. In 2018, the plant had an annual average organic loading of 42.97 lbs./day.

8 The Springhill Farms Wastewater Treatment Plant, built in 1988, is permitted at
9 an annual average flow of 0.1 MGD. In 2018, the plant had an annual average flow of
10 0.047 MGD.

11 The PWD SWPCP, built in 1948, is permitted at an annual average flow of 200
12 MGD. In 2018, the plant had an annual average flow of 183.21 MGD and a 3-month
13 maximum average flow of has an annual average flow of 189.65 MGD. In 2018, the
14 plant had an annual average organic loading of 165,601 lbs./day.

15
16 **Q. Does the Application include a summary of the DELCORA System assets?**

17 A. Yes. Included in the Application as Exhibit D is the Engineering Assessment which
18 provides an inventory of the DELCORA System assets.

19
20 **Q. Please give an overview of DELCORA's service agreements.**

21 A. Following the Environmental Protection Agency's mandate that systems in Delaware
22 County consolidate treatment providers, as more fully described in Mr. Willert's direct
23 testimony (Aqua Statement No. 5), participating municipalities and authorities entered

AQUA STATEMENT NO. 7
DIRECT TESTIMONY OF MICHAEL J. DISANTIS

1 into agreements to send flows to DELCORA to be treated at the WRTP or at PWD's
2 SWPCP. These contracts are included in the Exhibit F series to the Application.

3
4 **Q. Please summarize DECORA's existing sludge hauling and O&M contracts.**

5 A. DELCORA has agreements concerning the disposal of wastewater from the Burlington
6 County Resource Recovery Complex and the Delaware County Solid Waste Authority,
7 which both consist of leachate disposal for these entities. DELCORA also provides
8 sludge disposal services at rates posted on DELCORA's website, which have been
9 included in Aqua's proposed tariff (Application Exhibit G). All of the sludge generators
10 and haulers are approved by DELCORA before acceptance of any hauled sludge.

11 DELCORA has agreements either for the management of facilities or for the
12 Operation and Maintenance of Facilities ("O&M") with the following parties: Thornbury
13 Township, Southern Delaware County Authority, Borough of Folcroft, Borough of
14 Norwood, Tinicum Township, and Chadds Ford Township Sewer Authority. These
15 agreements are included in the Exhibit F series to the Application.

16
17 **III. ENVIRONMENTAL COMPLIANCE**

18 **Q. Please describe any environmental compliance issues of DELCORA over the past**
19 **five years.**

20 A. DELCORA has recently updated its Long-Term Control Plan ("LTCP") for the City of
21 Chester's combined sewer system, which is currently under review with DEP and EPA
22 and has not been finalized. The City of Chester is served by both separate and combined
23 sewer systems, and DELCORA developed the original LTCP to address the combined

AQUA STATEMENT NO. 7
DIRECT TESTIMONY OF MICHAEL J. DISANTIS

1 system in April 1999. In 2010, the EPA ordered DELCORA to update this LTCP,
2 claiming that it violated the federal Clean Water Act due to overflows and storm water
3 discharges, which occur during heavy rain and wet weather events.

4 In 2015, the EPA and Pennsylvania Department of Environmental Protection
5 (“DEP”) filed a complaint against DELCORA in the United States District Court for the
6 Eastern District of Pennsylvania. The complaint sought injunctive relief and civil
7 penalties for alleged violations of the Clean Water Act and the Pennsylvania Clean
8 Streams Law relating to the discharge of sewage. As a result of that action, DELCORA,
9 EPA and DEP entered into a Consent Decree, effective November 13, 2015, which
10 outlined the steps DELCORA would take to achieve full compliance with the Clean
11 Water Act and the Pennsylvania Clean Streams Law and eliminate sanitary sewer
12 overflows, which occur during rain and wet weather events. In addition to the
13 submission of an updated LTCP for approval and other injunctive relief, DELCORA
14 agreed to pay a civil penalty of \$1.375 million. More recently, the EPA reviewed
15 DELCORA’s required submissions regarding forty overflow discharges and assessed an
16 additional stipulated penalty of \$144,000 under the terms of the Consent Decree.

17 Other issues have been raised and resolved as well. In October 2011, DEP
18 provided DELCORA with a report of its review of the 2010 Municipal Wasteload
19 Management Report for the Rose Valley Wastewater Treatment Plant. In response, in
20 January 2012, DELCORA submitted a Corrective Action Plan in order to address the
21 hydraulic and organic overload issues at Rose Valley. After implementation of the plan,
22 this plant was closed in May 2018 and replaced with a pump station that connects the
23 Rose Valley system to the regional sewer system that serves DELCORA’s WRTP. As a

AQUA STATEMENT NO. 7
DIRECT TESTIMONY OF MICHAEL J. DISANTIS

1 result, DELCORA requested discontinuation of the plan, which DEP agreed to in August
2 2018.

3 On July 27, 2017, the DEP approved an Environmental Covenant regarding the
4 former Abbonizio Recycling and Covanta Delaware Valley, LP, located in the City of
5 Chester. Site soils exhibited concentrations of iron and aluminum above acceptable DEP
6 specifications. Due to this and other issues at the property, it is subject to activity and use
7 limitations, including that the property shall only be used for non-residential purposes
8 and groundwater is not to be used on the property for any purpose.

9 Additionally, the EPA and the Delaware River Basin Commission (“DRBC”)
10 have established Stage 1 Total Maximum Daily Loadings (“TMDLs”) for the Delaware
11 River Estuary and corresponding Waste Load Allocation (“WLA”) assigned to
12 DELCORA for the discharge of polychlorinated biphenyls from its WTRP. While a
13 proposed Stage 2 TMDL or WLA has not yet been issued by EPA and DRBC, it is
14 DELCORA’s expectation that this will occur soon.

15
16 **Q. Are there any Notices of Violation (“NOV”) issued to DELCORA over the last five**
17 **years?**

18 A. Yes. The NOV, narrative reports, and responses from the last five years are included in
19 the Application as Exhibit O1.

20
21 **Q. Are there any Consent Assessment of Civil Penalties (“CACP”) issued to**
22 **DELCORA over the last five years?**

AQUA STATEMENT NO. 7
DIRECT TESTIMONY OF MICHAEL J. DISANTIS

1 A. Yes. The CACPs are included in the Application as Exhibit O2. Each CACP has been
2 addressed by DELCORA.

3
4 **Q. Are there any other environmental compliance items of note for DELCORA's**
5 **System?**

6 A. All environmental compliance matters, including those described above, are detailed in
7 Schedule 4.13 of the Asset Purchase Agreement ("APA"). It should also be noted that, as
8 detailed in the testimony of Mr. Willert (Aqua Statement No. 5), the environmental
9 compliance issues facing PWD, and the costs involved in its resulting LTCP, are a
10 driving force in DELCORA's decision to end its partnership with PWD and expand its
11 operational capabilities at the WRTP.

12
13 **IV. PROJECTED FUTURE CONNECTIONS**

14 **Q. Please describe the projected future connections for DELCORA's plants.**

15 A. By 2024, it is projected that:

- 16 • 11 additional EDUs will connect with the Corinne Village Wastewater Treatment
17 Facility; and
- 18 • 22 additional EDUs will connect to the Sheeder Tract Wastewater Treatment
19 Plant.

20 In addition, the WRTP is projected to add 667 EDUs per year through 2023. We do not
21 yet have available the projected connections through 2024, but I will supplement my
22 testimony with this information when it becomes available.

AQUA STATEMENT NO. 7
DIRECT TESTIMONY OF MICHAEL J. DISANTIS

V. NPDES AND WATER QUALITY MANAGEMENT

Q. Does the Application include NPDES permits for DELCORA's plants?

A. Yes. Copies of NPDES permits for DELCORA's plants are included in the Application as Exhibits N1 (WRTP) and N2 (Springhill Farms).¹ Additionally, although not part of the DELCORA acquisition, the NPDES permit for PWD's SWPCP is included in the Application as Exhibit N3.

Q. Does the Application include WQM permits for DELCORA's plants?

A. Yes. Copies of WQM permits for DELCORA's plants are included in the Application as Exhibits M1 through M4. Additionally, although not part of the DELCORA acquisition, the WQM permit for PWD's SWPCP is included in the Application as Exhibit M5.

VI. ACT 537 PLANS

Q. Are Act 537 Plans included in the Application?

A. Yes. The majority of DELCORA's System falls under the 2002 Delaware County Planning Department Act 537 Sewage Facilities Plan Update – Eastern Plan of Study, which is included in the Application as Exhibit P1, and the 2004 Delaware County Planning Department Act 537 Sewage Facilities Plan Update – Western Plan of Study, which is included in the Application as Exhibit P2. The Western Plan of Study was updated in 2006 related to the re-rating of the WRTP and again in 2012 related to the Chester-Ridley Creek Service Area, which are included in the Application as Exhibits P2.

¹ Pocopson Preserve and Pocopson Riverside do not have NPDES permits as these plants do not have stream discharge.

AQUA STATEMENT NO. 7
DIRECT TESTIMONY OF MICHAEL J. DISANTIS

1 In 2018, an Act 537 Special Study Plan was prepared for DELCORA to address wet
2 weather issues at DELCORA's Central Delaware Pump Station, which is included with
3 Application Exhibit P1. These plans addressed both of DELCORA's eastern and western
4 service areas.

5 Also included in the Application are Act 537 Plans for Chadds Ford Township,
6 Chester County, Concord Township, Middletown Township, Newtown Township, Rose
7 Valley Borough, Edgmont Borough, and the City of Philadelphia, as Exhibits P3 through
8 P10, respectively.

9
10 **VII. CONCLUSION**

11 **Q. Does this conclude your testimony?**

12 A. Yes, it does. However, I reserve the right to file additional testimony at a later date as
13 may be necessary or appropriate.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

AQUA STATEMENT NO. 7-R

**REBUTTAL TESTIMONY OF
MICHAEL J. DISANTIS
DIRECTOR OF OPERATIONS AND MAINTENANCE
DELCORA**

October 20, 2020

REBUTTAL TESTIMONY OF MICHAEL J. DISANTIS

Q. Please state your name and business address for the record.

A. My name is Michael J. DiSantis. My business address is 100 East Fifth Street, Chester, PA 19013.

Q. In what capacity are you affiliated with the Delaware County Regional Water Quality Control Authority (“DELCORA”)?

A. I am the Director of Operations and Maintenance of DELCORA.

Q. Are you the same Michael DiSantis who previously submitted prepared direct testimony in this proceeding?

A. Yes. I prepared direct testimony which is identified as Aqua Statement No. 7.

Q. What is the purpose of your rebuttal testimony?

A. My Rebuttal Testimony responds to the direct testimony submitted by the following parties: (1) Kimberly-Clark Pennsylvania, LLC and Kimberley-Clark Corporation (“Kimberly-Clark”); and (2) Sunoco Partners Marketing and Terminals L.P. (“SPMT”).

RESPONSE TO KIMBERLY-CLARK

Q. Have you had the opportunity to review the testimony submitted by Kimberly-Clark?

A. Yes.

Q. Is Kimberly-Clark correct that its wastewater is beneficial to DELCORA?

1 A. No. Per the data submitted by Kimberly-Clark on their self-monitoring reports, Kimberly-
2 Clark's wastewater routinely exhibits spikes of very high total suspended solids and low
3 pH spikes when compared to wastewater from municipalities, individual homeowners, or
4 small commercial customers. Additionally, one of Kimberly-Clark's discharges contains
5 river mud which is very low in inert solids that can negatively impact the volatility of
6 sludge for incineration. This impact increases natural gas usage for
7 incineration. Overall, Kimberly-Clark's own data shows the potential for chemical
8 discharges with pH spikes and the potential for solids slug discharges. Neither of these two
9 potential conditions exists with wastewater from municipalities or from individual
10 homeowners or small commercial customers.

11
12 **RESPONSE TO SPMT**

13 **Q. Have you had the opportunity to review the testimony submitted by SPMT?**

14 A. Yes.
15

16 **Q. What is your understanding of SPMT's concerns about the Proposed Transaction?**

17 A. As I understand it, SPMT is concerned that if the Proposed Transaction is approved,

18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]
23 [REDACTED]





1

[REDACTED]

2

[REDACTED]

3

[REDACTED]

4

[REDACTED]

5

[REDACTED]

6

[REDACTED]

7

8 **Q. Does this conclude your testimony?**

9 A. Yes. However, I reserve the right to supplement my testimony as additional issues and

10 facts arise during the course of the proceeding.

EXHIBIT Y

TESTIMONY OF DYLAN D'ASCENDIS

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

AQUA STATEMENT NO. 9

**DIRECT TESTIMONY OF
DYLAN W. D'ASCENDIS**

March 3, 2020

**DIRECT TESTIMONY OF
DYLAN W. D'ASCENDIS**

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.

A. My name is Dylan W. D'Ascendis. My business address is 3000 Atrium Way, Suite 241,
Mount Laurel, NJ 08054.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by ScottMadden, Inc. ("ScottMadden") as Director.

**Q. PLEASE DESCRIBE YOUR PROFESSIONAL EDUCATION AND
EXPERIENCE.**

A. I offer expert testimony on behalf of investor-owned utilities on rate of return issues and
class cost of service issues. I am a Utility Valuation Expert ("UVE") in the
Commonwealth of Pennsylvania approved by the PUC (Utility Code 9919278). I also
assist in preparing rate filings, including, but not limited to, revenue requirements and
original cost and lead/lag studies. I am a graduate of the University of Pennsylvania,
where I received a Bachelor of Arts degree in Economic History. I also hold a Masters of
Business Administration from Rutgers University with a concentration in Finance and
International Business, which was conferred with high honors. I am a Certified Rate of
Return Analyst ("CRRRA") and a Certified Valuation Analyst ("CVA"). My full
professional qualifications, including my expert witness appearances, are provided in
Attachment A.

**Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PENNSYLVANIA
PUBLIC UTILITY COMMISSION?**

A. Yes. I have testified before the Pennsylvania Public Utility Commission ("Commission"
or "PUC") on several occasions as shown on Attachment A.

1 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

2 A. The purpose of my testimony is to describe the fair market value appraisal of the
3 wastewater operations of the Delaware County Regional Water Quality Control Authority
4 (“DELCORA”) that my staff and I performed on their behalf. DELCORA is selling their
5 operations to Aqua Pennsylvania Wastewater, Inc. (“Aqua”). Our report is entitled
6 “Valuation Report Delaware County Regional Water Quality Control Authority February
7 20, 2020.” The appraisal and its report were developed to meet the criteria established in
8 Section 1329 of the Pennsylvania Public Utility Code (“Code”), 66 Pa. C.S. § 1329
9 (“Determination of the fair market value of water and wastewater assets”).

10 In its 2015-2016 legislative session, the Pennsylvania Legislature passed Act 12
11 of 2016 and Governor Wolf signed into law Section 1329 of the Code establishing the
12 legislative guidelines facilitating the acquisition of municipal water and wastewater
13 systems by private investor-owned utilities and other entities which are rate-regulated by
14 the PUC.

15 **QUALIFICATION AS UTILITY VALUATION EXPERT**

16 **Q. ARE YOU ON THE COMMISSION’S REGISTRY OF UTILITY VALUATION**
17 **EXPERTS?**

18 A. Yes. I am considered a UVE in the Commonwealth of Pennsylvania approved by the
19 PUC (Utility Code 9919278).

1 **Q. PLEASE DESCRIBE THE PROCESS BY WHICH SCOTTMADDEN WAS**
2 **PLACED ON THE COMMISSION’S REGISTRY OF UTILITY VALUATION**
3 **EXPERTS.**

4 A. After passage of Section 1329 of the Code, the Commission established an application
5 process by which the Commission would approve and designate firms to be placed on the
6 Commission’s “Registry of Utility Valuation Experts.” ScottMadden submitted its
7 application and the required proof of experience on October 13, 2016 and received
8 confirmation and approval from the Commission of ScottMadden’s placement on the
9 Commission’s UVE Registry on December 7, 2016. ScottMadden has remained on the
10 Commission’s registry ever since.

11 **Q. HAVE YOU EVER HAD YOUR PROFESSIONAL CREDENTIALS REVOKED**
12 **OR SUSPENDED?**

13 A. No.

14 **Q. DO YOU HAVE SPECIFIC EXPERIENCE WITH THE VALUATION AND**
15 **APPRAISAL OF UTILITY ASSETS?**

16 A. Yes. Please see Attachment A for the details of my valuation assignments.

17 **Q. HAVE YOU, SCOTTMADDEN, OR ANY OF ITS STAFF DERIVED ANY**
18 **MATERIAL FINANCIAL BENEFIT FROM THE SALE OF DELCORA’S**
19 **ASSETS OTHER THAN FEES FOR YOUR SERVICES RENDERED?**

20 A. No.

1 **Q. ARE YOU, SCOTTMADDEN, OR ANY OF ITS STAFF AN IMMEDIATE**
2 **FAMILY MEMBER OF A DIRECTOR, OFFICER, OR EMPLOYEE OF EITHER**
3 **AQUA OR DELCORA?**

4 A. No.

5 **Q. IS SCOTTMADDEN IN COMPLIANCE WITH APPLICABLE PENNSYLVANIA**
6 **LAWS?**

7 A. Yes.

8 **Q. DOES SCOTTMADDEN HAVE THE FINANCIAL AND TECHNICAL FITNESS,**
9 **INCLUDING PROFESSIONAL LICENSES AND TECHNICAL**
10 **CERTIFICATIONS, TO PERFORM A FAIR MARKET VALUATION OF THE**
11 **ASSETS OF DELCORA?**

12 A. Yes.

13 **Q. ARE YOU AWARE OF ANY FACT, INCLUDING BUT NOT LIMITED TO ANY**
14 **POTENTIAL CONFLICT OF INTEREST, THAT WOULD CAST DOUBT UPON**
15 **YOUR ABILITY TO PROVIDE A THOROUGH, OBJECTIVE, UNBIASED, AND**
16 **FAIR VALUATION IN THIS PROCEEDING?**

17 A. No.

18 **Q. ARE YOU ADVOCATING FOR ANY PARTY OR OUTCOME?**

19 A. No.

1 **FEES PAID FOR UTILITY VALUATION EXPERT SERVICES**

2 **Q. HOW IS SCOTTMADDEN BEING COMPENSATED FOR ITS SERVICES IN**
3 **THIS MATTER?**

4 A. ScottMadden is being compensated on a fee basis, which includes a fixed fee upon
5 delivery of the initial valuation report, and hourly rates for any services rendered
6 thereafter. True, correct, and complete copies of ScottMadden's invoices to DELCORA
7 for this matter, as of the date of Application filing, are attached to Aqua's Application as
8 Application Exhibit S2 and I incorporate those invoices in my direct testimony as if set
9 forth in their entirety.

10 **Q. WILL SCOTTMADDEN RECEIVE FEES FOR ITS SERVICES REGARDLESS**
11 **OF WHETHER THE COMMISSION APPROVES THE PROPOSED**
12 **TRANSACTION OR WHETHER IT CLOSSES?**

13 A. Yes.

14 **Q. ARE THESE FEES CONSISTENT WITH COMPENSATION RECEIVED FOR**
15 **SIMILAR SERVICES PROVIDED TO OTHER CLIENTS?**

16 A. Yes.

17 **FAIR MARKET VALUATION OF DELCORA'S ASSETS**

18 **Q. PLEASE IDENTIFY EXHIBIT R TO THE APPLICATION IN THIS**
19 **PROCEEDING?**

20 A. Exhibit R of Aqua's Application includes my appraisal report dated February 20, 2020,
21 which I prepared for DELCORA to be filed in this proceeding.

22 **Q. HOW DO YOU RECOGNIZE IT?**

1 A. I personally prepared and supervised ScottMadden personnel in preparing the report, and
2 recognize it as ScottMadden's work product.

3 **Q. IS APPLICATION EXHIBIT R A TRUE, COMPLETE, AND ACCURATE COPY**
4 **OF YOUR VALUATION REPORT?**

5 A. Yes, and I incorporate it into my direct testimony as if set forth in its entirety.

6 **Q. PLEASE DESCRIBE THE PROCESS BY WHICH YOU PREPARED THE**
7 **VALUATION REPORT.**

8 A. In accordance with Section 1329 of the Code, Aqua and DELCORA engaged Pennoni
9 Associates and Weston Solutions, Inc. (collectively, "the Consulting Engineers") as the
10 licensed engineer to conduct an assessment of the DELCORA's tangible assets.
11 DELCORA engaged ScottMadden to prepare the fair market valuation report for their
12 operations. DELCORA provided financial statements regarding their operations and a
13 copy of the Engineering Assessment development by the Consulting Engineers as
14 required by Section 1329(a)(4). In addition, ScottMadden performed an on-site visit of
15 the above ground facilities and conducted intensive interviews of DELCORA staff on
16 January 17, 2020. After those activities and data gathering, we developed the appraisal.

17 The appraisal contains a letter of transmittal; a narrative report explaining our
18 methodology and conclusions; a statement of assumptions and limiting conditions; a
19 statement of the Valuation Analyst's Representations; a statement of the professional
20 qualifications of Dylan W. D'Ascendis, CVA, CRRA; and various schedules and
21 appendices.

22 The intent of the valuation report is to provide the appraisal results, as well as the
23 entire appraisal work file, in sufficient detail to satisfy the parties' and Commission's

review requirements of Section 1329 and the Commission’s Final Implementation Order, *In re: Implementation of Section 1329 of the Public Utility Code*, Docket No. M-2016-2543193 (Order entered October 27, 2016). In addition to a copy of my appraisal report, I have provided supporting work papers for the appraisal report. The relevant work papers have been submitted to the Commission with the Application and provided to the public advocates in live electronic format. ScottMadden considers the live electronic files, which are in Excel format, to be CONFIDENTIAL.

Q. IS THERE ANYTHING THAT YOU WOULD CHANGE IN THE VALUATION REPORT SINCE ITS PREPARATION?

A. No.

Q. WAS THE FAIR MARKET VALUATION OF THE DELCORA ASSETS DETERMINED IN COMPLIANCE WITH THE UNIFORM STANDARDS OF PROFESSIONAL APPRAISAL PRACTICE (“USPAP”)?

A. Yes. Included in my cover letter is a statement of our report’s compliance with USPAP.

Q. DID YOU EMPLOY THE COST, MARKET AND INCOME APPROACHES IN PREPARING YOUR VALUATION?

A. Yes. We developed our appraisal utilizing the cost, market, and income approaches as required by USPAP and Section 1329 of the Code. These approaches are summarized below.

Table 1: Summary of Indicated Values

Valuation Approach	Indicated Value
Cost Approach	\$292,413,993
Market Approach	\$613,520,480
Income Approach	\$291,863,370

1 **Q. DID YOU RELY UPON A LICENSED ENGINEER'S ASSESSMENT OF THE**
2 **TANGIBLE ASSETS OF DELCORA IN PERFORMING YOUR VALUATION?**

3 A. Yes. Aqua and DELCORA engaged the Consulting Engineers as the licensed engineers
4 to conduct an assessment of DELCORA's tangible assets. DELCORA provided a copy
5 of the Engineering Assessment developed by the Consulting Engineers as required by
6 Section 1329(a)(4). A copy of the Engineering Assessment is included as Exhibit D to
7 the Application.

8 **Q. DID THE LICENSED ENGINEER'S ASSESSMENT INCLUDE AN INVENTORY**
9 **OF THE USED AND USEFUL UTILITY PLANT ASSETS TO BE**
10 **TRANSFERRED COMPILED BY YEAR AND ACCOUNT?**

11 A. Yes.

12 **Q. DID THE LICENSED ENGINEER'S ASSESSMENT LIST ALL NON-**
13 **DEPRECIABLE PROPERTY SUCH AS LAND AND RIGHTS-OF-WAY?**

14 A. Yes.

15 **Q. TO THE BEST OF YOUR KNOWLEDGE, WAS THE LICENSED ENGINEER'S**
16 **INVENTORY DEVELOPED FROM AVAILABLE RECORDS, MAPS, WORK**
17 **ORDERS, DEBT ISSUE CLOSING DOCUMENTS FUNDING CONSTRUCTION**
18 **PROJECTS, AND OTHER SOURCES TO ENSURE AN ACCURATE LISTING**
19 **OF UTILITY PLANT INVENTORY BY UTILITY ACCOUNT?**

20 A. Yes.

21 **Q. DO YOU HAVE ANY REASON TO DOUBT THE ACCURACY OF THE**
22 **LICENSED ENGINEER'S INVENTORY OF THE ASSETS?**

23 A. No.

1 **Q. DID YOU INCORPORATE THE LICENSED ENGINEER’S ASSESSMENT INTO**
2 **YOUR COST APPROACH IN DEVELOPING YOUR VALUATION?**

3 A. Yes.

4 **Q. DID YOU CONDUCT AN ON-SITE INSPECTION OF THE DELCORA ASSETS,**
5 **AND IF SO, WHAT WAS ITS RESULT ON THE APPRAISAL?**

6 A. Yes. I travelled to DELCORA’s Western Regional Wastewater Treatment Plant on
7 January 17, 2020 for interviews with management and a tour of the treatment plant. The
8 information gathered during the interviews were used to finalize assumptions regarding
9 DELCORA’s operations if they were not being acquired. As far as an inspection of
10 individual DELCORA assets as to their operating condition, I relied on the Engineering
11 Assessment for that information.

12 **Q. DID YOU HAVE TO EXERCISE PROFESSIONAL DISCRETION IN**
13 **DEVELOPING ANY ASPECT OF YOUR VALUATION?**

14 A. Yes. The use of professional discretion is detailed throughout Application Exhibit R,
15 where applicable.

16 **Q. PLEASE DESCRIBE ANY ASSUMPTIONS, EXTRAORDINARY**
17 **ASSUMPTIONS, HYPOTHETICAL CONDITIONS, AND/OR LIMITING**
18 **CONDITIONS THAT YOU APPLIED TO THE VALUATION.**

19 A. The Statement of Assumptions and Limiting Conditions and the Valuation Analyst’s
20 Representations are provided in Appendices A and B to Exhibit R of the Application.
21 Two examples of the limiting conditions for this valuation are:

- 22 • Some of the National Association of Regulatory Utility Commissioners
23 (“NARUC”) account numbers used in the Engineering Assessment did not

1 match the NARUC account numbers in the Handy-Whitman Index.

2 Because of this, I had to make informed judgements on the appropriate

3 NARUC account numbers to use for my trended original cost study; and

- 4 • Other original cost information was not available. Because of this, I relied
5 on the Engineering Assessment for their estimation of original cost.

6 **Q. HOW DID YOU DEVELOP THE WEIGHTING APPLIED TO EACH**
7 **APPROACH IN YOUR APPRAISAL AND WHY ARE THE INDIVIDUAL**
8 **WEIGHTS YOU CHOSE APPROPRIATE FOR THE PROPOSED**
9 **TRANSACTION?**

10 A. No method of valuation will produce the exact value of a business. A valuation study
11 cannot incorporate market conditions at the time of sale or predict a potential investor's
12 desire, or lack thereof, to acquire the business. DELCORA's desire to sell additional
13 assets to the potential acquirer may increase the desire of some investors, and as a result,
14 increase the value of both sets of assets. Our valuation and report cannot incorporate
15 these considerations.

16 I have determined the range of values of DELCORA based on the relative
17 weighting of the three valuation methods, as will be discussed below. The weightings
18 indicate the value placed on each appraisal method from the valuation expert. In my
19 opinion, the income and cost approaches should receive significant weight and the market
20 approach should receive minimal weight. The reason for this is that the value derived
21 from the market approach is an obvious outlier from the other two approaches, even
22 when using the most conservative assumptions. The range of values and relative
23 weightings of the valuation approaches are set forth in Table 2, below:

Table 2: Conclusion of Value for DELCORA

Valuation Approach	Indicated Value	Weight	Weighted Value
Cost	\$292,413,993	45%	\$131,586,297
Market	\$613,520,480	5%	\$30,676,024
Income	\$291,863,370	50%	\$145,931,685
Indicated Value		100%	\$308,194,006

Cost Approach

Q. REGARDING YOUR APPLICATION OF THE COST APPROACH, WHAT METHOD DID YOU USE TO DETERMINE THE COST APPROACH RESULT?

A. I used a trended original cost method to determine the original cost new, less depreciation (“RCNLD”) of DELCORA’s assets. In order to arrive at the reproduction cost new for the DELCORA’s assets, I began with the original cost of the assets provided by the Engineering Assessment and used the Handy-Whitman Index (“HW Index”) to determine the current reproduction value. The HW Index is prepared specifically for electric, gas, and water utilities, and is the only publication of its kind available to the public. The HW Index has been published continuously since 1924. The Index is comprised of historical index values for various accounts prescribed by the NARUC Uniform System of Accounts, as well as for construction, material, and labor, by geographic region of the United States. For assets not included in the HW Index, specifically communication equipment, transportation equipment, and computer and software, I used the Producer Pricing Index.

1 The trended original cost method consists of the development of adjustment
2 factors from the time when the asset was put into service to the current date. For example,
3 an average main (NARUC account 331) placed into service in 1985 with an original cost
4 of \$100,000 would be trended forward by the ratio of the index value at the current date
5 divided by the index value at the time of installation. The index value of NARUC account
6 331 in January 2018 is 790.00, and the index value at 1985 when the assets were installed
7 was 254.00, which means the ratio applied to the original cost of the distribution main
8 would be 3.11.¹ This would translate into a current cost for that main of \$311,024.²

9 The next step in deriving the RCNLD for DELCORA's assets is to quantify the
10 amount of physical deterioration, functional obsolescence, and economic obsolescence of
11 the assets. Physical deterioration is caused by use, wear and tear, and the aging process.
12 Functional obsolescence is caused by changes in design or construction to create
13 efficiencies not present in the current asset. Economic obsolescence is a loss in value due
14 to external factors not in the control of DELCORA such as economic conditions. The
15 most common measure of physical deterioration is the reserve held for depreciation,
16 which is based on the asset's remaining life versus its average useful life. Functional
17 obsolescence is measured by comparing the subject asset to a replacement asset with
18 current technology. The Engineering Assessment found no significant functional
19 obsolescence for DELCORA assets. Economic obsolescence is usually measured by
20 market conditions, which have been supportive towards the water and wastewater
21 industries in the recent past, as well as prospectively, so I do not believe there is
22 significant economic obsolescence present in DELCORA assets. Since the only

¹ 790.00 / 254.00 = 3.11.

² (790.00 / 254.00) x \$100,000 = \$311,023.

1 applicable measure of loss of value is physical deterioration, the useful lives for each
2 asset were determined, and reserves for depreciation were calculated for each DELCORA
3 asset if original costs were available

4 **Q. HOW DID YOU CALCULATE THE DEPRECIATION RESERVE FOR EACH**
5 **ASSET?**

6 A. First, I determined the useful life for each asset,³ then I reduced the original cost of each
7 asset each year by 1/useful life until the asset was fully depreciated or 2019, which ever
8 one came first and put that value into the depreciation reserve.

9 **Q. WHAT IS THE INDICATED VALUE OF DELCORA BASED ON THE COST**
10 **APPROACH?**

11 A. Using the HW and Producers Pricing Indices to trend the original cost, less depreciation
12 of DELCORA's assets forward, I derived a reproduction cost new minus depreciation of
13 \$292,413,993 as shown on Schedule 1 of Exhibit R.

14 As stated above, the value derived from the cost approach is based solely on
15 DELCORA's underlying assets, which means it does not take into account the expected
16 cash flows of these assets. Additionally, even though the HW Index takes into account
17 the changes in the cost of various factors over time in different regions throughout the
18 country, it cannot take into account intricacies such as terrain (e.g. mountains in
19 Appalachia versus farmland in Pennsylvania) or changes in development and zoning
20 since original installation. All else remaining equal, different terrains or changes in laws
21 will translate into different timeframes to complete the project, which will directly affect
22 costs.

³ Useful lives are based on the System of Accounts for Water and Wastewater Utilities – with 200 or more connections from the Public Utility Commission of Texas with one exception. I used a 75 year useful life for mains as determined by the PUC in Docket No. A-2019-3008491.

Also mentioned previously, some of DELCORA's assets were classified under NARUC account numbers that did not coincide with NARUC account numbers in the HW Index, and therefore, I had to make judgments as to what NARUC account was the most appropriate. In addition, some assets did not have original costs assigned, so I relied upon the estimation of original cost provided by the Engineering Assessment.

Market Approach

Q. REGARDING YOUR APPLICATION OF THE MARKET APPROACH, WHAT METHODS DID YOU USE TO DETERMINE THE MARKET APPROACH RESULT?

A. I used the market-to-book multiple and comparable sales methods.

Q. PLEASE DISCUSS THE MARKET-TO-BOOK METHOD.

A. The market-to-book method applies a market-to-book ratio of a comparable risk group to the book value of equity of the subject company to derive an indicated market value. As shown on page 2 of Schedule 2 of Exhibit R, market-to-book ratios of the water utility proxy group used to derive the weighted average cost of capital ("WACC") in the income approach range from 2.25x to 5.71x book value. Using DELCORA's net position balance from its 2018 audited financial statements of \$180,035,336,⁴ indicated values range from \$415,589,365 to \$1,055,626,592, with an average of \$695,732,863 as shown on page 3 of Schedule 2 of Exhibit R.

Q. PLEASE DESCRIBE THE COMPARABLE SALES METHOD.

A. I also researched transactions involving companies who acquired 100% of a water or sewer interest since 2015. That research returned 69 results from around the country, 20

⁴ From DELCORA's audited financial statements for the year ended December 31, 2018.

1 of which were acquisitions in Pennsylvania, which are contained on page 4 of Schedule 2
2 of Exhibit R. A common ratio which can be used to determine DELCORA's market
3 value is transaction value per equivalent domestic unit ("EDU"). The purchase price per
4 EDU ratios for the relevant transactions are also shown on page 4 of Schedule 2 of
5 Exhibit R. As shown on page 4 of Schedule 2 of Exhibit R, the nationwide average
6 purchase price to EDU is approximately \$4,100, while the Pennsylvania average
7 purchase price to EDU is \$6,450. Given the 197,769 EDUs served by DELCORA,⁵
8 indicated values using this approach range from \$811,451,596 to \$1,276,340,191.

9 **Q. WHAT WERE THE RESULTS OF EACH ANALYSIS YOU PERFORMED?**

10 A. The market-to-book analysis produced a resulting range of \$415,589,365 to
11 \$1,055,626,592, with an average of \$695,732,863. The comparable sales method
12 produced a result of \$811,451,596 to \$1,276,340,191.

13 **Q. WHICH RESULTS WERE USED TO DETERMINE YOUR MARKET**
14 **APPROACH RESULT? PLEASE EXPLAIN WHY THESE RESULTS WERE**
15 **USED.**

16 A. I averaged the lowest values of the market-to-book method and comparable sales method
17 to come to an indicated value of \$613,520,480.

18
19 **Income Approach**

20 **Q. WHAT ASSUMPTIONS DID YOU EMPLOY TO DEVELOP YOUR INCOME**
21 **APPROACH RESULT?**

22 A. In determining the indicated value using the income approach, I made assumptions
23 regarding DELCORA's operating revenue, operating expenses, and capital requirements.

⁵ EDU count provided by DELCORA.

1 The vast majority of DELCORA's revenues are tied to fees for wastewater
2 treatment. Because of this, their revenues are dependent on two factors; population
3 growth and rate increases. Upon review of US census data and interviews with key staff,
4 I conclude that the population served by DELCORA will be flat or slightly increasing
5 going forward. Because of this, I did not make any further adjustment to the going
6 forward revenues due to population changes.

7 In regard to rate increases, because of major capital improvements scheduled for
8 the period 2020-2028, I assumed 11% rate increases every year from 2020 until 2028,
9 and then a rate increase of 3% every three years thereafter. The assumption of the 11%
10 annual rate increases from 2020 through 2028 are based on DELCORA's presentations to
11 various stakeholders regarding operations if they did not pursue being acquired. An
12 example of one of these presentations to stakeholders is attached as Appendix F of
13 Exhibit R. My assumption of 3% triennial rate increases in the period from 2029 to
14 perpetuity is the result of my discussion with DELCORA management and their strong
15 desire to keep rates as low as possible for their customers. Raising sewer rates slower
16 than the assumed rate of inflation (discussed below) in the period 2029 to perpetuity is an
17 extremely conservative assumption.

18 General operating expenses for DELCORA are comprised of taxes and operation
19 and maintenance expenses. Since the acquiring company will not be tax exempt, we have
20 assumed a composite income tax rate (state and federal) of 28.892%.⁶ The state and
21 federal income taxes will be reduced by the tax shield created by its depreciation
22 expense. To simplify, we will assume that book depreciation expense is equal to tax

⁶ Federal income tax of 21% and Pennsylvania corporate income tax of 9.99%. $(100\%-21\%) \times 9.99\% = 7.892\%$. $21\% + 7.892\% = 28.892\%$

1 depreciation expense⁷ and multiply depreciation expense by the effective tax rate to
2 derive the value of the tax shield.

3 All operation and maintenance expenses are assumed to increase at the projected
4 level of the Consumer Price Index⁸ (“CPI”) with two exceptions. In my assumptions,
5 DELCORA does not renew its contract with the Philadelphia Water Department
6 (“PWD”), which expires in 2028. Because of this, I eliminate the Philadelphia Long-
7 Term Control Plan expense in 2029 and going forward. Similarly, since DELCORA will
8 be treating the flows formerly going to the Southwest Water Pollution Control Plant, they
9 will not be paying the 12% management fee to PWD to treat their wastewater. Because
10 of this, in 2029, I reduce the Philadelphia plant treatment costs 12%. I also assumed that
11 PWD was charging cost-based rates to DELCORA throughout their contract. Due to this
12 assumption, all operation and maintenance expenses associated with the DELCORA
13 plant expansion would be subsumed in the former Philadelphia treatment plant costs.
14 These are conservative adjustments, as DELCORA management in their interviews
15 expressed that costs would dramatically decrease after the expiration of the PWD contract
16 in excess of my assumed 12% decrease. After 2029, I assume that the former
17 Philadelphia treatment plant costs increase at CPI every year.

18 There are several major capital projects that are reflected in the income approach,
19 which include improvements to the DELCORA system to allow them to bypass the PWD
20 Plant (~\$450M); the implementation of the long-term control plan for the City of Chester
21 (~\$87M); regulatory required capital projects to expand ammonia and nutrient control

⁷ Book depreciation expense was assumed to be the rate base in that year multiplied by the DELCORA’s current depreciation rate of 2.5%.

⁸ I employed a CPI projection of 2.1% per year, based on the long-term CPI projection published by *Blue Chip Financial Forecasts*. See, *Blue Chip Financial Forecasts*, Vol. 38, No. 12, December 1, 2019 at 14.

1 (~\$100M); DELCORA's 2019 capital plan (~\$340M), and annual replacements of aged
2 sewer lines (~\$4M / year).

3 For the expected system improvements for the period used in the income
4 approach, I relied on DELCORA's internal projected capital expenditures for the period
5 2020-2040 (provided as Appendix G to Exhibit R). For the period from 2041 to
6 perpetuity, I assumed regular capital expenditures of \$20M / year increased by CPI.

7 **Q. WHAT DISCOUNT RATE DID YOU USE TO CALCULATE YOUR INCOME**
8 **APPROACH?**

9 A. The discount rate is the investor-required expected rate of return on the assets. An
10 investor in any company needs to be compensated for the risk of that investment, and a
11 higher level of risk equates to a higher required rate of return. The overall rate of return in
12 this instance is defined by the WACC. I have calculated a discount rate which relates to
13 the traditional method of financing for publicly-traded water companies, which uses an
14 equal mix between debt and equity capital.

15 For the common equity cost rate, I applied the Discounted Cash Flow ("DCF"),
16 Risk Premium ("RPM") and Capital Asset Pricing Models ("CAPM") to a proxy group of
17 publicly-traded water companies and a group of non-regulated companies comparable in
18 total risk to the water utility group. Application of these cost of common equity models to
19 these groups results in an indicated cost of common equity of 9.75% which is presented
20 in Appendix H of Exhibit R.

21 The representative capital structure is a hypothetical capital structure based on the
22 range of capital structures for fiscal year 2018 of the publicly-traded proxy group

companies used to derive the cost of common equity.⁹ For the debt cost rate used in the WACC calculation, I used a projected Moody's A public utility bond rate of 4.11%.¹⁰ Table 3 below illustrates the assumed WACC of an investor-owned water utility.

Table 3: Assumed WACC for Water Utility Company

Type of Capital	Cost Rate	Ratio	Weighted Cost
Long-Term Debt	4.11%	50.00%	2.06%
Common Equity	9.75%	<u>50.00%</u>	<u>4.88%</u>
Total		100.00%	6.94%

Q. IF YOU USED A TERMINAL VALUE IN YOUR DISCOUNTED CASH FLOW ANALYSIS WHAT IS THE NUMBER OF YEARS OVER WHICH THE CASH FLOWS ARE CONSIDERED?

A. I considered those cash flows over 30 years (2020 – 2050).

Q. WHAT IS THE BASIS FOR USING THIS NUMBER OF YEARS?

A. It is my opinion that it is necessary to use 30 years to calculate terminal value because it incorporates DELCORA's capital plan (2020 – 2040) and a normalized period after the major capital expenditures are finished (2041 – 2050).

Q. WHAT IS THE INDICATED VALUE OF DELCORA USING THE INCOME APPROACH?

A. Inputting the estimated revenue, expense, and capital expenditure data into the model resulted in an indicated value of \$291,863,370.

⁹ The range of equity ratios of the proxy group companies were from 43.40% to 67.33% at 2018 fiscal year end.

¹⁰ Exhibit R, Appendix H, at 13.

CONCLUSION

Q. WHAT IS YOUR CONCLUSION REGARDING THE FAIR MARKET VALUE OF DELCORA'S WASTEWATER OPERATIONS TO BE PURCHASED BY AQUA?

A. The fair market value of DELCORA's wastewater operations is \$308,194,006 as of February 20, 2020. The results of my appraisal and conclusions are summarized in the following table:

Table 4: Conclusion of Value for DELCORA

Valuation Approach	Indicated Value	Weight	Weighted Value
Cost	\$292,413,993	45%	\$131,586,297
Market	\$613,520,480	5%	\$30,676,024
Income	\$291,863,370	50%	\$145,931,685
Indicated Value		100%	\$308,194,006

Q. DID YOU MAKE ANY UPDATES TO YOUR APPRAISAL AFTER IT WAS SUBMITTED TO THE SELLER/BUYER, AND IF SO, WHAT WAS THE UPDATE, WHEN WAS IT MADE, AND WHY WAS IT NECESSARY?

A. I did not update or revise my appraisal after it was submitted to the Seller.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes. However, I reserve the right to supplement my testimony as additional issues and facts arise during the course of the proceeding.

Summary

Dylan is an experienced consultant and a Certified Rate of Return Analyst (CRRA) and Certified Valuation Analyst (CVA). He has served as a consultant for investor-owned and municipal utilities and authorities for 11 years. Dylan has extensive experience in rate of return analyses, class cost of service, rate design, and valuation for regulated public utilities. He has testified as an expert witness in the subjects of rate of return, cost of service, rate design, and valuation before 19 regulatory commissions in the U.S., one Canadian province, and an American Arbitration Association panel.

He also maintains the benchmark index against which the Hennessy Gas Utility Mutual Fund performance is measured.

Areas of Specialization

- | | | |
|----------------------------|-----------------------|-------------------|
| ■ Regulation and Rates | ■ Financial Modeling | ■ Rate of Return |
| ■ Utilities | ■ Valuation | ■ Cost of Service |
| ■ Mutual Fund Benchmarking | ■ Regulatory Strategy | ■ Rate Design |
| ■ Capital Market Risk | ■ Rate Case Support | |

Recent Expert Testimony Submission/Apearances

Jurisdiction	Topic
■ Massachusetts Department of Public Utilities	Rate of Return
■ New Jersey Board of Public Utilities	Rate of Return
■ Hawaii Public Utilities Commission	Cost of Service, Rate Design
■ South Carolina Public Service Commission	Return on Common Equity
■ American Arbitration Association	Valuation

Recent Assignments

- Provided expert testimony on the cost of capital for ratemaking purposes before numerous state utility regulatory agencies
- Maintains the benchmark index against which the Hennessy Gas Utility Mutual Fund performance is measured
- Sponsored valuation testimony for a large municipal water company in front of an American Arbitration Association Board to justify the reasonability of their lease payments to the City
- Co-authored a valuation report on behalf of a large investor-owned utility company in response to a new state regulation which allowed the appraised value of acquired assets into rate base

Recent Publications and Speeches

- Co-Author of: "Decoupling, Risk Impacts and the Cost of Capital", co-authored with Richard A. Michelfelder, Ph.D., Rutgers University and Pauline M. Ahern. The Electricity Journal, March, 2020.
- Co-Author of: "Decoupling Impact and Public Utility Conservation Investment", co-authored with Richard A. Michelfelder, Ph.D., Rutgers University and Pauline M. Ahern. Energy Policy Journal, 130 (2019), 311-319.
- "Establishing Alternative Proxy Groups", before the Society of Utility and Regulatory Financial Analysts: 51st Financial Forum, April 4, 2019, New Orleans, LA.
- "Past is Prologue: Future Test Year", Presentation before the National Association of Water Companies 2017 Southeast Water Infrastructure Summit, May 2, 2017, Savannah, GA.
- Co-author of: "Comparative Evaluation of the Predictive Risk Premium Model™, the Discounted Cash Flow Model and the Capital Asset Pricing Model", co-authored with Richard A. Michelfelder, Ph.D., Rutgers University, Pauline M. Ahern, and Frank J. Hanley, The Electricity Journal, May, 2013.
- "Decoupling: Impact on the Risk and Cost of Common Equity of Public Utility Stocks", before the Society of Utility and Regulatory Financial Analysts: 45th Financial Forum, April 17-18, 2013, Indianapolis, IN.

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Regulatory Commission of Alaska				
Alaska Power Company	07/16	Alaska Power Company	Docket No. TA857-2	Rate of Return
Alberta Utilities Commission				
AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.	01/20	AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.	2021 Generic Cost of Capital, Proceeding ID. 24110	Rate of Return
Arizona Corporation Commission				
Arizona Water Company	12/19	Arizona Water Company – Western Group	Docket No. W01445A-19-0278	Rate of Return
Arizona Water Company	08/18	Arizona Water Company – Northern Group	Docket No. W01445A-18-0164	Rate of Return
Colorado Public Utilities Commission				
Summit Utilities, Inc.	04/18	Colorado Natural Gas Company	Docket No. 18AL-0305G	Return on Equity
Atmos Energy Corporation	06/17	Atmos Energy Corporation	Docket No. 17AL-0429G	Return on Equity
Delaware Public Service Commission				
Tidewater Utilities, Inc.	11/13	Tidewater Utilities, Inc.	Docket No. 13-466	Capital Structure
Hawaii Public Utilities Commission				
Lanai Water Company, Inc.	12/19	Lanai Water Company, Inc.	Docket No. 2019-0386	Cost of Service / Rate Design
Manele Water Resources, LLC	8/19	Manele Water Resources, LLC	Docket No. 2019-0311	Cost of Service / Rate Design
Kaupulehu Water Company	02/18	Kaupulehu Water Company	Docket No. 2016-0363	Rate of Return
Aqua Engineers, LLC	05/17	Puhi Sewer & Water Company	Docket No. 2017-0118	Cost of Service / Rate Design
Hawaii Resources, Inc.	09/16	Laie Water Company	Docket No. 2016-0229	Cost of Service / Rate Design
Illinois Commerce Commission				
Utility Services of Illinois, Inc.	11/17	Utility Services of Illinois, Inc.	Docket No. 17-1106	Cost of Service / Rate Design
Aqua Illinois, Inc.	04/17	Aqua Illinois, Inc.	Docket No. 17-0259	Rate of Return
Utility Services of Illinois, Inc.	04/15	Utility Services of Illinois, Inc.	Docket No. 14-0741	Rate of Return
Indiana Utility Regulatory Commission				
Aqua Indiana, Inc.	03/16	Aqua Indiana, Inc. Aboite Wastewater Division	Docket No. 44752	Rate of Return
Twin Lakes, Utilities, Inc.	08/13	Twin Lakes, Utilities, Inc.	Docket No. 44388	Rate of Return
Kansas Corporation Commission				
Atmos Energy	07/19	Atmos Energy	19-ATMG-525-RTS	Rate of Return
Louisiana Public Service Commission				
Louisiana Water Service, Inc.	06/13	Louisiana Water Service, Inc.	Docket No. U-32848	Rate of Return
Maryland Public Service Commission				

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
FirstEnergy, Inc.	08/18	Potomac Edison Company	Case No. 9490	Rate of Return
Massachusetts Department of Public Utilities				
Unitil Corporation	12/19	Fitchburg Gas & Electric Co. (Elec.)	D.P.U. 19-130	Rate of Return
Unitil Corporation	12/19	Fitchburg Gas & Electric Co. (Gas)	D.P.U. 19-131	Rate of Return
Liberty Utilities	07/15	Liberty Utilities d/b/a New England Natural Gas Company	Docket No. 15-75	Rate of Return
Mississippi Public Service Commission				
Atmos Energy	03/19	Atmos Energy	Docket No. 2015-UN-049	Capital Structure
Atmos Energy	07/18	Atmos Energy	Docket No. 2015-UN-049	Capital Structure
Missouri Public Service Commission				
Indian Hills Utility Operating Company, Inc.	10/17	Indian Hills Utility Operating Company, Inc.	Case No. SR-2017-0259	Rate of Return
Raccoon Creek Utility Operating Company, Inc.	09/16	Raccoon Creek Utility Operating Company, Inc.	Docket No. SR-2016-0202	Rate of Return
New Jersey Board of Public Utilities				
Aqua New Jersey, Inc.	12/18	Aqua New Jersey, Inc.	Docket No. WR18121351	Rate of Return
Middlesex Water Company	10/17	Middlesex Water Company	Docket No. WR17101049	Rate of Return
Middlesex Water Company	03/15	Middlesex Water Company	Docket No. WR15030391	Rate of Return
The Atlantic City Sewerage Company	10/14	The Atlantic City Sewerage Company	Docket No. WR14101263	Cost of Service / Rate Design
Middlesex Water Company	11/13	Middlesex Water Company	Docket No. WR1311059	Capital Structure
North Carolina Utilities Commission				
Aqua North Carolina, Inc.	12/19	Aqua North Carolina, Inc.	Docket No. W-218 Sub 526	Rate of Return
Carolina Water Service, Inc.	06/19	Carolina Water Service, Inc.	Docket No. W-354 Sub 364	Rate of Return
Carolina Water Service, Inc.	09/18	Carolina Water Service, Inc.	Docket No. W-354 Sub 360	Rate of Return
Aqua North Carolina, Inc.	07/18	Aqua North Carolina, Inc.	Docket No. W-218 Sub 497	Rate of Return
Public Utilities Commission of Ohio				
Aqua Ohio, Inc.	05/16	Aqua Ohio, Inc.	Docket No. 16-0907-WW-AIR	Rate of Return
Pennsylvania Public Utility Commission				
Valley Energy, Inc.	07/19	C&T Enterprises	Docket No. R-2019-3008209	Rate of Return
Wellsboro Electric Company	07/19	C&T Enterprises	Docket No. R-2019-3008208	Rate of Return
Citizens' Electric Company of Lewisburg	07/19	C&T Enterprises	Docket No. R-2019-3008212	Rate of Return
Steelton Borough Authority	01/19	Steelton Borough Authority	Docket No. A-2019-3006880	Valuation

SPONSOR	DATE	CASE/APPLICANT	DOCKET No.	SUBJECT
Mahoning Township, PA	08/18	Mahoning Township, PA	Docket No. A-2018-3003519	Valuation
SUEZ Water Pennsylvania Inc.	04/18	SUEZ Water Pennsylvania Inc.	Docket No. R-2018-000834	Rate of Return
Columbia Water Company	09/17	Columbia Water Company	Docket No. R-2017-2598203	Rate of Return
Veolia Energy Philadelphia, Inc.	06/17	Veolia Energy Philadelphia, Inc.	Docket No. R-2017-2593142	Rate of Return
Emporium Water Company	07/14	Emporium Water Company	Docket No. R-2014-2402324	Rate of Return
Columbia Water Company	07/13	Columbia Water Company	Docket No. R-2013-2360798	Rate of Return
Penn Estates Utilities, Inc.	12/11	Penn Estates, Utilities, Inc.	Docket No. R-2011-2255159	Capital Structure / Long-Term Debt Cost Rate
South Carolina Public Service Commission				
Blue Granite Water Co.	12/19	Blue Granite Water Company	Docket No. 2019-292-WS	Rate of Return
Carolina Water Service, Inc.	02/18	Carolina Water Service, Inc.	Docket No. 2017-292-WS	Rate of Return
Carolina Water Service, Inc.	06/15	Carolina Water Service, Inc.	Docket No. 2015-199-WS	Rate of Return
Carolina Water Service, Inc.	11/13	Carolina Water Service, Inc.	Docket No. 2013-275-WS	Rate of Return
United Utility Companies, Inc.	09/13	United Utility Companies, Inc.	Docket No. 2013-199-WS	Rate of Return
Utility Services of South Carolina, Inc.	09/13	Utility Services of South Carolina, Inc.	Docket No. 2013-201-WS	Rate of Return
Tega Cay Water Services, Inc.	11/12	Tega Cay Water Services, Inc.	Docket No. 2012-177-WS	Capital Structure
Virginia State Corporation Commission				
WGL Holdings, Inc.	7/18	Washington Gas Light Company	PUR-2018-00080	Rate of Return
Atmos Energy Corporation	5/18	Atmos Energy Corporation	PUR-2018-00014	Rate of Return
Aqua Virginia, Inc.	7/17	Aqua Virginia, Inc.	PUR-2017-00082	Rate of Return
Massanutten Public Service Corp.	08/14	Massanutten Public Service Corp.	PUE-2014-00035	Rate of Return / Rate Design

Valuation Engagements:

SPONSOR	DATE	ASSETS VALUED	DESCRIPTION
Delaware County Regional Water Quality Control Authority	2/20	Wastewater Operations	Authored Valuation Report, which will be a part of an Act 12 Filing.
Washington County Water System, NC	2/20	Water Operations	Authored Valuation Report for internal purposes.
Egg Harbor City, NJ	2/20	Water Operations	Authored Valuation Report for internal purposes.
City of Ashtabula, OH	11/19	Wastewater Operations	Authored Valuation Report for internal purposes.
Steelton Water Authority	6/18	Water Operations	Authored Valuation Report, which will be a part of an Act 12 Filing.

SPONSOR	DATE	ASSETS VALUED	DESCRIPTION
Block Island Power Company	4/18	Electric Operations	Authored Valuation Report for internal purposes.
Mahoning Township, PA	9/17	Water and Sewer Assets	Authored Valuation Report, which is part of Act 12 Filing.
Atmos Energy Corporation	9/16	Intrastate Natural Gas Pipeline	Authored Valuation for internal purposes.
Village of Glenview, IL (North Maine Utilities)	7/14	Water and Sewer Assets	Co-Authored Valuation Report, which was part of House Bill 1379 Filing (similar to PA Act 12).
Springfield Township, PA	8/14	Sewer Assets	Co-Authored Valuation report for internal purposes.
Erie City Water Authority, Erie, PA	12/13	Water Assets	Sponsored Valuation Testimony in Arbitration Hearing.
City of Allentown, PA	12/12	Water and Sewer Assets	Assisted in the generation of Valuation Report.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

AQUA STATEMENT NO. 9-R

**REBUTTAL TESTIMONY OF
DYLAN W. D'ASCENDIS**

October 20, 2020

1 **REBUTTAL TESTIMONY OF**
2 **DYLAN W. D'ASCENDIS**

3 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.**

4 A. My name is Dylan W. D'Ascendis. My business address is 3000 Atrium Way, Suite 241,
5 Mount Laurel, NJ 08054.

6 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

7 A. I am employed by ScottMadden, Inc. ("ScottMadden") as Director.

8 **Q. ARE YOU THE SAME DYLAN W. D'ASCENDIS WHO PREVIOUSLY**
9 **SUBMITTED PREPARED DIRECT TESTIMONY IN THIS PROCEEDING?**

10 A. Yes. ScottMadden is the Utility Valuation Expert ("UVE") for the Delaware County
11 Regional Water Quality Control Authority ("DELCORA"). I prepared direct testimony
12 which is identified as Aqua Statement No. 9 and am the sponsoring witness for the
13 ScottMadden Fair Market Value Appraisal of the DELCORA wastewater system, which
14 was included with the Application as Application Exhibit R.

15 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

16 A. My Rebuttal Testimony responds to the direct testimony of Mr. Ralph C. Smith, witness
17 for the Office of Consumer Advocate ("OCA") proposing adjustments to my Appraisal.

18 **RESPONSE TO OCA WITNESS SMITH**

19 **Q. PLEASE SUMMARIZE MR. SMITH'S DIRECT TESTIMONY REGARDING**
20 **YOUR VALUATION OF DELCORA.**

21 A. Mr. Smith takes issue with my cost, income, and market approaches. After adjustments,
22 Mr. Smith finds my fair market value to be \$218,170,000.¹ Although Mr. Smith makes

¹ Exhibit RCS-1.

1 “certain adjustments to the Buyer’s and Seller’s valuation approaches,”² he ultimately
2 finds the \$276.5 million purchase price to be appropriate, which is Aqua Pennsylvania
3 Wastewater’s (“Aqua”) proposed value in this proceeding.

4 **Q. PLEASE SUMMARIZE MR. SMITH’S ADJUSTMENTS TO YOUR COST**
5 **APPROACH.**

6 A. Mr. Smith specifically adjusts the useful lives for Account 362.2 Special Collecting
7 Structures, from 75 years to 40 years, and Accounts 380.3 Treatment and Disposal
8 Equipment – Pump Stations and 380.4 Treatment and Disposal Equipment, from 50 years
9 to 40 years.³ Mr. Smith’s adjustments are based on the depreciation rates approved in
10 Aqua’s last wastewater utility base rate case.

11 **Q. WHAT IS YOUR RESPONSE TO MR. SMITH’S ADJUSTMENTS TO YOUR**
12 **COST APPROACH?**

13 A. In my Direct Testimony I noted the determination of the useful lives was based on the
14 System of Accounts for Water and Wastewater Utilities – with 200 or More Connections
15 as published by the Public Utility Commission of Texas, and previous Pennsylvania
16 Public Utility Commission (“Commission” or “PUC”) guidance.⁴ Specifically, in Docket
17 No. A-2019-3008491, the Commission found a useful life of 75 years to be appropriate
18 for mains.⁵ Because Account 362.2 Special Collecting Structures, like mains, function to
19 regulate the flow of water and wastewater, I consider them to be functionally equivalent
20 to mains, and therefore relied on Commission guidance in that instance, finding the
21 Commission’s judgment in Docket No. A-2019-3008491 germane to this proceeding.

² Direct Testimony of Ralph C. Smith, at 10.

³ Direct Testimony of Ralph C. Smith, at 60.

⁴ Direct Testimony of Dylan W. D’Ascendis, at 13, footnote 3.

⁵ Docket No. A-2019-3008491, Opinion and Order, at 45.

Regarding Accounts 380.3 and 380.4, as shown on page 5 of System of Accounts for Water and Wastewater Utilities – with 200 or More Connections, the useful lives listed for account “380 Outfall sewer lines” is 50 years. While I recognize Aqua used useful lives of 40 years for account 380 in their depreciation study, my valuation study is not bound by Aqua’s decisions. I used a source of information that is both readily available and supported by a state regulatory jurisdiction. As discussed in my Direct Testimony,⁶ the value derived using the cost approach is based solely on DELCORA’s assets (*i.e.* exclusive of ownership by Aqua). Mr. Smith has not presented any evidence whatsoever to call into question the integrity of the document I relied on or explained why collection structures are not operationally similar to water mains. As such, I do not find Mr. Smith’s adjustments appropriate and have not incorporated them in my cost approach.

Q. PLEASE SUMMARIZE MR. SMITH’S ADJUSTMENTS TO YOUR INCOME APPROACH

A. Instead of relying on a capitalization rate in determining the terminal value of a firm’s net cash flow, Mr. Smith calculates the terminal value as the estimated Net Plant less Accumulated Deferred Income Taxes (“ADIT”) for the year 2049.⁷

Q. DO YOU AGREE WITH MR. SMITH’S CALCULATION OF THE TERMINAL VALUE IN HIS ADJUSTMENT TO YOUR INCOME APPROACH?

A. No. Mr. Smith provides no theoretical or academic support for the use of projected net plant less ADIT as the terminal value for a going concern. The following citations of valuation literature supports the calculation of the terminal value as I have done it

⁶ Direct Testimony of Dylan W. D’Ascendis, at 13,

⁷ Direct Testimony of Ralph C. Smith, at 61.

(capitalizing terminal year cash flow and discounting that to present value). The National Association of Certified Valuers and Analysts and Institute of Business Appraisers state the following about the calculation of a terminal value:

The terminal value represents the value of a company in the terminal year of an earnings forecast, or what the company will be worth in x number of years. There are several methods of estimating terminal value, including price/earnings and other multiples. The most frequently used method is to capitalize terminal year earnings using an appropriate capitalization rate and then discount the results to a present value.⁸

The American Society of Appraisers also discuss the calculation of a terminal value in the income approach:

The next step, which is sometimes considered the salvage value or residual value, is used to derive the present value of the operations in the last period of the forecast – *estimate the terminal value of the asset* (basic step 7). An analysis concerning the life of the operations must be developed. If the asset has a limited life (the operations end at the last period in the forecast), the terminal value is the present value of the net salvage or scrap value of the operations in the future. If the asset is a business whose life may be very long, the terminal value is the present value of the capitalized future value; the capitalized value, in a future period, reflects the value of the operations into perpetuity. In both cases, the future value for the last forecast period is discounted to present value at the appraisal date.⁹

Finally, specific to water utilities, Hayward in Valuing a Water Utility states:

In situations in which the investment is assumed to have a finite life, the estimated liquidation or salvage value at the end of the finite life is the terminal value. The second method, the generally preferred one, is capitalization of cash flows expected in the year following a specific projection period, usually by the Gordon Growth Model.¹⁰

⁸ Consultants' Training Institute, *Business Valuations: Fundamentals, Techniques, and Theory* (2014), at Chapter 5, page 3.

⁹ American Society of Appraisers, *Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets*, 3rd Edition, 2011, at 134.

¹⁰ David L. Hayward, Valuing a Water Utility, Revised and Updated Third Edition, Infinity Publishing, 2017, at 187. ("Hayward")

1 In view of the above and given DELCORA's operations are assumed to be a going
2 concern (*i.e.*, operation into perpetuity),¹¹ it is appropriate to rely on the capitalization of
3 cash flows as I have done in my income approach.

4 **Q. PLEASE SUMMARIZE MR. SMITH'S CONCERNS WITH YOUR MARKET**
5 **APPROACH.**

6 A. Mr. Smith notes several concerns with my market approach, specifically my Comparable
7 Sales Method based on cost per connection, noting that it lacks "demonstrated reliability
8 and use in actual transactions and produces extremely inflated valuation result."¹²

9 **Q. WHAT IS YOUR RESPONSE TO MR. SMITH'S CONCERNS WITH YOUR**
10 **MARKET APPROACH?**

11 A. The Comparable Sales Method is one of the most intuitive methods of valuation. For
12 example, any homeowner would want to know the recent sales history of other homes on
13 their block before putting their home up for sale. It is no different for utilities.

14 Additionally, the Comparable Sales Method has also been noted in numerous
15 publications, including by Mr. Smith on page 55 of his direct testimony, quoting The
16 American Society of Appraisers. Additionally, Hayward notes that market-based
17 approaches are "[A] general way of determining a value indication of a business, business
18 ownership interest, security, or intangible asset by using one or more methods that
19 compare the subject to similar businesses, business ownership interests, securities, or
20 intangible assets that have been sold."¹³

¹¹ See, Direct Testimony of Ralph C. Smith, at 19; noting that Aqua will merge its system with that of DELCORAs.

¹² Direct Testimony of Ralph C. Smith, at 63.

¹³ Hayward, at 177; quoting Shannon P. Pratt, Business Valuation Body of Knowledge, (Hoboken, NJ: John Wiley & Sons, Inc., 2003), p. 76.

1 Regarding my use of purchase price per connection, I note that it is one of the
2 most readily accessible methods of market comparison for water and wastewater
3 transactions. As shown in a recent industry report of water and wastewater transactions,
4 the only multiple shown is the purchase price and number of customers:

Table 1: Regulatory Research Associates (“RRA”) List of Water and Wastewater Transactions¹⁴

Selected Pennsylvania fair market value transactions						
Acquisition completion date	Selling municipality	buyer	System type	water utility value (\$M)	Transaction	Customer additions
PENDING	Lower Makefield Township		Essential Utilities	Wastewater	53.0	11,000
PENDING	Upper Pottsgrove Twsp		American Water	Wastewater	13.8	1,600
PENDING	Royersford Borough		American Water	Wastewater	13.0	1,600
PENDING	Valley Township		American Water	Water/ WW	21.3	4,800
PENDING	Borough of Kane Authority		American Water	Wastewater	17.5	2,100
PENDING	Delaware County Regional Water Quality Control Authority		Essential Utilities	Wastewater	276.5	165,000
PENDING	New Garden Township		Essential Utilities	Wastewater	29.5	10,500
06/22/20	East Norriton Township		Essential Utilities	Wastewater	21.0	4,950
04/09/20	Felton Borough		The York Water Co.	Wastewater	0.9	130
12/19/19	Cheltenham Township		Essential Utilities	Wastewater	50.3	10,200
12/06/19	Borough of Phoenixville		Essential Utilities	Water	3.5	536
10/24/19	Exeter Township		American Water	Wastewater	93.5	9,000
10/09/19	Steelton		American Water	Water	21.8	2,400
08/29/19	Jacobus Borough		The York Water Co.	Wastewater	2.1	700
07/24/19	Borough of Turbotville		American Water	Water/ WW	1.0	610
04/03/19	Mahoning Township		SUEZ Water	Water/ WW	9.5	1,200
03/07/19	Sadsbury Township		American Water	Wastewater	8.6	1,000
12/12/18	East Bradford Township		Essential Utilities	Water	5.0	1,250
07/25/18	Limmerick, PA		Essential Utilities	Wastewater	75.0	5,400
12/18/17	McKeesport, PA		American Water	Wastewater	159.0	31,000
As of Sept. 28, 2020.						
WW = wastewater.						
Source: S&P Global Market Intelligence						

Hayward discusses acceptable multiples for use in the Guideline Merged and Acquired Company (“M&A”) method:

The M&A method uses various benchmarks *e.g.*, number of customers, multiples of book value, purchase price/rate base from “comparable” transactions, capital/EBITDA, sales/EBITDA, and capital/EBIT.¹⁵

¹⁴ RRA Water Advisory, Consolidation of Municipal Systems Accelerates with use of Fair Market Value, September 29, 2020.

¹⁵ Hayward, at 177.

1 Please note that the first two benchmarks mentioned by Hayward are number of
2 customers and multiples of book value, both of which are used in my market approach.
3 Mr. Smith offers no support for his conclusory statement that using cost per connection is
4 not reliable. Moreover, in my appraisal I have taken into account the results of the
5 market approach by applying a 5% weighting. Because Mr. Smith has provided no
6 evidence for his support that the Comparable Sales Method, and specifically the purchase
7 price per customer multiple, is unreliable and lacks application in actual transactions, I do
8 not find the need to make any adjustments to my market approach.

9 **Q. HAVE YOU MADE ANY ADJUSTMENTS TO YOUR FAIR MARKET VALUE**
10 **ANALYSIS BASED ON ANY OF MR. SMITH'S CRITICISMS?**

11 A. No, I have not.

12 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

13 A. Yes. However, I reserve the right to supplement my testimony as additional issues and
14 facts arise during the course of the proceeding.

Application of Aqua Pennsylvania Wastewater, Inc.
Pa. PUC Docket No. A-2019-3015173
Answers of Lower Chichester Township
To Interrogatories of Aqua Pennsylvania Wastewater Inc.
Set XII

Aqua-XII-8. Ref: Page 6, lines 13-14: Identify and describe the basis for your understanding with respect to Aqua's non-eligibility for most government grants. Provide all documents that support your answer.

Answer

The statement is based on the advice of counsel who advises that, for example, that low-cost funding for sewage treatment plants and related facilities under the Clean Water State Revolving Fund is available only to government units. 25 Pa. Code § 965.2.

Responsible witness: Joseph Possenti, Jr.

Dated: October 13, 2020

Application of Aqua Pennsylvania Wastewater, Inc.
Pa. PUC Docket No. A-2019-3015173
Answers of Lower Chichester Township
To Interrogatories of Aqua Pennsylvania Wastewater Inc.
Set XII

Aqua-XII-2. To your knowledge, is there a prohibition in the current Lower Chichester-DELCORA Service Agreement that prevents DELCORA from fulfilling its contractual obligations thereunder via agents or subcontractors of DELCORA?

Statement of counsel

The question was directed to Mr. Possenti. The response is being provided by Mr. Possenti based on his understanding of the relationship with DELCORA as it relates to his duties with Lower Chichester Township, and not as a legal opinion.

Answer

I do not know if the contract prevents DELCORA from using agents or subcontractors to fulfill its contractual obligations.

Responsible witness: Joseph Possenti, Jr.
Dated: October 13, 2020

Application of Aqua Pennsylvania Wastewater, Inc.
Pa. PUC Docket No. A-2019-3015173
Answers of Lower Chichester Township
To Interrogatories of Aqua Pennsylvania Wastewater Inc.
Set XII

Aqua-XII-6. Ref: Page 9, Lines 10-11: Identify and describe the bases and rationale for concluding that “Aqua ownership would greatly increase our rates and not provide any benefits to the township or our customers”. Provide all documents, calculations, spreadsheets, studied and other analyses that support your answer.

Answer

The information is discussed in my testimony. Also see the response to Aqua-XII-4, above. I did not perform any calculations, or prepare spreadsheets or other analyses, other than looking at the projections provided by DELCORA and Aqua in Municipal Protestants Exhibit 1.

Responsible witness: Joseph Possenti, Jr.
Dated: October 13, 2020

Application of Aqua Pennsylvania Wastewater, Inc.
Pa. PUC Docket No. A-2019-3015173
Answers of Lower Chichester Township
To Interrogatories of Aqua Pennsylvania Wastewater Inc.
Set XII

Aqua-XII-7. Identify and describe all of your education, training and experience in connection with setting and designing rates for water and wastewater utilities. Provide all documents that support your answer.

Answer

None.

Responsible witness: Joseph Possenti, Jr.

Dated: October 13, 2020

Application of Aqua Pennsylvania Wastewater, Inc.
Pa. PUC Docket No. A-2019-3015173
Answers of Edgmont Township
To Interrogatories of Aqua Pennsylvania Wastewater Inc.
Set XI

Aqua-XI-8. Ref: Page 6, lines 11-12: Identify and describe the basis for your understanding with respect to Aqua's eligibility/non-eligibility for most government grants. Provide all documents that support your answer.

Answer

The statement is based on the advice of counsel who advises, for example, that low-cost funding for sewage treatment plants and related facilities under the Clean Water State Revolving Fund is available only to government units. 25 Pa. Code § 965.2.

Responsible witness: Samantha Reiner
Dated: October 20, 2020

Application of Aqua Pennsylvania Wastewater, Inc.
Pa. PUC Docket No. A-2019-3015173
Answers of Edgmont Township
To Interrogatories of Aqua Pennsylvania Wastewater Inc.
Set XI

Aqua-XI-9. Ref: Page 6, lines 11-12: Identify and describe those government grants for which Aqua would be eligible. Provide all documents that support your answer.

Answer

I do not know the identity of specific grants that might be available to DELCORA that would not be available to Aqua. See also the response to Aqua-XI-8.

Responsible witness: Samantha Reiner

Dated: October 20, 2020

Application of Aqua Pennsylvania Wastewater, Inc.
Pa. PUC Docket No. A-2019-3015173
Answers of Edgmont Township
To Interrogatories of Aqua Pennsylvania Wastewater Inc.
Set XI

Aqua-XI-2. To your knowledge, is there a prohibition in the current Edgmont-DELCORA Service Agreement that prevents DELCORA from fulfilling its contractual obligations thereunder via agents or subcontractors of DELCORA?

Statement of counsel

The question was directed to Ms. Reiner. The response is being provided by Ms. Reiner based on her understanding of the relationship with DELCORA as it relates to her duties with Edgmont Township, and not as a legal opinion.

Answer

I don't know if the contract prevents DELCORA from using agents or subcontractors to fulfill its contractual obligations.

Responsible witness: Samantha Reiner

Dated: October 20, 2020

Application of Aqua Pennsylvania Wastewater, Inc.
Pa. PUC Docket No. A-2019-3015173
Answers of Edgmont Township
To Interrogatories of Aqua Pennsylvania Wastewater Inc.
Set XI

Aqua-XI-7. Identify and describe all of your education, training and experience in connection with setting and designing rates for water and wastewater utilities. Provide all documents that support your answer.

Answer

As a Professional Municipal Manager, I do not set nor do I design rates for water and wastewater utilities.

Responsible witness: Samantha Reiner

Dated: October 20, 2020

Application of Aqua Pennsylvania Wastewater, Inc.
Pa. PUC Docket No. A-2019-3015173
Answers of Southwest Delaware County Municipal Authority
To Interrogatories of Aqua Pennsylvania Wastewater Inc.
Set XIII

Aqua-XIII-1. Ref: Page 8, lines 13-15: Identify and describe all studies, analyses, evaluations, etc. you have conducted or supervised to support your statement that “. . .Aqua’s rates are likely to be higher because of higher capital costs, overheads, and taxes.”. Provide all documents that support your answer.

Answer

I have not conducted or supervised any studies, analyses, evaluations, etc.

Responsible witness: Cecelia Nelson

Dated: October 13, 2020

Application of Aqua Pennsylvania Wastewater, Inc.
Pa. PUC Docket No. A-2019-3015173
Answers of Southwest Delaware County Municipal Authority
To Interrogatories of Aqua Pennsylvania Wastewater Inc.
Set XIII

Aqua-XIII-4. Ref: Page 10, Lines 9-10: Identify and describe your understanding with respect to Aqua's obligations when setting rates. Provide all documents that support your answer.

Answer

My only understanding with respect to Aqua's obligations when setting rates is the requirement of Aqua to comply with the PUC's rules and regulations.

Responsible witness: Cecelia Nelson

Dated: October 13, 2020

Application of Aqua Pennsylvania Wastewater, Inc.
Pa. PUC Docket No. A-2019-3015173
Answers of Southwest Delaware County Municipal Authority
To Interrogatories of Aqua Pennsylvania Wastewater Inc.
Set XIII

Aqua-XIII-5. Ref: Page 10, Line 12: To you [sic] knowledge, is there a process applicable to the setting of rate [sic] by and for Aqua? Explain and provide all documents that support your answer.

Answer

See the response to Aqua XIII-4. I have no specific knowledge of such a process.

Responsible witness: Cecelia Nelson

Dated: October 13, 2020

Application of Aqua Pennsylvania Wastewater, Inc.
Pa. PUC Docket No. A-2019-3015173
Answers of Southwest Delaware County Municipal Authority
To Interrogatories of Aqua Pennsylvania Wastewater Inc.
Set XIII

Aqua-XIII-7. To your knowledge, is there a prohibition in the current Authority-DELCORA Service Agreement that prevents DELCORA from fulfilling its contractual obligations thereunder via agents or subcontractors of DELCORA? Explain and provide all documents that support your answer.

Statement of counsel

The question was directed to Ms. Nelson. The response is being provided by Ms. Nelson based on her understanding of the relationship with DELCORA as it relates to her duties with SWDCMA, and not as a legal opinion.

Answer

The Agreement of Service only refers to DELCORA fulfilling its contractual obligations to operate the system. It does not state “DELCORA via agents or subcontractors” fulfilling the contractual obligations. Specifically, Section 7.01 of the Agreement states: “DELCORA will exercise best efforts to continuously operate, maintain and repair ‘The System’ or cause it to be maintained and repaired so that it will be at all times in efficient operating condition and in compliance with the standards prescribed by all appropriate regulatory agencies for the purpose of this Agreement.”

Responsible witness: Cecelia Nelson

Dated: October 13, 2020

Application of Aqua Pennsylvania Wastewater, Inc.
Pa. PUC Docket No. A-2019-3015173
Answers of Upland Borough
To Interrogatories of Aqua Pennsylvania Wastewater Inc.
Set XIV

Aqua-XIV-2. To your knowledge, is there a prohibition in the current Upland-DELCORA Service Agreement that prevents DELCORA from fulfilling its contractual obligations thereunder via agents or subcontractors of DELCORA?

Statement of counsel

The question was directed to Mr. Ciach. The response is being provided by Mr. Ciach based on his understanding of the relationship with DELCORA as it relates to his duties with Upland, and not as a legal opinion.

Answer

Yes.

Responsible witness: Michael J. Ciach
Dated: October 13, 2020

Application of Aqua Pennsylvania Wastewater, Inc.
Pa. PUC Docket No. A-2019-3015173
Answers of Upland Borough
To Interrogatories of Aqua Pennsylvania Wastewater Inc.
Set XIV

Aqua-XIV-7. Please provide any rate analysis Upland has performed that contrasts the cost of wastewater service from DELCORA versus the cost of service provided by Aqua. Provide all documents that support your answer.

Answer

Upland did not perform any rate analysis

Responsible witness: Michael J. Ciach
Dated: October 13, 2020

Application of Aqua Pennsylvania Wastewater, Inc.
Pa. PUC Docket No. A-2019-3015173
Answers of Upland Borough
To Interrogatories of Aqua Pennsylvania Wastewater Inc.
Set XIV

Aqua-XIV-4. Identify and describe all of your education, training and experience in connection with setting and designing rates for water and wastewater utilities. Provide all documents that support your answer.

Answer

I have no education, training, or experience specific to setting and designing rates for wastewater utilities.

Responsible witness: Michael J. Ciach
Dated: October 13, 2020

I&E Statement No. 1
Witness: Lisa A. Gumby

**APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC. PURSUANT
TO SECTIONS 507, 1102 AND 1329 OF THE PUBLIC UTILITY CODE FOR
APPROVAL OF ITS ACQUISITION OF THE WASTEWATER SYSTEM
ASSETS OF THE DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY**

Docket No. A-2019-3015173

Direct Testimony

of

**Lisa A. Gumby
Bureau of Investigation and Enforcement**

Concerning:

**Public Benefit Concerns
Irrevocable Trust Arrangement
Cost of Service Study**

TABLE OF CONTENTS

INTRODUCTION	1
I&E RECOMMENDATION	4
GENERAL OVERVIEW OF EXISTING DELCORA SYSTEM	6
PUBLIC BENEFIT CONCERNS	8
IRREVOCABLE TRUST ARRANGEMENT	10
COST OF SERVICE STUDY	18
OVERALL RECOMMENDATION	25

1 **INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Lisa A. Gumby. My business address is Pennsylvania Public Utility
4 Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg,
5 PA 17120.

6

7 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

8 A. I am employed by the Pennsylvania Public Utility Commission (“Commission” or
9 “PUC”) in the Bureau of Investigation and Enforcement (“I&E”) as the Fixed
10 Utility Manager in I&E’s Technical Division.

11

12 **Q. PLEASE DESCRIBE THE ROLE OF I&E IN THIS PROCEEDING.**

13 A. I&E is responsible for protecting the public interest in proceedings before the
14 Commission. The I&E analysis in the proceeding is based on its responsibility to
15 represent the public interest. This responsibility requires balancing the interest of
16 ratepayers, the utility company, and the regulated community as a whole.

17

18 **Q. WHAT IS YOUR EDUCATIONAL AND EMPLOYMENT EXPERIENCE?**

19 A. An outline of my education and employment experience is attached as
20 Appendix A.

1 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

2 A. The purpose of my direct testimony is to address regulatory issues relating to Aqua
3 Pennsylvania Wastewater Inc.'s ("Aqua" or "Company") petition for approval of
4 its acquisition of wastewater system assets of the Delaware County Regional
5 Water Authority ("DELCORA"). My testimony addresses public benefit issues,
6 the proposed irrevocable trust, and cost of service requirements for future rate
7 cases.

8
9 **Q. DOES YOUR DIRECT TESTIMONY INCLUDE AN EXHIBIT?**

10 A. Yes. I&E Exhibit No. 1 contains exhibits in support of my direct testimony.

11
12 **Q. WHAT IS AQUA REQUESTING IN THIS APPLICATION?**

13 A. According to Aqua witness Lucca, Aqua is making three primary requests. First,
14 under 66 Pa. C.S. § 1102 ("Section 1102"), Aqua is requesting approval to acquire
15 the DELCORA system and for the right to begin service in the areas currently
16 served by DELCORA. Additionally, under 66 Pa. C.S § 1329 ("Section 1329"),
17 Aqua is also requesting permission to utilize the fair market value to establish the
18 ratemaking rate base of DELCORA at \$276.5 million based upon a negotiated
19 purchase price. Finally, Aqua is also seeking Commission approval of its Asset
20 Purchase Agreement ("APA") with DELCORA, as well as a memorandum of
21 understanding ("MOU") between Aqua and DELCORA, and the assignment of

1 163 contracts under Section 507, 66 Pa. C.S. § 507 (Aqua Ex. U1, St. No. 1, pp. 4-
2 7).

3
4 **Q. WHY DOES AQUA NEED APPROVAL OF THE ACQUISITION UNDER**
5 **SECTION 1102?**

6 A. Section 1102 requires the Commission to issue a Certificate of Public
7 Convenience prior to the Company acquiring DELCORA's assets and providing
8 service in its service territory. The Commission will only grant a Certificate of
9 Public Convenience if it determines that such a certificate is "necessary or proper
10 for the service, accommodation, convenience or safety of the public."¹

11
12 **Q. WHAT DOES 66 Pa. C.S. § 1329 ALLOW?**

13 A. Section 1329 established that investor owned water and wastewater utilities may
14 use the fair market valuation of two utility valuation experts ("UVE") in the
15 acquisition of water and wastewater systems owned by a municipal corporation or
16 authority. Further, Section 1329 states that the ratemaking rate base of the selling
17 utility shall be the lesser of the negotiated purchase price or the fair market value
18 of the selling utility. Using the Section 1329 framework enables the investor
19 owned utility to establish the ratemaking rate base of the acquired property in the
20 same proceeding that it seeks to acquire the property.

¹ 66 Pa. C.S. § 1103(a).

1 **Q. WHAT DOES THE FAIR MARKET VALUE APPROACH REQUIRE?**

2 A. The fair market valuation approach dictates that once the buyer and the seller
3 agree to its use, they must engage the services of a licensed engineer to conduct an
4 assessment of the tangible assets of the seller. The licensed engineer assessment is
5 then presented to two UVE's, one to represent the buyer and one to represent the
6 seller, to conduct independent analyses based on the Uniform Standards of
7 Professional Appraisal Practice, employing the cost, market and income
8 approaches. The results of the UVEs' analyses are then incorporated into the
9 Section 1102 of the Code application submitted to the Commission for approval.²
10 For ratemaking purposes, the valuation will be the lesser of the fair market value
11 or the negotiated purchase price. Finally, Section 1329 allows the acquiring public
12 utility's post-acquisition improvement costs not recovered through a DSIC to be
13 deferred for book and ratemaking purposes.

14
15 **I&E RECOMMENDATION**

16 **Q. WHAT IS YOUR RECOMMENDATION REGARDING AQUA'S**
17 **APPLICATION TO ACQUIRE THE WASTEWATER SYSTEM ASSETS**
18 **OF DELCORA?**

19 A. For the reasons explained below, I recommend that if the Commission determines
20 to approve Aqua's Application, that it condition any approval of DELCORA's

² http://www.puc.pa.gov/filing_resources/issues_laws_regulations/section1329_applications.aspx

1 application on the following terms:

- 2 1. Closing should not occur until Aqua and DELCORA provide the
3 Commission with a guarantee that the pending litigation in Delaware
4 County Court, or in any other venue, will not change (1)
5 DELCORA's status as a bona fide seller and (2) will not result in
6 any change to the terms of the APA for which Aqua seeks approval
7 in this case;
- 8 2. To the extent that it relies upon Aqua issuing acquired customers'
9 bills that are lower than the applicable tariffed rates, Aqua and
10 DELCORA's proposal for an irrevocable trust should be rejected;
11 and
- 12 3. Aqua should provide a separate cost of service study for the
13 DELCORA system that segregates stormwater costs, identifies the
14 plant in service costs at the time the DELCORA system was
15 purchased, identifies the cost of any plant retirements, and identifies
16 the cost of any plant investments.

17 I will address the need for each of these conditions below after I provide a brief
18 overview of the DELCORA system for context.

1 **GENERAL OVERVIEW OF EXISTING DELCORA SYSTEM**

2 **Q. PROVIDE A BRIEF OVERVIEW OF THE DELCORA SYSTEM THAT**
3 **AQUA SEEKS TO ACQUIRE IN THIS CASE.**

4 A. The DELCORA system consists of 180 miles of gravity collection system mains
5 and related infrastructure, including 24 pumping stations. The system services 49
6 municipalities in Delaware and Philadelphia Counties and three small areas in
7 Chester County. The system has 16,000 customers consisting of municipal,
8 retail/wholesale, industrial, and commercial users. The daily flow through the
9 system is estimated at 52 million gallons per day ("MGD") based on an annual
10 average of 197,000 equivalent dwelling units ("EDU") serviced at the industry
11 standard of 262.5 gallons per EDU ($262.5 \times 197,000 = 51,712,500$ Gal/day). The
12 city of Chester's system, located in Delaware County, is also classified as a
13 combined sewer overflow ("CSO") system, as both sewage and storm flows are
14 collected and combined before transfer to a treatment facility. The system is
15 divided into two service areas: Eastern and Western. The majority of the flows
16 from the Eastern section are transferred to the Southwest Water Pollution Control
17 facility ("SWPCP") owned and operated by the Philadelphia Water Department
18 ("PWD"). The majority of the western flows are transferred to the Western
19 Regional Treatment Plant ("WRTP"), owned and operated by DELCORA (Aqua
20 Ex. W2, St. No. 6, pp. 3-4).

21 Since a portion of the system accepts storm water flows, the wet weather
22 flows are divided between the two treatment facilities based on volume (Aqua Ex.

1 W1, St. No 5, p. 5). In addition, DELCORA owns and operates two smaller
2 treatment systems: Corinne Village (Pocopson Preserve) and Sheeder Tract, both
3 located in located in Chester County. DELCORA also has an agreement for the
4 purchase of an additional wastewater system, Springhill Farms, which it claims
5 will conclude in 2020 (Aqua Ex. W3, St., No. 7, pp. 3-4).
6

7 **Q. FOR WHAT REASONS IS DELCORA LOOKING TO SELL ITS**
8 **SYSTEM?**

9 A. DELCORA conveys most its Eastern system flows to the SWPCP owned and
10 operated by the PWD. PWD has developed a long-term control plan ("LTCP") to
11 upgrade its treatment facility, and due to the proposed improvements, costs to
12 DELCORA to transfer flows have increased and these increases are expected to
13 continue. DELCORA is seeking to sell its system in order to have the expertise
14 and capital necessary to upgrade its own treatment facility, the WRTP, in order to
15 transfer all flows to this facility and sever ties with PWD, lowering treatment costs
16 over the long term. In addition, DELCORA has increased costs associated with
17 meeting US Environmental Protection Agency ("EPA") regulations for its
18 operations (Aqua Ex. W1, St. No. 5, pp. 5-6).

1 **PUBLIC BENEFIT CONCERNS**

2 **Q. WHAT PUBLIC BENEFITS DOES AQUA CLAIM WILL RESULT FOR**
3 **THE PROPOSED ACQUISITION?**

4 A. In Aqua Exhibit U2, Statement No. 2, pages 13-14, Witness William C. Packer
5 claims the affirmative public benefits as follows:

- 6 1. The majority of the sale proceeds will be placed in an irrevocable
7 Trust that will benefit DELCORA customers;
- 8 2. Aqua is familiar with the DELCORA service areas, and many
9 DELCORA customers are also AQUA water customers;
- 10 3. Economies of scale with service areas;
- 11 4. Aqua's experience as a large scale company;
- 12 5. DELCORA customers will benefit from Commission's regulation
13 and the Company's Helping Hand program;
- 14 6. Aqua will maintain the jobs of DELCORA employees;
- 15 7. Aqua's experience and standard of environmental compliance with
16 wastewater operations;
- 17 8. Aqua's ability to implement large scale projects;
- 18 9. Cost efficiency in combining operations;
- 19 10. DELCORA's customers will become part of a larger -scale,
20 efficiently operated, water and wastewater utility;
- 21 11. The elimination of the treatment expense to PWD, by the upgrade of
22 DELCORA's WRTP.

1 **Q. DO YOU AGREE WITH MR. PACKER THAT ALL OF THE TERMS HE**
2 **MENTIONED ARE AFFIRMATIVE PUBLIC BENEFITS?**

3 A. No, not all of them. Specifically, I disagree that the irrevocable trust will be of
4 any known benefit to existing Aqua customers. I am also advised by counsel that
5 Aqua's plan for reflecting bill credits to acquired customers as part of the trust
6 arrangement is not permissible under the Public Utility Code. However, I will
7 discuss this in more detail below.

8

9 **Q. DO YOU HAVE OTHER CONCERNS REGARDING WHETHER THE**
10 **ALLEGED AFFIRMATIVE PUBLIC BENEFITS WILL MATERIALIZE?**

11 A. Yes. I am advised by counsel that there is currently litigation pending against
12 DELCORA in Delaware County Court that could conclude with the dissolution of
13 DELCORA and/or the County of Delaware stepping into DELCORA's shoes as
14 the seller for purposes of the APA.

15

16 **Q. WHY IS THE PENDING LITIGATION A CONCERN IN THIS CASE?**

17 A. While I am not an attorney and I am not taking a position on any litigation
18 between the County of Delaware and DELCORA, counsel has advised me that
19 both DELCORA's status as a seller and/or the terms of the APA may be impacted
20 depending on the outcome of the litigation. I will defer to counsel to address this
21 issue in briefing, but the crux of I&E's concerns are that during the course of this
22 case, I&E, other parties, and the Commission cannot be certain of DELCORA's

1 ability to sell its wastewater assets to Aqua or that the commitments DELCORA
2 has made in the APA will materialize.

3
4 **Q. WHAT DO YOU RECOMMEND?**

5 A. I recommend that closing of this proposed transaction should not be permitted to
6 occur until Aqua and DELCORA provide the Commission with a guarantee that
7 the pending litigation in Delaware County Court, or in any other venue, will not
8 change (1) DELCORA's status as a bona fide seller and (2) will not result in any
9 change to the terms of the APA for which Aqua seeks approval in this case.

10 Otherwise, parties and the Commission may rely on DELCORA's commitments to
11 their detriment and the public benefits alleged may not ultimately materialize.

12 This outcome would be wholly inconsistent with the public interest.

13
14 **IRREVOCABLE TRUST ARRANGEMENT**

15 **Q. HOW DOES DELCORA PROPOSE TO USE THE PROCEEDS FROM**
16 **THE SALE OF ITS SYSTEM?**

17 A. Aqua witness Robert Willert, DELCORA's Executive Director, reported that the
18 purchase price of \$276.5 million will first be utilized to pay down existing debts
19 and all remaining amounts will be placed into an "irrevocable trust fund" (Aqua
20 Ex. W1, St. No. 5, p. 10).

1 **Q. PLEASE DESCRIBE THE REFERENCED IRREVOCABLE TRUST**
2 **FUND.**

3 A. Aqua witness Robert Willert (Aqua Ex. W1, St. No. 5, p. 12) explains that the
4 irrevocable trust will be a fund containing the sale proceeds, less DELCORA's
5 liabilities. Aqua witness Pileggi estimated that the trust will be estimated to
6 contain \$200 million (I&E Ex. No. 1, Sch 1).

7
8 **Q. ACCORDING TO MR. WILLERT, HOW WILL THE TRUST BE**
9 **ESTABLISHED AND OVERSEEN?**

10 A. Mr. Willert indicates that the Trust will be established as an irrevocable trust to
11 ensure that it will only ever be used for the benefit of DELCORA's customers,
12 and it will have one independent, institutional trustee. Mr. Willert also explains
13 that the Trust will automatically terminate when all money has been distributed for
14 DELCORA customer bills and related expenses (Aqua Ex. W1, St. No. 5, p. 11).

15
16 **Q. DOES MR. WILLERT INDICATE DELCORA'S GOAL FOR AQUA RATE**
17 **RELIEF THROUGH TRUST PAYMENTS TO DELCORA CUSTOMERS?**

18 A. Yes. Mr. Willert indicated that DELCORA's goal is for Trust payments to
19 DELCORA customers be set such that customer rate increases are stabilized at an
20 annual increase of 3% for 8-12 years after the transaction closes (Aqua Ex. W1,
21 St. No. 5, p. 10).

1 **Q. HAS AQUA PROPOSED RATE TREATMENT FOR DELCORA AS PART**
2 **OF ITS APPLICATION?**

3 A. Yes. In its Application, Aqua proposed to implement DELCORA's sanitary
4 wastewater rates in effect at closing as reflected on Schedule 7.04(a) of the APA,
5 and to maintain them until its next base rate proceeding (Aqua's Application, para.
6 36). Thereafter, Aqua indicates that it will include the DELCORA system in its
7 next rate case and propose to move the DELCORA rates to the full cost of service
8 (Aqua Exhibit U2, Stmt. No. 2, p.5).

9

10 **Q. IS AQUA ASKING THE COMMISSION FOR APPROVAL OF THE**
11 **IRREVOCABLE TRUST ARRANGEMENT AS PART OF THIS CASE?**

12 A. Yes, that appears to be the case. In his direct testimony, Aqua witness Packer
13 acknowledges and incorporates an MOU between Aqua and DELCORA to
14 facilitate payments from the DELCORA Trust to be included on DELCORA
15 customer bills (Aqua Exhibit U2, Stmt. No. 2, p. 3). Through the discovery
16 process, Aqua clarified that it is seeking approval for the MOU as follows (I&E
17 Ex. No. 1, Sch. 2).

18 The MOU is needed if the Commission approves Aqua and
19 DELCORA's proposal to include customer assistance
20 payments from the DELCORA Customer Trust on the bills to
21 DELCORA customers. If the Commission approves Aqua
22 and DELCORA's proposal, Aqua and DELCORA are asking
23 the Commission also approve, to the extent necessary, the
24 MOU and any updates or modifications to the MOU during
25 this proceeding.

1 **Q. WHO WILL BE ELIGIBLE TO RECEIVE MONEY FROM THE TRUST?**

2 A. Through the discovery process, Aqua witness Pileggi indicates that DELCORA's
3 retail customers who (1) were retail customers of DELCORA on the date of the
4 APA; (2) who become retail customers between the date of the APA and closing;
5 (3) or who become retail customers of Aqua in the former DELCORA
6 service area after the date of closing will be eligible to receive Trust benefits. The
7 same eligibility parameters will apply to DELCORA's wholesale customers.
8 (I&E Ex. No.1, Sch. 3)

9

10 **Q. HOW WILL CUSTOMERS RECEIVE MONEY FROM THE TRUST?**

11 A. According to Aqua witness Packer, in order to accommodate DELCORA's request
12 for Aqua to apply customer assistance payments from the Trust to DELCORA
13 customers, Aqua is proposing to include a payment line item directly on the
14 impacted customers' bills (Aqua Exhibit U2, Stmt. No. 2, p. 5). Upon I&E's
15 request, Aqua provided a sample bill to illustrate how the proposed credit would
16 be reflected on acquired customers bills, and I am incorporating it here as I&E Ex.
17 No. 1, Sch. No. 4. As the sample provided by Aqua illustrates, Aqua proposes to
18 charge the acquired customers less than the tariffed rates by using a line item to
19 directly discount the DELCORA customer bills.

1 **Q. WILL THERE BE ANY PROPOSED BENEFIT TO EXISTING AQUA**
2 **WASTEWATER CUSTOMERS AS A DIRECT RESULT OF THE TRUST?**

3 A. Since the funds from the proposed trust will only be distributed to DELCORA
4 retail customers, there will be no direct benefit to existing Aqua customers from
5 the trust.

6
7 **Q. ARE THERE ANY OTHER PROBLEMS WITH THE PROPOSED TRUST?**

8 A. Yes. The proposed trust will benefit DELCORA customers for a limited period
9 and for a limited amount. Aqua estimates that this fund will contain up to \$200
10 million (I&E Ex. No. 1, Sch. 1) and last for approximately 8-12 years after which
11 the funds will deplete, and the supplemental credit to customers will cease. The
12 trust will limit increases in rates to approximately 3% per year (Aqua Ex. W1, St.
13 No. 5, p. 10). According to this plan, DELCORA customers will still be in the
14 position of paying increased rates (up to a 36% total increase using the provided
15 estimates) over the duration of the trust.

16
17 **Q. DOES AQUA'S PROPOSAL TO APPLY TRUST PROCEEDS AS A BILL**
18 **CREDIT TO ACQUIRED CUSTOMERS VIOLATE THE PUBLIC**
19 **UTILITY CODE?**

20 A. Yes, I am advised by counsel that the arrangement is directly at odds with Section
21 1303 of the Public Utility Code. Although I am not offering a legal opinion, and
22 while I will defer to counsel to address the legal argument in briefing, counsel

1 advises that Section 1303, which appears below, prohibits Aqua from charging
2 any customers rates that deviate from tarified rates approved by the Commission:

3 **§ 1303. Adherence to tariffs.**

4 No public utility shall, directly or indirectly, by any device
5 whatsoever, or in anywise, demand or receive from any
6 person, corporation, or municipal corporation a greater or less
7 rate for any service rendered or to be rendered by such public
8 utility than that specified in the tariffs of such public utility
9 applicable thereto. The rates specified in such tariffs shall be
10 the lawful rates of such public utility until changed, as
11 provided in this part. Any public utility, having more than
12 one rate applicable to service rendered to a patron, shall, after
13 notice of service conditions, compute bills under the rate most
14 advantageous to the patron.³

15
16 **Q. HAS THE ISSUE OF A PROPOSAL SIMILAR TO AQUA'S PROPOSAL**
17 **TO DEVIATE FROM TARIFFED RATES BEEN ADDRESSED IN ANY**
18 **PAST CASES?**

19 **A.** Yes, in the most recent example, a similar rate adjustment issue was the subject of
20 litigation in the Pennsylvania American Water Company ("PAWC") acquisition of
21 the Scranton Sewer Authority ("SSA") wastewater system.⁴

22
23 **Q. WHAT RATE ADJUSTMENT PROPOSAL DID PAWC MAKE IN THE**
24 **SCRANTON ACQUISITION CASE?**

25 **A.** As part of its Asset Purchase Agreement to acquire the SSA and to begin service

³ 66 Pa. C.S. § 1303.

⁴ "Scranton Acquisition Case", Docket No. A-2016-2537209.

1 to acquired customers, PWSA proposed a “variance adjustment.” The variance
2 adjustment was a potential adjustment to the \$195 million purchase price ten years
3 following the closing of the PAWC/SSA transaction. If, over this ten-year period,
4 there was a positive difference between the annual revenues in the SSA’s former
5 service area and a 1.9% compound annual growth rate in annual revenues, PAWC
6 would be required to pay the difference to SSA. Per the proposed Asset Purchase
7 Agreement, SSA would be permitted to retain the payment or it could request that
8 it be distributed to PAWC’s then-current wastewater customers in SSA’s former
9 service territory.⁵
10

11 **Q. HOW WAS PAWC’S PROPOSAL FOR THE VARIANCE ADJUSTMENT**
12 **RESOLVED?**

13 A. Counsel advised that the variance adjustment was litigated, and that
14 Administrative Law Judges David A. Salapa and Steven K. Haas adopted I&E’s
15 position that the variance adjustment would violate Section 1303. A review of the
16 ALJs’ recommended decision indicates that they determined that regardless of
17 whether variance adjustments were paid to impacted customers by a third party
18 administrator or paid by PAWC directly to customers, the attempted use of sale
19 proceeds to provide a buffer against future rate increases constituted de facto
20 refunds that would impermissibly lead to customers paying less than tariffed rates.

⁵ Scranton Acquisition Case, Docket No. A-2016-2537209, Asset Purchase Agreement, Sections 707(d)- 707(e),

1 I note that PAWC elected to withdraw its variance adjustment proposal after the
2 ALJs' decision was issued.⁶

3
4 **Q. WHAT DOES THE PAWC/SCRANTON VARIANCE ADJUSTMENT**
5 **OUTCOME HAVE TO DO WITH THIS CASE?**

6 A. The PAWC/Scranton variance adjustment outcome is important because it
7 demonstrates that de facto refunds through billing adjustments are impermissible.
8 In this case, Aqua is proposing an arrangement that exceeds the bounds of what
9 was impermissible in PAWC/Scranton because Aqua proposes to apply a Trust
10 discount directly in customer bills to explicitly deviate from tariffed rates.

11
12 **Q. ISN'T IT TRUE THAT THE COMMISSION DOES NOT HAVE**
13 **AUTHORITY TO DIRECT HOW DELCORA, A NON-JURISDICTIONAL**
14 **MUNICIPAL ENTITY, SPENDS ITS SALE PROCEEDS?**

15 A. Counsel advises me that this is generally correct. However, my testimony is not
16 related to DELCORA's use of sale proceeds and it is important not to confuse this
17 issue. My testimony relates to Aqua's proposal to charge acquired customers less
18 than tariffed rates through reflection of Trust payments. For the reasons explained
19 above, that arrangement should be rejected by the Commission.

⁶ Scranton Acquisition Case, Docket No. A-2016-2537209, Recommended Decision, pp. 34-37 (Entered on August 17, 2016).

1 **Q. WHAT DO YOU RECOMMEND?**

2 A. To the extent that it relies upon Aqua issuing acquired customers bills that are
3 lower than the applicable tariffed rates, Aqua and DELCORA's proposal for an
4 irrevocable trust should be rejected.

5

6 **COST OF SERVICE STUDY**

7 **Q. WHAT IS YOUR COST OF SERVICE STUDY RECOMMENDATION?**

8 A. I recommend that Aqua should be required to provide a separate cost of service
9 study for the DELCORA system that segregates stormwater costs, identifies the
10 plant in service costs at the time the DELCORA system was purchased, identifies
11 the cost of any plant retirements, and identifies the cost of any plant investment.

12

13 **Q. WHY IS KNOWING THE COST TO SERVE THE DELCORA SYSTEM**
14 **IMPORTANT?**

15 A. In general, the primary goal of a cost of service study is to determine a utility's
16 revenue requirement to provide service to its different customer classes. In this
17 case, a cost of service study for the DELCORA wastewater system is beneficial
18 because it:

- 19 • Determines the cost to operate the DELCORA wastewater system
20 separately;
21 • Calculates the costs of the utility's different services;

- Separates the costs between the utility's different customer classes and service areas;
- Attributes costs to the utility's different customer classes and service areas; and
- Determines how costs will be recovered from the utility's different customer classes and service areas.

Moreover, a cost of service study can establish the existence and extent of subsidization (inter- and intra-class) and assist in determining the appropriate amount of revenue requirement to be shifted from wastewater customers to water customers, which Aqua has utilized in past base rate cases. Therefore, without the cost of service study that includes segregated wastewater costs, the appropriate ratemaking recommendations for those costs cannot be proposed or implemented. Additionally, and specifically for the present case, a separate cost of service study would help to determine the proper allocation of a revenue shortfall among Aqua's existing customers.

Q. HAS THE COMMISSION PREVIOUSLY ADDRESSED THE IMPORTANCE OF REQUIRING COST OF SERVICE STUDIES FOR ACQUIRED SYSTEMS?

A. Yes. The topic of a separate cost of service study being required for a Section 1329 acquisition was first broached in Aqua's acquisition of New Garden at

1 Docket No. A-2016-2580061, which was the first proceeding before the
2 Commission to employ the fair market valuation under Section 1329. In that case,
3 the Commission required Aqua to prepare a cost of service study for use in its next
4 base rate case to separate the costs, capital, and operating expenses of providing
5 wastewater service to the newly acquired New Garden customers. Pages 69-70 of
6 the Commission's Order approving Aqua's acquisition of the New Garden system,
7 states the following:

8 Specifically, Aqua shall develop and file a cost-of-service
9 study in its next rate case pursuant to our regulations that
10 separates costs, capital, and operating expenses of providing
11 wastewater service to the New Garden customers as a stand-
12 alone rate group. Moreover, Aqua is directed to address the
13 pros and cons of designing New Garden rates as a separate
14 rate group. As a result, all parties and the Commission will
15 be informed of the overall rate impact on Aqua customers
16 and, alternatively, the result of establishing New Garden as a
17 separate rate zone.

18
19 Additionally, as far as I am aware, the provision of separate cost of service studies
20 has been approved by the Commission in all Section 1329 proceedings to date.
21 Specifically, the five most recent Section 1329 proceedings culminated in
22 settlement agreements that were approved by the Commission and which adopted
23 cost of service studies of acquired systems as a condition of settlement. These five
24 proceedings were PAWC's acquisition of the Exeter Township system,⁷ PAWC's

⁷ Application of PAWC under Sections 507, 1102, and 1329 of the Public Utility Code for Approval of its Acquisition of wastewater system assets of Exeter Township at Docket No. A-2018-3004933, p. 15 (Order entered October 3, 2019).

1 acquisition of the Steelton Borough Authority,⁸ PAWC's acquisition of Borough
2 of Kane Authority,⁹ Aqua's Acquisition of East Norriton Township,¹⁰ and Aqua's
3 acquisition of the wastewater system assets of Cheltenham Township.¹¹
4

5 **Q. IS PART OF THE DELCORA SYSTEM DESIGNATED A CSO?**

6 A. Yes. As mentioned previously, a portion the Chester City operations are a CSO
7 system.
8

9 **Q. WHAT IMPACT DOES THE CSO HAVE ON OPERATIONS AND**
10 **RATEMAKING?**

11 A. The system being classified as a CSO means that there are additional operating
12 costs associated with that system beyond what would apply to conventional
13 collection and treatment systems. These additional costs include additional capital
14 plant costs for storm water catch basins, storm sewer mains prior to the
15 combination with sanitary sewers, and overflows for when the volumes exceed the
16 capacity of the treatment facility. Other additional costs include maintenance

⁸ Application of PAWC under Sections 507, 1102, and 1329 of the Public Utility Code for Approval of its Acquisition of water treatment and distribution system assets of Steelton Borough Authority at Docket No. A-2019-3006880, p. 16 (Order entered October 3, 2019).

⁹ Application of PAWC under Sections 507, 1102, and 1329 of the Public Utility Code for Approval of its Acquisition of wastewater system assets of Borough of Kane Authority at Docket No. A-2019-3014248, p. 3 (Order entered June 18, 2020.).

¹⁰ Application of Aqua under Sections 507, 1102, and 1329 of the Public Utility Code for Approval of its Acquisition of wastewater system assets of East Norriton Township at Docket No. A-2019-3009052, p. 39 (Order entered May 21, 2020).

¹¹ Application of Aqua under Sections 507, 1102, and 1329 of the Public Utility Code for Approval of its Acquisition of wastewater system assets of the Township of Cheltenham at Docket No. A-2019-3008491, p. 91 (Order entered November 5, 2019).

1 expenses for cleaning the catch basins, repairing mains, and additional chemical
2 expenses for the higher volumes that are treated during storm events. Typically,
3 customers of CSO systems would have these additional costs built into rates.

4 Because of these greater operating costs, the need for a separate COSS, and
5 potentially a separate CSO rate zone, is important to prevent subsidization of CSO
6 operations by other traditional wastewater system customers.

7
8 **Q. HAVE THERE BEEN OTHER CASES PRESENTED BEFORE THE**
9 **COMMISSION THAT ADDRESS COMBINED SANITARY AND STORM**
10 **SYSTEMS?**

11 A. Yes. The Commission permitted PAWC to acquire the Scranton Sewer Authority,
12 at Docket No. A-2016-2537209 (Order entered October 19, 2016), and the
13 Municipal Authority of the City of McKeesport at Docket No. A-2017-2606103
14 (Order entered October 26, 2017), which were combined sanitary and storm
15 systems. In both proceedings, the Commission ordered that a separate COSS be
16 provided that separated the sanitary sewer flows and storm water flows in its next
17 base rate proceeding.

18 Additionally, the topic of a separate COSS study being required for an
19 acquisition was broached in the recent Aqua acquisition of New Garden at Docket
20 No. A-2017-2580061, which was the first proceeding before the Commission to
21 employ the fair market valuation under Section 1329. Although New Garden is
22 not a CSO, the Commission required Aqua to prepare a COSS for use in its next

1 base rate case to separate the costs, capital, and operating expenses of providing
2 wastewater service to the newly-acquired New Garden customers. Pages 69-70 of
3 the Commission's Order approving Aqua's acquisition of the New Garden system,
4 states the following:

5 Specifically, Aqua shall develop and file a cost-of-service
6 study in its next rate case pursuant to our regulations that
7 separates costs, capital, and operating expenses of providing
8 wastewater service to the New Garden customers as a stand-
9 alone rate group. Moreover, Aqua is directed to address the
10 pros and cons of designing New Garden rates as a separate
11 rate group. As a result, all parties and the Commission will
12 be informed of the overall rate impact on Aqua customers
13 and, alternatively, the result of establishing New Garden as a
14 separate rate zone.

15
16 **Q. WHAT DO YOU RECOMMEND REGARDING THE COSS ISSUE WITH**
17 **RESPECT TO THE DELCORA ACQUISITION?**

18 A. In its next base rate case, I recommend Aqua provide a separate COSS for the
19 system that separates capital expenses and operating costs for the traditional
20 wastewater systems and a separate COSS for the City of Chester that further
21 separates capital expenses and operating costs with respect to sanitary and storm
22 water functions. This recommendation is consistent with the PAWC-Scranton and
23 PAWC-McKeesport acquisitions because this proceeding involves the acquisition
24 of a CSO, and it is consistent with the Aqua-New Garden Acquisition because the
25 Company has used the Section 1329 fair market valuation.

1 **Q. WHY DO YOU RECOMMEND THAT THE COMPANY PROVIDE A**
2 **SEPARATE COST OF SERVICE STUDIES FOR THE DELCORA**
3 **TRADITIONAL WASTEWATER SYSTEMS AND THE CITY OF**
4 **CHESTER CSO SYSTEM?**

5 **A.** In general, the primary goal of a Cost of Service Study is to determine a utility's
6 revenue requirement to provide service to its different customer classes. In this
7 case, a Cost of Service Study for the large DECLORA system that segregates
8 storm water costs is beneficial because it:

- 9 • Determines the cost to operate the DELCORA system and further
10 breaks down the costs between the traditional wastewater systems and
11 the CSO operations;
- 12 • Calculates the costs of the utility's different services and sections;
- 13 • Separates the costs between the utility's different customer classes and
14 jurisdictions;
- 15 • Attributes costs to the utility's different customer classes and
16 jurisdictions; and
- 17 • Determines how costs will be recovered from the utility's different
18 customer classes and jurisdictions.

19 Moreover, a COSS can establish the existence and extent of subsidization (inter
20 and intra-class) and assist in determining the appropriate amount of revenue
21 requirement to be shifted from the wastewater customers to the water customers,
22 which AQUA has utilized in past base rate cases. Therefore, without the cost of

1 service study that includes segregated storm water costs, the appropriate
2 ratemaking recommendations for those costs cannot be proposed or implemented.
3 Further, in order for Aqua to establish rates for DELCORA customers in its next
4 proceeding that sets rates at the cost to serve those customers, a separate COSS is
5 a necessity. Additionally, the greater costs associated with a CSO system may
6 demonstrate that the City of Chester may require its own rate zone on a permanent
7 basis or implementation of a separate storm water tariff if consolidation of
8 wastewater rates is desired.
9

10 **OVERALL RECOMMENDATION**

11 **Q. ARE YOU RECOMMENDING THAT THE APPLICATION BE DENIED?**

12 A. No. However, I am recommending that if the Commission determines to approve
13 Aqua's Application, that it condition any approval of DELCORA's application on
14 the following terms:

- 15 1. Closing should not occur until Aqua and DELCORA provide the
16 Commission with a guarantee that the pending litigation in Delaware
17 County Court, or in any other venue, will not change (1)
18 DELCORA's status as a bona fide seller and (2) will not result in
19 any change to the terms of the APA for which Aqua seeks approval
20 in this case;

1 2. To the extent that it relies upon Aqua issuing acquired customers
2 bills that are lower than the applicable tariffed rates, Aqua and
3 DELCORA's proposal for an irrevocable trust should be rejected;
4 and

5 3. Aqua should provide a separate cost of service study for the
6 DELCORA system that segregates the City of Chester and further
7 segregates the City of Chester by sanitary and stormwater costs,
8 identifies the plant in service costs at the time the DELCORA
9 system was purchased, identifies the cost of any plant retirements,
10 and identifies the cost of any plant investment.

11
12 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

13 **A. Yes.**

I&E Exhibit No. 1
Witness: Lisa A. Gumby

**APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC. PURSUANT
TO SECTIONS 507, 1102 AND 1329 OF THE PUBLIC UTILITY CODE FOR
APPROVAL OF ITS ACQUISITION OF THE WASTEWATER SYSTEM
ASSETS OF THE DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY**

Docket No. A-2019-3015173

Exhibit to Accompany
the
Direct Testimony
of
Lisa A. Gumby
Bureau of Investigation and Enforcement

Concerning:
Public Benefit Concerns
Irrevocable Trust Arrangement
Cost of Service Study

Respondent: Robert Willert
Date: 8/07/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET III INTERROGATORIES DIRECTED TO DELCORA

OCA-III-10 The DELCORA Rate Stabilization Trust Agreement (i.e., the DELCORA RATE STABILIZATION FUND TRUST AGREEMENT between THE DELAWARE COUNTY REGIONAL WATER QUALITY CONTROL AUTHORITY as SETTLOR and UNIVEST BANK AND TRUST CO. as TRUSTEE, Effective Date: December 27, 2019) provides that a majority of the sales proceeds be contributed to the Trust. Has DELCORA determined what dollar amount would be contributed to the Trust? If not, explain fully why not. If so, please identify that dollar amount.

RESPONSE:

The proceeds of the sale will first be used to pay any existing liabilities of DELCORA. The balance of the sale proceeds will be placed into the Trust, with the exception of any reasonable reserves. The precise amounts of DELCORA's liabilities and any reserves have not yet been determined; however, DELCORA's preliminary estimates for the amount to be transferred to the trust is approximately \$200 million. Continuing to administer the Trust in accordance with DELCORA's charter is not expected to be a material expense.

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SOUTHWEST DELAWARE COUNTY MUNICIPAL AUTHORITY

SET I INTERROGATORIES

SWDCMA-I-5

Are Aqua and DELCORA asking the Commission to approve the MOU in this proceeding, or in a separate proceeding under Section 507 of the Public Utility Code as stated in the MOU?

RESPONSE

The MOU is needed if the Commission approves Aqua and DELCORA's proposal to include customer assistance payments from the DELCORA Customer Trust on the bills to DELCORA customers. If the Commission approves Aqua and DELCORA's proposal, Aqua and DELCORA are asking the Commission also approve, to the extent necessary, the MOU and any updates or modifications to the MOU during this proceeding.

Respondent: John Pileggi
Date: 8/10/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SOUTHWEST DELAWARE COUNTY MUNICIPAL AUTHORITY

SET I INTERROGATORIES

SWDCMA-I-8

Please state whether the “customer assistance payment” would apply to each of the following types of customers:

- a. Those who were retail customers of DELCORA on the date of the Asset Purchase Agreement
- b. Those who were wholesale customers of DELCORA on the date of the Asset Purchase Agreement where the wholesale customer agrees to the assignment of its contract to Aqua
- c. Those who were wholesale customers of DELCORA on the date of the Asset Purchase Agreement where the wholesale customer does not agree to the assignment of its contract to Aqua
- d. Those who become retail customers of DELCORA between the date of the Asset Purchase Agreement and the date of closing
- e. Those who become wholesale customers of DELCORA between the date of the Asset Purchase Agreement and the date of closing
- f. Those who become retail customers of Aqua in the former DELCORA service area after the date of closing
- g. Those who become wholesale customers of Aqua in the former DELCORA service area after the date of closing

RESPONSE

- a. Yes.
- b. Yes.
- c. Please see the response to SWDCMA-I-4.

d. Yes.

e. Yes.

f. Yes.

g. Yes.

Respondent: William C. Packer
Date: 8/03/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

BUREAU OF INVESTIGATION AND ENFORCEMENT

SET I INTERROGATORIES

I&E-I-1 Reference the direct testimony of Witness William C. Packer (Aqua Exhibit U2, pp.5-7) regarding the proposed Trust. Provide a sample bill, the proposed trust line item amount, and a schedule that shows how the proposed cost reimbursement/customer assistance plan from the proposed trust will be calculated for an average:

- A. Western Residential customers;
- B. Western Commercial customers;
- C. Western Industrial customers;
- D. All flat rate customers; and
- E. All bulk customers.

RESPONSE

Please see I&E-I-1 Attachment 1 and 2. The sample bill is a preliminary draft showing how the DELCORA customer assistance payment will be shown on a typical Western Retail residential bill.



Service To:
Western Retail
123 DRIVE
CHESTER, PA 17985

I&E Exhibit Attachment 1
000000000 0000000
 Aqua Pennsylvania Wastewater
 2150630 PWSID # PA3540071

Aqua Pennsylvania Wastewater Toll Free: **877.987.2782**
 762 W. Lancaster Avenue Fax: **866.780.8292**
 Bryn Mawr, PA 19010-3489 **www.aquaamerica.com**

Questions about your sewer service?... Contact us before the due date.
 Bill Date **July 28, 2020** Total Amount Due **\$ 40.33** Current Charges Due Date **August 19, 2020**

Billing Detail

For period
 beginning **June 24, 2020** and ending **July 27, 2020**

I&E Exhibit No. 1
 Schedule 4, Page 2 of 8

Amount Owed from Last Bill	\$ 68.40
Total Payments Received	68.40
Remaining Balance	0.00
Sewer Charges 6,810 gals @.006472.....	44.07
Total Current Sewer Charges	44.07
DELCORA Customer Assistance Payment	-3.74
Amount Due	\$ 40.33

Message Center (see reverse side for other information)

- Effective July 1, 2020 the allowable wastewater DSIC is 1.18%. The PA Public Utility Commission permits a maximum wastewater DSIC of 5%.
- The due date refers to current charges and any deferred payment amount only. If you do not pay your bill on time, your service could be subject to interruption. To ensure proper credit, please remember to provide your full 16-digit account number when paying your bill.

RETURN THIS PORTION WITH YOUR PAYMENT



Aqua Pennsylvania Wastewater
 762 W. Lancaster Avenue • Bryn Mawr, PA 19010-3489

MAKE CHECK PAYABLE TO:
Aqua PA WW

Account Number
000000000 0000000

Please Do Not Remit Payment To The Above Address

DUE DATE **08/19/2020** TOTAL AMOUNT DUE **\$40.33**

Cyc=15CK 1up=2517866 EC: P745 BC: P745

Seq=16344

Amount Enclosed \$



Western Retail
 123 DRIVE
 CHESTER, PA 17985

AQUA PA WW
 PO BOX 70279
 PHILADELPHIA PA 19176-0279



00157811610999420000000069219



View your account, pay your current bill, check your daily balance, sign up for paperless billing, make a one-time payment.

[Get Started >](#)

[More Ways To Pay](#)

Save time and cut clutter with paperless billing!

Enroll today in WaterSmart e-Billing. You can cut the clutter of a paper bill, and we'll notify you by email when your bill is available to view online. It's simple, secure, and no additional fees.

Visit – AquaAmerica.com for more details.

I&E-I-1 Attachment 2

Existing Rates:		
Western Retail	\$	5.75 Per 1,000
Western Retail (Marcus Hook)	\$	8.78 Per 1,000
Western Retail Industrial	\$	6.93 Per 1,000
Chester Ridley Creek: SWDCMA	\$	3.50 Per 1,000
Chester Ridley Creek: Middletown	\$	3.50 Per 1,000
Western Wholesale Industrial	\$	3.18 Per 1,000
EDU Wholesale: Brookhaven	\$	2.89 Per 1,000
EDU Wholesale: Nether Providence	\$	2.89 Per 1,000
Eastern Authority: CDCA	\$	2.71 Per 1,000
Eastern Authority: DCJA	\$	2.71 Per 1,000
Eastern Authority: Muckinipates	\$	2.71 Per 1,000
Rose Valley / Nether Providence	\$	972.00 Per EDU
Pocopson Riverside	\$	950.00 Per EDU
Pocopson Preserve	\$	1,400.00 Per EDU
Edgmont Residential	\$	1,275.00 Per EDU
Edgmont Commercial EDU	\$	1,025.00 Per EDU
Edgmont Commercial Volumetric	\$	10.25 Per 1,000
Springhill Farms	\$	69.50 Average Bill

Revenue Deficiency	12.55%
Annual Increase	3.00%
Trust Payment Amount in Year 1 after Rate Case	9.55%

Western Retail

Existing Rate	\$	5.75
Existing Rate Plus 3%	\$	5.92
Full Cost Rate	\$	6.47
Usage Per 1,000 Gallons		6.81
Full Cost Bill	\$	44.07
Customer Bill Existing Rates Plus 3%	\$	40.33
Trust Payment	\$	3.74

Western Retail (Marcus Hook)

Existing Rate	\$	8.78
Existing Rate Plus 3%	\$	9.04
Full Cost Rate	\$	9.88
Usage Per 1,000 Gallons		3.91
Full Cost Bill	\$	38.64
Customer Bill Existing Rates Plus 3%	\$	35.36
Trust Payment	\$	3.28

I&E-I-1 Attachment 2

Western Retail Industrial

Existing Rate	\$	6.93
Existing Rate Plus 3%	\$	7.14
Full Cost Rate	\$	7.80
Usage Per 1,000 Gallons		735.87
Full Cost Bill	\$	5,739.58
Customer Bill Existing Rates Plus 3%	\$	5,252.57
Trust Payment	\$	487.01

Chester Ridley Creek: SWDCMA

Existing Rate	\$	3.50
Existing Rate Plus 3%	\$	3.61
Full Cost Rate	\$	3.94
Usage in 1,000 Gallons		80,604.00
Full Cost Bill	\$	317,519.31
Customer Bill Existing Rates Plus 3%	\$	290,577.42
Trust Payment	\$	26,941.89

Chester Ridley Creek: Middletown

Existing Rate	\$	3.50
Existing Rate Plus 3%	\$	3.61
Full Cost Rate	\$	3.94
Usage in 1,000 Gallons		50,188.00
Full Cost Bill	\$	197,703.08
Customer Bill Existing Rates Plus 3%	\$	180,927.74
Trust Payment	\$	16,775.34

Western Wholesale Industrial

Existing Rate	\$	3.18
Existing Rate Plus 3%	\$	3.28
Full Cost Rate	\$	3.58
Usage in 1,000 Gallons		40,015.00
Full Cost Bill	\$	143,217.29
Customer Bill Existing Rates Plus 3%	\$	131,065.13
Trust Payment	\$	12,152.16

EDU Wholesale: Brookhaven

Existing Rate	\$	2.89
Existing Rate Plus 3%	\$	2.98
Full Cost Rate	\$	3.25
Usage in 1,000 Gallons		22,582.00
Full Cost Bill	\$	73,452.36
Customer Bill Existing Rates Plus 3%	\$	67,219.84
Trust Payment	\$	6,232.52

I&E-I-1 Attachment 2

EDU Wholesale: Nether Providence

Existing Rate	\$	2.89
Existing Rate Plus 3%	\$	2.98
Full Cost Rate	\$	3.25
Usage in 1,000 Gallons		30,977.00
Full Cost Bill	\$	100,758.73
Customer Bill Existing Rates Plus 3%	\$	92,209.24
Trust Payment	\$	8,549.50

Eastern Authority: CDCA

Existing Rate	\$	2.71
Existing Rate Plus 3%	\$	2.79
Full Cost Rate	\$	3.05
Usage in 1,000 Gallons		319,375.00
Full Cost Bill	\$	974,127.28
Customer Bill Existing Rates Plus 3%	\$	891,471.44
Trust Payment	\$	82,655.85

Eastern Authority: DCJA

Existing Rate	\$	2.71
Existing Rate Plus 3%	\$	2.79
Full Cost Rate	\$	3.05
Usage in 1,000 Gallons		623,542.00
Full Cost Bill	\$	1,901,868.57
Customer Bill Existing Rates Plus 3%	\$	1,740,492.78
Trust Payment	\$	161,375.79

Eastern Authority: Muckinipates

Existing Rate	\$	2.71
Existing Rate Plus 3%	\$	2.79
Full Cost Rate	\$	3.05
Usage in 1,000 Gallons		144,479.00
Full Cost Bill	\$	440,676.12
Customer Bill Existing Rates Plus 3%	\$	403,284.23
Trust Payment	\$	37,391.89

Rose Valley / Nether Providence

Existing Rate	\$	972.00
Existing Rate Plus 3%	\$	1,001.16
Full Cost Rate	\$	1,093.99
Usage (EDU Basis)		-
Full Cost Bill	\$	1,093.99
Customer Bill Existing Rates Plus 3%	\$	1,001.16
Trust Payment	\$	92.83

I&E-I-1 Attachment 2

Pocopson Riverside

Existing Rate	\$	950.00
Existing Rate Plus 3%	\$	978.50
Full Cost Rate	\$	1,069.23
Usage (EDU Basis)		-
Full Cost Bill	\$	1,069.23
Customer Bill Existing Rates Plus 3%	\$	978.50
Trust Payment	\$	90.72

Pocopson Preserve

Existing Rate	\$	1,400.00
Existing Rate Plus 3%	\$	1,442.00
Full Cost Rate	\$	1,575.70
Usage (EDU Basis)		-
Full Cost Bill	\$	1,575.70
Customer Bill Existing Rates Plus 3%	\$	1,442.00
Trust Payment	\$	133.70

Edgmont Residential

Existing Rate	\$	1,275.00
Existing Rate Plus 3%	\$	1,313.25
Full Cost Rate	\$	1,435.01
Usage (EDU Basis)		-
Full Cost Bill	\$	1,435.01
Customer Bill Existing Rates Plus 3%	\$	1,313.25
Trust Payment	\$	121.76

Edgmont Commercial Annual EDU

Existing Rate	\$	1,025.00
Existing Rate Plus 3%	\$	1,055.75
Full Cost Rate	\$	1,153.64
Usage (EDU Basis)		-
Full Cost Bill	\$	1,153.64
Customer Bill Existing Rates Plus 3%	\$	1,055.75
Trust Payment	\$	97.89

I&E-I-1 Attachment 2

Edgmont Commercial Volumetric

Existing Rate	\$	10.25
Existing Rate Plus 3%	\$	10.56
Full Cost Rate	\$	11.54
Usage in 1,000 Gallons		29.00
Full Cost Bill	\$	334.55
Customer Bill Existing Rates Plus 3%	\$	306.17
Trust Payment	\$	28.39

Springhill Farms

Existing Average Bill	\$	69.50
Existing Bill Plus 3%	\$	71.59
Full Cost Rate		NA
Usage in 1,000 Gallons		NA
Full Cost Bill	\$	78.22
Customer Bill Existing Rates Plus 3%	\$	71.59
Trust Payment	\$	6.64

LISA A. GUMBY

PROFESSIONAL EXPERIENCE AND EDUCATION

EDUCATION & TRAINING:

National Association of Regulatory Utility Commissioners Utility Rate School
October 29-November 2, 2012.

Harrisburg Area Community College, Harrisburg, Pennsylvania
Accounting & Finance Course Work, 20 credits, 2008-2011

Pennsylvania State University, Harrisburg, Pennsylvania
Bachelor of Science; Major in Electrical Engineering Technology, 1984

EXPERIENCE:

03/2017 - Present

Fixed Utility Manager – Technical Division

Pennsylvania Public Utility Commission, Bureau of Investigation & Enforcement

12/2012 – 03/2017

Fixed Utility Valuation Engineer

Pennsylvania Public Utility Commission, Bureau of Investigation & Enforcement

12/2011 – 12/2012

Fixed Utility Financial Analyst

Pennsylvania Public Utility Commission, Bureau of Investigation & Enforcement

01/2010 – 12/2011

Accountant 1

Pennsylvania Department of Revenue, Gaming Division

03/2006 – 01/2010

Unemployment Compensation Tax Technician

Pennsylvania Department of Labor & Industry, UC Tax Services

I have testified and/or participated in the following proceedings:

- Equitable Gas Company LLC, Docket Nos. R-2012-2304727, R-2012-2304731, R-2012-2304735
- Columbia Gas of Pennsylvania, Inc., Docket No. R-2012-2321748
- PGW, 1307(f), Docket No. R-2013-2346376
- UGI Utilities Inc., 1307(f), Docket No. R-2013-2361771
- UGI Utilities Inc., UGI Penn Natural Gas, Inc., UGI Central Penn Gas, Inc., Docket No. P-2013-2356232
- PPL Electric Utilities Corporation, Docket No. R-2012-2290597
- Pennsylvania American Water Company, Docket No. R-2013-2355276
- Cooperstown Water Company, Docket No. R-2013-2367125
- City of Bethlehem – Bureau of Water, Docket No. R-2013-2390244
- First Energy Companies DSP, Docket Nos. P-2013-2391368, P-2013-2391372, P-2013-2391375, P-2013-2391378
- Pike County Light & Power Company (Electric), Docket No. R-2013-2397237
- Columbia Gas of Pennsylvania, Inc., Docket No. R-2014-2407345
- PGW, 1307(f), Docket No. R-2014-2404355
- UGI Utilities Inc., 1307(f), Docket No. R-2014-2420276
- City of Lancaster – Bureau of Water, Docket No. R-2014-2418872
- Citizens' Electric Company of Lewisburg, PA, Docket No. R-2014-2419776
- Peoples Natural Gas Company LLC, Docket No. R-2014-2429610
- First Energy Companies, Docket Nos. R-2014-2428742, R-2014-2428743, R-2014-2428744, R-2014-2428745
- PECO Energy Company, Docket No. P-2014-2451772
- United Water PA, Docket No. R-2015-2462723
- PGW, 1307(f), Docket No. R-2015-2465656
- PPL Electric Utilities Corporation, Docket No. R-2015-2469275
- UGI Utilities Inc., 1307(f), Docket No. R-2015-2480950
- Metropolitan Edison Company, Docket No. A-2015-2488903
- Pennsylvania Electric Company, Docket No. A-2015-2488904
- Mid-Atlantic Interstate Transmission LLC, Docket No. A-2015-2488905
- UGI Utilities Inc., Docket No. R-2015-2518438
- PGW, 1307(f), Docket No. R-2016-2526700
- Pennsylvania American Water Company, Docket No. A-2016-2537209
- UGI Utilities, Inc., 1307(f), Docket No. R-2016-2543309
- UGI Penn Natural Gas, Inc., 1307(f), Docket No. R-2016-2543314
- First Energy Companies, Docket Nos. R-2016-2537349, R-2016-2537352, R-2016-2537355, R-2016-2537359

I&E Statement No. 1-R
Witness: Lisa A. Gumby

**APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC. PURSUANT
TO SECTIONS 507, 1102 AND 1329 OF THE PUBLIC UTILITY CODE FOR
APPROVAL OF ITS ACQUISITION OF THE WASTEWATER SYSTEM
ASSETS OF THE DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY**

Docket No. A-2019-3015173

Rebuttal Testimony

of

Lisa A. Gumby
Bureau of Investigation and Enforcement

Concerning:

Irrevocable Trust Arrangement

TABLE OF CONTENTS

INTRODUCTION.....	1
SUMMARY OF OCA POSITION REGARDING TRUST PAYMENTS.....	2
I&E RESPONSE TO THE OCA TRUST PAYMENT POSITION	2

1 **INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Lisa A. Gumby. My business address is Pennsylvania Public Utility
4 Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg,
5 PA 17120.

6
7 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

8 A. I am employed by the Pennsylvania Public Utility Commission (“Commission” or
9 “PUC”) in the Bureau of Investigation and Enforcement (“I&E”) as the Fixed
10 Utility Manager in I&E’s Technical Division.

11
12 **Q. ARE YOU THE SAME LISA A. GUMBY WHO IS RESPONSIBLE FOR THE**
13 **DIRECT TESTIMONY CONTAINED IN I&E STATEMENT NO. 1 AND THE**
14 **SCHEDULES IN I&E EXHIBIT NO. 1?**

15 A. Yes.

16
17 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

18 A. The purpose of my rebuttal testimony is to address statements made by Office of
19 Consumer Advocate (OCA) witness Ralph C. Smith (OCA Statement No. 1) regarding
20 the irrevocable trust arrangement.

1 **Q. DOES YOUR REBUTTAL TESTIMONY INCLUDE AN EXHIBIT?**

2 A. No.

3
4 **SUMMARY OF OCA POSITION REGARDING TRUST PAYMENTS**

5 **Q. PLEASE SUMMARIZE OCA WITNESS SMITH'S POSITION REGARDING**
6 **DELCORA TRUST DISTRIBUTIONS.**

7 A. Mr. Smith concludes in his testimony that, provided it does not result in a costly
8 modification of its billing process, Aqua should reflect the DELCORA trust
9 customer assistance payments on the Aqua customer bills. It is Mr. Smith's
10 opinion that reflecting the customer assistance payments in this manner will make
11 this public benefit of the acquisition transparent to the DELCORA wastewater
12 customers (OCA Statement No. 1, pp. 43-44).

13
14 **I&E RESPONSE TO THE OCA TRUST PAYMENT POSITION**

15 **Q. DO YOU AGREE WITH MR. SMITH'S CONCLUSION THAT THE**
16 **DELCORA TRUST DISTRIBUTIONS SHOULD BE REFLECTED ON**
17 **DELCORA WASTEWATER CUSTOMER BILLS?**

18 A. No. As I stated in my direct testimony, it is my position that applying "customer
19 assistance" payments in this manner to the DELCORA customer bills is directly at
20 odds with Section 1303 of the Public Utility Code. And as previously stated,
21 although I am not offering a legal opinion, and while I will defer to counsel to
22 address the legal argument in briefing, counsel advises that Section 1303 prohibits

1 Aqua from charging any customers rates that deviate from tariffed rates approved
2 by the Commission (I&E Statement No. 1, pp. 14-15).

3
4 **Q. DOES IDENTIFYING THE BILL LINE ITEM AS A CUSTOMER**
5 **ASSISTANCE PAYMENT MAKE THIS ON BILL ADJUSTMENT**
6 **PERMISSIBLE IN YOUR OPINION?**

7 A. No. Despite Aqua witness William C. Packer's attempt to draw a corollary to
8 third party "customer assistance" payments such as those applied to payment
9 troubled, low income customer bills (Aqua Statement No. 2, pp. 5-6), these trust
10 payments, which are universal customer account credits, are representative of a
11 rate stabilization plan or rate subsidy that results in all customers paying less than
12 tariffed rates. In fact, in the memorandum of understanding that Mr. Packer
13 included with his testimony, the irrevocable trust arrangement is not identified as a
14 customer assistance program but is, instead, specifically called a Rate Stabilization
15 Fund (Aqua Statement No. 2, Appendix B).

16
17 **Q. DOES MR. SMITH CHARACTERIZE THE TRUST ARRANGEMENT AS**
18 **A "RATE STABILIZATION PLAN?"**

19 A. Yes. On page 20 of his direct testimony, Mr. Smith indicates that the trust is
20 proposed for rate stabilization.

1 **Q. WHY IS MR. SMITH’S CHARACTERIZATION OF THE TRUST AS A**
2 **“RATE STABILIZATION PLAN” SIGNIFICANT?**

3 A. Mr. Smith’s characterization of the trust as a “rate stabilization plan” is significant
4 because if, in fact, the trust is a rate stabilization plan, then Mr. Smith should have
5 also indicated that Aqua failed to support a rate stabilization plan as part of its
6 filing. On page 20 of his direct testimony, Mr. Smith provides the Section 1329(g)
7 definition of a rate stabilization plan, but he fails to acknowledge that when such a
8 plan is proposed, the Commission requires the Applicant to support it with
9 testimony, schedules, and work papers that establish the basis for the plan and its
10 impact on existing customers as required by the Commission.¹ Aqua did not
11 submit these materialize because it alleges that it has not presented a rate
12 stabilization plan (Aqua Application, p. 8, para. 36).

13 If Mr. Smith identifies the trust as a rate stabilization plan, then he should
14 have also indicated that it is an unsupported rate stabilization plan and he should
15 have recommended that Aqua be required to provide the requisite materials for its
16 support. He did not do so; therefore, his assertion that the trust is a rate
17 stabilization plan testimony should be more appropriately characterized as that the
18 trust is an *unsupported* rate stabilization plan.

¹ *Final Implementation Order*, M-2016-2543193, p. 27 (Order entered October 27, 2016).

1 **Q. HAVE ALTERNATIVE OPTIONS TO AQUA’S ON-BILL TRUST**
2 **PAYMENT CREDIT BEEN SUGGESTED THAT COULD BE**
3 **ACCEPTABLE?**

4 A. Yes. Throughout Mr. Smith’s testimony, he cites to responses where DELCORA
5 has committed to passing these funds back to ratepayers either via the online bill
6 credit, if permitted, or through a variety of suggested alternatives including direct
7 rebates to customers or inclusion of checks in the customers’ Aqua billing
8 statements.

10 **Q. IS IT POSSIBLE THAT ONE OF THESE ALTERNATIVE**
11 **DISTRIBUTION METHODS COULD ELIMINATE YOUR CONCERNS**
12 **REGARDING THE CODE VIOLATION?**

13 A. Yes; however, any alternative distribution method would need to be evaluated to
14 ensure that it is not simply an alternate method resulting in application of a rate
15 subsidy. As I stated in my direct testimony, it is not appropriate for customers to
16 pay less than tariffed rates either by direct or indirect discount. Additionally, the
17 only arrangement Aqua has directly proposed to implement as part of this case is
18 the direct bill discount, so that appears to be the only operative proposal at this
19 time.

1 **Q. ON PAGE 44 OF HIS DIRECT TESTIMONY, MR. SMITH**
2 **CHARACTERIZES THE TRUST AS PUBLIC BENEFIT. DO YOU**
3 **AGREE?**

4 A. No. As I discussed on page 14 of my direct testimony, the trust is not a benefit to
5 either Aqua’s existing customers, who will not receive any trust proceeds, nor
6 acquired Delcora customers who will initially have artificial rates while the trust
7 provides rate relief, but then experience rate shock when it is no longer funded. I
8 note that several parties who could “benefit” from the trust, including Sunoco
9 Partners Marketing & Terminal, L.P. (SPMT St. No. 2, pp. 29-30), have also
10 acknowledged the detriments I identified.

11
12 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

13 A. Yes.



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

BUREAU OF
INVESTIGATION
&
ENFORCEMENT

November 2, 2020

Via Electronic Mail

Honorable Angela T. Jones
Pennsylvania Public Utility Commission
Office of Administrative Law Judge
801 Market Street, Suite 4063
Philadelphia, PA 19107

Re: Application of Aqua Pennsylvania Wastewater Inc. pursuant to Sections 507,
1102 and 1329 of the Public Utility Code for Approval of its Acquisition of the
Wastewater System Assets of the Delaware County Regional Water Quality
Control Authority
Docket No. A-2019-3015173
I&E Surrebuttal Testimony

Your Honor:

Enclosed please find a copy of the following prepared **Surrebuttal Testimony** of the
Bureau of Investigation and Enforcement's (I&E) witness:

Lisa A. Gumby

I&E Statement No. 1-SR

Copies are being served on parties of record per the attached Certificate of Service. *Due to the temporary closing of the PUC's offices, I&E is only providing electronic service.* Should you have any questions, please do not hesitate to contact ginmiller@pa.gov and ermclain@pa.gov.

Sincerely,

Gina L. Miller
Prosecutor

Bureau of Investigation and Enforcement
PA Attorney ID No. 313863

Erika L. McLain
Prosecutor

Bureau of Investigation and Enforcement
PA Attorney ID No. 320526

GLM/ELM/ac
Enclosures

cc: Secretary Rosemary Chiavetta (*Cover Letter and Certificate of Service only – via e-file*)
Per Certificate of Service

I&E Statement No. 1-SR
Witness: Lisa A. Gumby

**APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC. PURSUANT
TO SECTIONS 507, 1102 AND 1329 OF THE PUBLIC UTILITY CODE FOR
APPROVAL OF ITS ACQUISITION OF THE WASTEWATER SYSTEM
ASSETS OF THE DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY**

Docket No. A-2019-3015173

Surrebuttal Testimony

of

Lisa A. Gumby
Bureau of Investigation and Enforcement

Concerning:

Pending Litigation
Irrevocable Trust Arrangement

TABLE OF CONTENTS

INTRODUCTION.....	1
PENDING LITIGATION	3
IRREVOCABLE TRUST ARRANGEMENT	5

1 **INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Lisa A. Gumby. My business address is Pennsylvania Public Utility
4 Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg,
5 PA 17120.

6

7 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

8 A. I am employed by the Pennsylvania Public Utility Commission (Commission or
9 PUC) in the Bureau of Investigation and Enforcement (I&E) as the Fixed Utility
10 Manager in I&E's Technical Division.

11

12 **Q. ARE YOU THE SAME LISA A. GUMBY WHO IS RESPONSIBLE FOR**
13 **THE DIRECT TESTIMONY CONTAINED IN I&E STATEMENT NO. 1,**
14 **THE ACCOMPANYING SCHEDULES IN I&E EXHIBIT NO. 1, AND THE**
15 **REBUTTAL TESTIMONY CONTAINED IN I&E STATEMENT NO. 1-R?**

16 A. Yes.

17

18 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

19 A. The purpose of my surrebuttal testimony is to address statements made in rebuttal
20 testimony by Aqua (Aqua or Company) witnesses William C. Packer (Aqua
21 Statement No. 2-R) and Robert Willert (Aqua Statement No. 5-R) regarding my

1 positions in direct testimony concerning pending litigation and the irrevocable
2 trust arrangement.
3

4 **Q. DOES YOUR SURREBUTTAL TESTIMONY INCLUDE AN EXHIBIT?**

5 A. No. However, I will refer to my direct testimony and rebuttal testimony in this
6 surrebuttal testimony.
7

8 **Q. HOW WILL YOUR SURREBUTTAL TESTIMONY BE ORGANIZED?**

9 A. I will first address both witnesses regarding their comments as to conditions I
10 recommended relative to the public benefit concerns and then address both
11 witnesses regarding my position with respect to the irrevocable trust arrangement.
12

13 **Q. DID AQUA ACCEPT ANY OF THE RECOMMENDATIONS THAT YOU**
14 **MADE IN DIRECT TESTIMONY?**

15 A. Yes, Mr. Packer accepted I&E's recommendation to provide separate cost of
16 service studies (COSS) for the DELCORA system and the combined sewer system
17 of the City of Chester, with the clarification that the separate COSS' will be
18 consistent with typically filed ratemaking exhibits (Aqua Statement No. 2-R, p. 20).

1 **PENDING LITIGATION**

2 **Q. PLEASE SUMMARIZE YOUR POSITION IN DIRECT TESTIMONY**
3 **REGARDING PENDING LITIGATION.**

4 A. As stated in my direct testimony, I was advised by counsel that there is currently
5 litigation pending against DELCORA in Delaware County Court that could
6 conclude with the dissolution of DELCORA and/or the County of Delaware
7 stepping into DELCORA's shoes as the seller for purposes of the asset purchase
8 agreement (APA). As I am not an attorney, I did not take a position on any
9 litigation between the County of Delaware and DELCORA, and deferred any
10 impact of this issue regarding DELCORA's possible status as a seller and/or the
11 terms of the APA to be addressed by counsel in briefing. My recommendation
12 with respect to the pending litigation was that Closing should not occur until Aqua
13 and DELCORA provide the Commission with a guarantee that the pending
14 litigation in Delaware County Court, or in any other venue, will not change (1)
15 DELCORA's status as a bona fide seller and (2) will not result in any change to
16 the terms of the APA for which Aqua seeks approval in this case. (I&E Statement
17 No. 1, pp. 9-10).

18
19 **Q. PLEASE SUMMARIZE MR. PACKER'S AND MR. WILLERT'S**
20 **POSITION IN REBUTTAL TESTIMONY REGARDING PENDING**
21 **LITIGATION.**

22 A. Both Mr. Packer and Mr. Willert opine that the pending litigation has no impact on

1 the terms of APA or DELCORA's authority to sell the wastewater utility. Further,
2 both witnesses claim that the Commission lacks any jurisdictional authority to
3 place any restrictions on the advancement of the sale relating to this pending
4 litigation (Aqua Statement No. 2-R, p. 20, Aqua Statement No. 5-R, p. 3). Mr.
5 Packer further goes on to detail a number of legal issues relating to the Municipal
6 Authorities Act that supports the authority of DELCORA to sell the wastewater
7 utility (Aqua Statement No. 2-R, pp. 9-11).

8
9 **Q. WHAT IS YOUR RESPONSE TO THE WITNESSES' POSITIONS**
10 **REGARDING THE PENDING LITIGATION IN DELAWARE COUNTY?**

11 A. First and foremost, as stated in my direct testimony, the issues surrounding this
12 pending litigation are legal issues that will be addressed by counsel in briefing
13 (I&E Statement No. 1, pp. 9-10). However, with respect to both witnesses'
14 position that the Commission lacks the jurisdictional authority to impose any
15 conditions on closure relating to the outcome of this pending litigation, I disagree.
16 The Commission is being asked to approve the sale of the DELCORA wastewater
17 utility to a regulated Pennsylvania water utility in this proceeding, and if the facts
18 and legal analysis support the conclusion that pending litigation may impact the
19 validity of the sale or the terms of the APA, the Commission would certainly be
20 able to impose conditions on the closing or reject the acquisition in its entirety.

1 **IRREVOCABLE TRUST ARRANGEMENT**

2 **Q. PLEASE SUMMARIZE YOUR POSITION IN DIRECT TESTIMONY AND**
3 **REBUTTAL TESTIMONY REGARDING THE IRREVOCABLE TRUST**
4 **ARRANGEMENT.**

5 A. I disagreed that the irrevocable trust will be of any known benefit to existing Aqua
6 customers, and, as advised by counsel, I stated that Aqua's plan for reflecting bill
7 credits to acquired customers as part of the trust arrangement is not permissible
8 under the Public Utility Code (I&E Statement No. 1, pp. 14-15). The specific
9 legal issues regarding the legitimacy of the proposed irrevocable trust and the
10 corresponding bill credits with respect to the Public Utility Code will be addressed
11 by counsel in briefing. Further, in rebuttal testimony, in response to OCA witness
12 Smith, I equated the proposed irrevocable trust arrangement to a rate stabilization
13 plan based on DELCORA's own language and Mr. Smith's characterization of the
14 arrangement, which is not appropriately reflected or supported in the APA (I&E
15 Statement No. 1-R, pp. 3-4).

16
17 **Q. PLEASE SUMMARIZE MR. WILLERT'S POSITION IN REBUTTAL**
18 **TESTIMONY REGARDING THE IRREVOCABLE TRUST**
19 **ARRANGEMENT.**

20 A. Mr. Willert opines that the customer bill assistance appearing on customer bills
21 provides for maximization of the available proceeds available for distribution to
22 customers as other methods would increase the administrative burden to

1 DELCORA and reduce the available proceeds. And further, that without Aqua's
2 participation, DELCORA would be unable to align the customer assistance
3 payments to assure the 3% rate increase limit is maintained. Mr. Willert states that
4 the legality of the on-bill credits will be addressed by counsel. (Aqua Statement
5 No. 5-R, p. 4).
6

7 **Q. WHAT IS YOUR RESPONSE TO MR. WILLERT'S POSITION**
8 **REGARDING THE ECONOMY AND ACCURACY OF THE PROPOSED**
9 **METHODOLOGY?**

10 A. First, my concerns are based on violations of the Public Utility Code and the fair
11 treatment of all tariffed customers, not with what it may or may not cost
12 DELCORA to distribute its sale proceeds to customers of that system. Second, the
13 restatement of the desired alignment with billed wastewater charges to ensure
14 compliance with the desired 3% rate increase limitation simply reinforces my
15 position that these "customer assistance payments" are rate subsidies, and the
16 irrevocable trust arrangement is a rate stabilization plan. In fact, Mr. Willert's
17 suggestion of DELCORA implementing a one-size-fits-all disbursement method
18 that would result in check disbursements to existing DELCORA customers is a far
19 more appropriate distribution as it aligns the sharing of the proceeds with the
20 customers who may have paid tap-in fees or funded other contributions in aid of
21 construction that they will now be paying for again in rates when the wastewater
22 system is added to Aqua's rate base. So, if DELCORA independently sent checks

1 to recompense its customers for the investments they already made in its system,
2 independent of any currently billed wastewater charges imposed by Aqua, that
3 course of action may not be problematic; however, that is not being proposed here.
4

5 **Q. PLEASE SUMMARIZE MR. PACKER'S POSITION IN REBUTTAL**
6 **TESTIMONY REGARDING THE IRREVOCABLE TRUST**
7 **ARRANGEMENT.**

8 A. Mr. Packer opines that neither the customer assistance payments applying only to
9 DELCORA customers, nor the limited period for the distribution, diminishes the
10 value of the public benefit (Aqua Statement No. 2-R, pp. 12-13).

11 With respect to my position regarding the impropriety of the on-bill
12 customer assistance payments, Mr. Packer opines that the position in the Scranton
13 Sewer Authority (SSA) acquisition is not comparable to the proposed irrevocable
14 trust arrangement in this acquisition proceeding because he claims that the
15 Administrative Law Judges' (ALJs) objection to the SSA variance adjustment, the
16 refund mechanism used in that case, was that it resulted in an undetermined final
17 purchase price (Aqua Statement No. 2-R, pp. 13-16).

18 Finally, Mr. Packer continues to opine that as long as the bills are presented
19 at tariffed rates, and the customer assistance payment appears later as a separate
20 line item, that Aqua is not violating the requirement that all customers be billed at
21 tariffed rates. He continues to equate the irrevocable trust payments to low-
22 income assistance programs (such as the Low-Income Home Energy Assistance

1 Program (LIHEAP), Aqua's Helping Hand program, and customer assistance
2 program (CAP) funding), and he attempts to further equate it to a one-time bill
3 credit provided as a result of settlement in the Aqua/Peoples Gas acquisition
4 proceeding (Aqua Statement No. 2-R, pp. 16-18).

5
6 **Q. WHAT IS YOUR RESPONSE TO MR. PACKER'S POSITION**
7 **REGARDING THE PUBLIC BENEFIT RESULTING FROM THE**
8 **IRREVOCABLE TRUST ARRANGEMENT?**

9 A. I do not disagree that the trust disbursements to DELCORA customers would
10 likely be perceived by those customers as a benefit, nor did I imply at any point
11 that I would only consider a customer credit mechanism to be a benefit if it were
12 permanent. However, as I explained in my rebuttal testimony, my opinion is that
13 the trust is not a benefit to either Aqua's existing customers, who will not receive
14 any trust proceeds, nor acquired DELCORA customers who will initially have
15 artificial rates while the trust provides rate relief, but then experience rate shock
16 when it is no longer funded (I&E St. No. 1-R, p. 6).

17
18 **Q. IS MR. PACKER CORRECT THAT THE OBJECTION TO THE SSA**
19 **VARIANCE ADJUSTMENT WAS THE UNCERTAIN PURCHASE PRICE**
20 **AND THAT THIS RESULT MAKES THE DECISION INAPPLICABLE IN**
21 **THIS PROCEEDING?**

22 A. No. While the ALJs acknowledged Pennsylvania American Water Company's

1 (PAWC) and SSA's attempt to characterize the variance adjustment as an
2 adjustment to the purchase price, the uncertainty of the purchase price was not a
3 determining factor in the ALJs' decision. Instead, the ALJs determined that the
4 variance adjustment's operation as a "price break" from tariffed rates was a
5 violation of Section 1303 (Docket No. A-2016-2537209, RD, p. 39):

6 Here, PAWC is obligated by the APA to refund to the SSA
7 service area customers, after ten years, an amount equal to the
8 variance adjustment. The refund will be paid by PAWC to the
9 customers either directly or through a third party administrator
10 mechanism. In either case, the end result is the same. The SSA
11 service area customers will realize a price break from PAWC's
12 tariffed rates for service received during the previous ten years.
13 Consistent with Philadelphia Suburban, we find this to be in
14 impermissible violation of Section 1303.

15 In reaching this conclusion, the ALJs' Section 1303 analysis does not hinge upon
16 whether PAWC's purchase price was finalized or reasonable, but instead focused
17 on the variance adjustment payment, regardless of the amount, that would
18 ultimately be refunded to SSA wastewater customers, either by PAWC, SSA, or a
19 third-party, that would represent a reduction to PAWC's tariffed rates. Despite
20 Mr. Packer's attempt to distinguish Aqua's proposal here, the ultimate result is the
21 same, regardless of how or who disburses the payments or where or if they appear
22 on the bill; the irrevocable trust arrangement represents a reduction to tariffed rates
23 for DELCORA wastewater customers. As the applicability of this decision to the
24 current proceeding is primarily a legal issue, the specific issues surrounding the
25 applicability of the decision in the SSA Acquisition to the irrevocable trust
26 arrangement proposed here will be further addressed by counsel in briefing.

1 **Q. IS MR. PACKER’S OPINION THAT AS LONG AS BILLS ARE**
2 **PRESENTED AT TARIFFED RATES PRIOR TO APPLICATION OF A**
3 **SEPARATE BILL CREDIT, AQUA IS NOT VIOLATING THE**
4 **REQUIREMENT THAT ALL CUSTOMERS ARE BILLED AT TARIFFED**
5 **RATES VALID?**

6 **A.** No. Regardless of whether the customer rate is specified at the tariffed rate on the
7 bill initially, the subsequent application of a rate credit that is directly tied to a
8 reduction of the tariffed rates still represents a billing at less than tariffed rates.
9 Since the intent of the DELCORA trust is to limit customer increases to 3%, and
10 the amount of credit is calculated specifically by customer usage per bill to result
11 in overall payment that meets that criteria, the outcome is a bill that is paid at less
12 than tariffed rates.

13
14 **Q. IS MR. PACKER’S COMPARISON OF EXISTING AUTHORIZED BILL**
15 **CREDITS RELATED TO FINANCIAL NEED, LIKE LIHEAP OR CAP**
16 **FUNDING, AND THE PROPOSED IRREVOCABLE TRUST BILL**
17 **CREDITS REASONABLE?**

18 **A.** No. As noted in my rebuttal testimony, despite Mr. Packer’s attempt to draw a
19 corollary to third party “customer assistance” payments, the trust payments are
20 universal customer payments designed to limit tariffed rate increases to a specific
21 amount and are representative of a rate stabilization plan or rate subsidy, which

1 result in all acquired customers paying less than tariffed rates, regardless of
2 financial need (I&E Statement No. 1-R, p. 3).

3 In his rebuttal testimony, Mr. Packer takes this position further by noting
4 that the Commission has approved customer assistance programs that are, in fact,
5 discounts to the tariffed rates, and that LIHEAP, which he equates to Aqua's
6 Helping Hand program, is also a bill credit that is supplied by a third party and is
7 directly applied to customer bills. These programs specifically highlight the
8 difference between the proposed trust bill credits that I alluded to previously in
9 that these programs are based on financial need and are not applied unilaterally to
10 newly-acquired customers based on billed usage, which is clearly a discount or
11 rate subsidy. In fact, LIHEAP is a federally-funded program tailored to addressing
12 low-income energy costs that is not even applicable to water and wastewater
13 utilities.¹ While Aqua's Helping Hand program is not federally funded, it is
14 clearly tied to customer financial need and contains a clear set of criteria to
15 determine customer eligibility.²

16 Additionally, although CAP programs are not federally funded low-income
17 programs, funding of these programs is grounded in regulation, subject to defined
18 parameters of affordability, and subject to Commission approval and oversight.
19 Counsel will address the legal underpinning of CAP programming in briefing, but
20 for my purposes, the irrevocable trust arrangement proposed is a contractually-

¹ <https://www.acf.hhs.gov/ocs/resource/liheap-fact-sheet-0>

² <https://www.aquaamerica.com/our-states/pennsylvania/helping-hand.aspx>

1 based refund agreement. Aqua's proposed Trust credit is not tied to ability to pay,
2 but tied only to giving acquired DELCORA customers a reduction to tariffed rates.
3

4 **Q. IS MR. PACKER'S COMPARISON OF THE ONE-TIME BILL CREDIT**
5 **APPLIED TO CUSTOMER BILLS AS A RESULT OF THE SETTLEMENT**
6 **IN THE AQUA ACQUISITION OF PEOPLES GAS COMPARABLE TO**
7 **THE PROPOSED IRREVOCABLE TRUST BILL CREDITS**
8 **REASONABLE?**

9 A. No. This comparison appears to refer to a provision of a settlement that I&E did
10 not join, and which is distinguishable from the proposed DELCORA discount.
11 Specifically, Paragraph 33 of the settlement memorializes Aqua's commitment:
12 "Aqua America agrees to provide all Peoples Companies' customers a rate credit
13 of \$13 million. The rate credit will appear on the Peoples Companies' customer
14 bills before the end of 2019." (Docket Nos. A-2018-3006061, A-2018-3006062,
15 A-2018- 3006063, Joint Petition for Approval of Non-Unanimous Complete
16 Settlement Among Most Parties, para. 33). Although I&E did not agree to the
17 settlement provision that Mr. Packer relies upon, his attempt to use the Peoples'
18 credit as an example of what Aqua proposed here fails because the \$13 million
19 credit was tied to recompensing the existing Peoples Companies' customers to
20 partially offset certain costs associated with remediation of the Goodwin and
21 Tombaugh Systems. It is my understanding that the Peoples' credit was tied to
22 customers' investment in infrastructure repair, which is not the same as the

1 bargained-for price break here that would result from Aqua's agreement to
2 artificially lower the bills of acquired customers to close a deal with DELCORA.
3

4 **Q. HAVE ANY OF THE ISSUES RAISED IN COMPANY REBUTTAL**
5 **TESTIMONY ALTERED YOUR POSITION THAT AQUA'S PROPOSED**
6 **IRREVOCABLE TRUST ARRANGEMENT VIOLATES THE**
7 **REQUIREMENT THAT ALL CUSTOMERS ARE BILLED AT TARIFFED**
8 **RATES?**

9 A. No.

10
11 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

12 A. Yes.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania	:	
Wasterwater Inc. pursuant to Sections 507,	:	
1102 and 1329 of the Public Utility Code for	:	Docket No. A-2019-3015173
Approval of its Acquisition of the Wastewater	:	
System Assets of the Delaware County	:	
Regional Water Quality Control Authority	:	

CERTIFICATE OF SERVICE

I hereby certify that I am serving the foregoing **Surrebuttal Testimony** dated November 2, 2020, in the manner and upon the persons listed below.

Served via Electronic Mail Only

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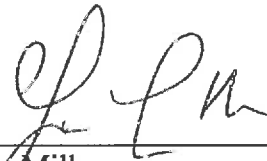
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**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania Wastewater Inc. :
Pursuant to Sections 507, 1102 and 1329 of the Public :
Utility Code For Approval of its Acquisition of the : Docket No. A-2019-3015173
Wastewater System Assets of the Delaware County :
Regional Water Quality Control Authority :

DIRECT TESTIMONY

OF

RALPH C. SMITH

**REGARDING UTILITY VALUATION APPRAISALS,
ACQUISITION POLICY AND BENEFITS**

**ON BEHALF OF THE
PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE**

September 29, 2020

DIRECT TESTIMONY OF RALPH C. SMITH

TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
Background and Qualifications.....	1
Purpose of Testimony	7
Exhibits Filed with Testimony	8
Summary of Testimony and Conclusions	9
II. STANDARD OF REVIEW	12
Section 1102(a) Requirements	12
Section 1329 Requirements	13
III. APPLICANT’S PROPOSED TRANSACTION	14
IV. ANALYSIS OF THE PROPOSED TRANSACTION	21
Impact of the Proposed Transaction.....	24
V. THE DELCORA CUSTOMER TRUST	32
VI. REVIEW OF AQUA’S (BUYER’S) VALUATION (GANNETT FLEMING)	46
Review and Adjustments to Cost Approach	46
Review and Adjustments to Income Approach.....	50
Review and Adjustments to Market Approach	55
VII. REVIEW OF DELCORA’S (SELLER’S) VALUATION (SCOTTMADDEN)	59
Review and Adjustments to Cost Approach	60
Review and Adjustments to Income Approach.....	61
Review and Adjustments to Market Approach	62
VIII. INCOME TAX SAVINGS FROM CLAIMING REPAIRS DEDUCTIONS ON THE WASTEWATER UTILITY BEING ACQUIRED FROM DELCORA.....	63
IX. OTHER ISSUES	65
X. CONCLUSIONS AND RECOMMENDATIONS	65

ATTACHMENTS:

Attachment A- Background and Qualifications

EXHIBITS:

Exhibit RCS-1 - Summary of the buyer’s and seller’s appraisals and the OCA adjusted results

Exhibit RCS-2 - OCA adjustments to Gannett Fleming Cost Approach

Exhibit RCS-3 - OCA adjustments to Gannett Fleming Income Approach

Exhibit RCS-4 - OCA adjustment to the Gannett Fleming Market Approach

Exhibit RCS-5 - OCA adjustments to ScottMadden Cost Approach

Exhibit RCS-6 - OCA adjustments to the ScottMadden Income Approach

Exhibit RCS-7 - OCA adjustments to the ScottMadden Market Approach

Exhibit RCS-8 - Non-Confidential Responses to Selected Data Requests Referenced in
Testimony

1 **I. INTRODUCTION**

2
3 **Q. Please state your name, position and business address.**

4 A. Ralph C. Smith. I am a Senior Regulatory Consultant at Larkin & Associates,
5 PLLC, 15728 Farmington Road, Livonia, Michigan 48154.

6 **Q. Please describe Larkin & Associates.**

7 A. Larkin & Associates is a Certified Public Accounting and Regulatory Consulting
8 firm. The firm performs independent regulatory consulting primarily for public
9 service/utility commission staffs and consumer interest groups (public counsels,
10 public advocates, consumer counsels, attorneys general, etc.). Larkin & Associates
11 has extensive experience in the utility regulatory field as expert witnesses in over
12 400 regulatory proceedings including numerous telephone, water and sewer, gas, and
13 electric matters.

14
15 **Background and Qualifications**

16 **Q. Mr. Smith, please summarize your educational background.**

17 A. I received a Bachelor of Science degree in Business Administration (Accounting
18 Major) with distinction from the University of Michigan - Dearborn, in April 1979.
19 I passed all parts of the C.P.A. examination in my first sitting in 1979, received my
20 CPA license in 1981, and received a certified financial planning certificate in 1983.
21 I also have a Master of Science in Taxation from Walsh College, 1981, and a law
22 degree (J.D.) cum laude from Wayne State University, 1986. In addition, I have
23 attended a variety of continuing education courses in conjunction with maintaining

1 my accountancy license. I am a licensed Certified Public Accountant and attorney in
2 the State of Michigan. I am also a Certified Financial Planner™ professional and a
3 Certified Rate of Return Analyst (CRRRA). Since 1981, I have been a member of the
4 Michigan Association of Certified Public Accountants. I am also a member of the
5 Michigan Bar Association and the Society of Utility and Regulatory Financial
6 Analysts (SURFA). I have also been a member of the American Bar Association
7 (ABA), and the ABA sections on Public Utility Law and Taxation.

8 **Q. Please summarize your professional experience.**

9 A. Subsequent to graduation from the University of Michigan, and after a short period
10 of installing a computerized accounting system for a Southfield, Michigan realty
11 management firm, I accepted a position as an auditor with the predecessor CPA firm
12 to Larkin & Associates in July 1979. Before becoming involved in utility regulation
13 where the majority of my time for the past 41 years has been spent, I performed
14 audit, accounting, and tax work for a wide variety of businesses that were clients of
15 the firm.

16 During my service in the regulatory section of our firm, I have been involved
17 in rate cases and other regulatory matters concerning numerous electric, gas,
18 telephone, water, and sewer utility companies. My present work consists primarily
19 of analyzing rate case and regulatory filings of public utility companies before
20 various regulatory commissions, and, where appropriate, preparing testimony and
21 schedules relating to the issues for presentation before these regulatory agencies.

22 I have performed work in the field of utility regulation on behalf of industry,
23 state attorneys general, consumer groups, municipalities, and public service

1 commission staffs concerning regulatory matters before regulatory agencies in
2 Alabama, Alaska, Arizona, Arkansas, California, Connecticut, Delaware, Florida,
3 Georgia, Hawaii, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maine, Maryland,
4 Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, New Jersey,
5 New Mexico, New York, Nevada, North Carolina, North Dakota, Ohio, Oregon,
6 Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee,
7 Texas, Utah, Vermont, Virginia, Washington, Washington D.C., West Virginia, and
8 Canada as well as the Federal Energy Regulatory Commission and various state and
9 federal courts of law.

10 **Q. Have you previously testified before the Pennsylvania Public Utility**
11 **Commission?**

12 A. Yes. I have previously testified before the Pennsylvania Public Utility Commission
13 (“PA PUC” or “Commission”) on a number of occasions.

14 **Q. Have you previously submitted testimony before the Commission in utility**
15 **merger and acquisition cases?**

16 A. Yes. I presented testimony on behalf of the Pennsylvania Office of Consumer
17 Advocate (“OCA”) in Docket No. A-122250F5000 involving a proposal for
18 Approval of the Transfer of All Stock and Rights of The Peoples Natural Gas
19 Company d/b/a Dominion Peoples to Equitable Resources. I filed testimony on
20 behalf of the Pennsylvania OCA in Docket No. A-2008-2063737, involving a
21 proposal to transfer all of the issued and outstanding shares of capital stock of The
22 Peoples Natural Gas Company to SteelRiver Infrastructure Fund North America LP
23 (“SRIFNA”). I filed testimony on behalf of the Pennsylvania OCA in Docket No. A-

1 2010-2210326, involving a proposal to transfer all of the issued and outstanding
2 shares of capital stock of T.W. Phillips Gas and Oil Co., currently owned by TWP
3 Inc., to LDC Holdings II LLC, an indirect subsidiary of SRIFNA, and to Approve
4 the Resulting Change in Control of T.W. Phillips Gas and Oil Co.

5 As additional illustrative examples, I filed testimony and participated in the
6 following Pennsylvania acquisition/merger proceedings on behalf of the OCA:

- 7 • LDC Holdings Inc. proposed purchase of T.W. Phillips Gas and Oil
8 Co., Pennsylvania PUC Docket No. A-2010-2210326;
- 9 • Babcock & Brown Infrastructure Fund North America LP proposed
10 acquisition of Peoples Natural Gas Company, Pennsylvania PUC
11 Docket No. A-2008-2063737;
- 12 • Equitable Resources, Inc. proposed acquisition of Dominion Peoples,
13 Pennsylvania PUC Docket No. A-122250F5000; and
- 14 • Aqua-Peoples proposed acquisition/merger, Pennsylvania PUC
15 Docket Nos. A-2018-3006061, A-2018-3006062, and A-2018-
16 3006063
- 17 • PAWC proposed acquisition of Wastewater System Assets of Kane
18 Borough, Docket No. A-2019-3014248.

19
20 **Q. Have you filed testimony in other jurisdictions concerning utility acquisition**
21 **and merger cases?**

22 A. Yes, as illustrative examples my prior testimony has included evaluations of
23 proposed mergers, such as Docket No. T-01051B-99-0497 before the Arizona
24 Corporation Commission on behalf of the Utilities Division Staff concerning the
25 merger of the parent corporations of Qwest Communications Corporation, LCI
26 International Telecom Corp., USLD Communications, Inc., Phoenix Network, Inc.
27 and US WEST Communications, Inc. As other illustrative examples, I filed
28 testimony on behalf of the West Virginia Consumer Advocate Division (“CAD”) in

1 Case No. 08-1761-G-PC, concerning a proposal to transfer all of the issued and
2 outstanding shares of capital stock of Hope Gas, Inc. d/b/a Dominion Hope to
3 SRIFNA and in Case No. 10-0713-E-PC, concerning a proposal for a merger
4 between a subsidiary of FirstEnergy and Allegheny Energy, Inc. and the “change of
5 control” of Monongahela Power Company, Potomac Edison Company and Trans-
6 Allegheny Interstate Line Company.

7 I filed testimony on behalf of the Connecticut Office of Consumer Counsel in
8 Docket No. 15-03-45 before the Connecticut Public Utilities Regulatory Authority
9 ("PURA") in the Joint Application Of Iberdrola, S.A., et al, and UIL Holdings
10 Corporation for Approval of a Change of Control.

11 I filed testimony on behalf of the District of Columbia District Government
12 in Formal Case No. 1119 before the District of Columbia Public Service
13 Commission concerning the Matter of the Merger of Exelon Corporation, Pepco
14 Holdings, Inc., Potomac Electric Power Company, Exelon Energy Delivery
15 Company, LLC and New Special Purpose Entity, LLC.

16 I filed testimony on behalf of the Steering Committee of Cities Served by
17 Oncor, the Texas Office of Public Counsel, and the Texas Industrial Energy
18 Consumers before the Public Utility Commission of Texas in Docket 46238
19 concerning a proposed acquisition by NextEra Energy, Inc. of Oncor Electric
20 Delivery Company LLC.

21 I also participated/testified in the following acquisition/merger proceedings:

- 22 • Iberdrola, S.A., et al proposed purchase of UIL Holdings Corporation,
23 Massachusetts Department of Utilities, Docket No. 15-26;

- Proposed merger of Fortis, Inc. and UNS Energy Corporation, Arizona Corporation Commission Docket Nos. E-04230A-14-0011, E-01933A-14-0011

Q. Have you also participated in Pennsylvania water and wastewater utility rate cases in which acquired utility systems were addressed?

A. Yes. On behalf of the OCA I also filed testimony and participated in a number of Pennsylvania water and/or wastewater utility rate cases in which acquired systems were addressed, including rate cases filed by Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc. and Pennsylvania American Water. Those Pennsylvania rate cases involving water and wastewater systems generally predated Section 1329.

Q. Have you filed testimony and/or participated in utility rate cases in which the fair value of utility assets was analyzed?

A. Yes, in several Arizona utility rate cases, where fair value was being used to establish the utility's required operating income and revenue requirement, I reviewed and addressed the utility's fair value and reconstruction cost new depreciated (RCND) analyses for public utility assets.

The Arizona state constitution includes a requirement that the Arizona Corporation Commission consider fair value in establishing utility rates. I have worked on many Arizona rate cases in which original cost, RCND and fair value rate base presented by utilities were reviewed and adjusted. The RCND studies used by Arizona utilities in their rate cases have some similarities to the replacement cost analysis used in the Section 1329 appraisal studies, in that Handy Whitman and other

1 cost indices are applied to historical plant costs to derive reconstruction/replacement
2 values. The fair value rate base used in Arizona rate cases is different than the fair
3 market value concept used in Pennsylvania Section 1329 cases where the average of
4 two independent appraisals is compared with the purchase price of utility assets to
5 determine the amount to be used for rate base for the acquired system.

6 **Q. Have you participated on project teams that were involved with the valuation of**
7 **water or sewer utility assets for potential purchase or acquisition?**

8 A. Yes. As an illustrative example, in 1997-1998, on a project for the Village of
9 University Park, IL, a Larkin & Associates team I led worked with the engineering
10 firm, Crawford, Murphy & Tilly, Inc., to perform a water and sewer valuation study
11 for University Park. Various reports were jointly produced for University Park for
12 that project.

13 **Q. Have you prepared an attachment summarizing your educational background**
14 **and regulatory experience?**

15 A. Yes. Attachment A provides details concerning my experience and qualifications.
16

17 **Purpose of Testimony**

18 **Q. On whose behalf are you appearing?**

19 A. Larkin & Associates, PLLC, was retained by the Pennsylvania Office of Consumer
20 Advocate to review the proposed acquisition by Aqua Pennsylvania Wastewater, Inc.
21 ("Aqua" or "Company" or "Applicant") of the wastewater utility assets of the
22 Delaware County Regional Water Quality Control Authority ("DELCORA").
23 Accordingly, I am appearing on behalf of the OCA.

1 **Q. What is the purpose of the testimony you are presenting?**

2 A. My testimony presents the analysis, results, and conclusions of Larkin & Associates’
3 review of this proposed acquisition by Aqua of the DELCORA wastewater system
4 and the harms it presents to ratepayers in the Commonwealth. The application was
5 filed by Aqua and DELCORA pursuant to Sections 507, 1102, and 1329 of the
6 Public Utility Code. My testimony also presents a number of conditions that are
7 necessary to address concerns that I have identified with the acquisition. I also
8 address the valuation studies conducted on behalf of DELCORA (seller) and Aqua
9 (buyer) pursuant to Section 1329 of the Public Utility Code. My investigation of the
10 seller’s and buyer’s valuations has focused on the income, cost, and market
11 approaches utilized within these valuation studies.

12 **Q. What information did you review in conducting your analysis?**

13 A. In conducting my analysis, I reviewed the Applicant’s filed testimony and exhibits
14 and their responses to discovery propounded by the OCA and others. I also reviewed
15 the details underlying the seller’s and buyer’s proposed valuations.

16

17 **Exhibits Filed with Testimony**

18 **Q. Have you prepared any exhibits to be filed with your testimony?**

19 A. Yes. Exhibits RCS-1 through RCS-8 were prepared by me or under my supervision
20 and are attached to my testimony.

21 **Q. Please briefly explain what is included in each of those attachments.**

22 A. Exhibit RCS-1 contains a summary of the buyer’s and seller’s appraisals and the
23 OCA adjusted results.

1 Exhibit RCS-2 presents OCA adjustments to Gannett Fleming Cost
2 Approach.

3 Exhibit RCS-3 presents OCA adjustments to Gannett Fleming Income
4 Approach.

5 Exhibit RCS-4 presents the OCA adjustment to the Gannett Fleming Market
6 Approach.

7 Exhibit RCS-5 presents OCA adjustments to ScottMadden Cost Approach.

8 Exhibit RCS-6 presents OCA adjustments to the ScottMadden Income
9 Approach.

10 Exhibit RCS-7 presents the OCA adjustments to the ScottMadden Market
11 Approach.

12 Exhibit RCS-8 presents non-confidential responses to discovery that are
13 referenced in my testimony.

14

15 **Summary of Testimony and Conclusions**

16 **Q. Please summarize your testimony and conclusions.**

17 A. The estimated impact of the proposed transaction would be an approximately
18 12.55% average rate increase in the rates for current DELCORA wastewater
19 customers due to the change in ownership of this utility, which Aqua has indicated
20 could occur in its next wastewater utility rate case. DELCORA proposes to use
21 approximately \$200 million of its proceeds from the sale to Aqua to establish a
22 DELCORA Customer Trust, which would be utilized to minimize the rate
23 increase(s) to DELCORA wastewater customers under Aqua ownership to 3 percent

1 per year while the funds last. Section V of my testimony discusses the DELCORA
2 Customer Trust. The transaction proposed by the Applicant would create significant
3 additional costs and presents significant risks to Pennsylvania ratepayers. As
4 proposed, Aqua has not supported that the acquisition will produce affirmative
5 public benefits for its existing wastewater and water customers and the acquired
6 DELCORA customers. If the Commission approves the acquisition, the
7 Commission should adopt the OCA's proposed adjustments to the appraisals. If the
8 Commission approves the acquisition, the OCA recommends a ratemaking rate base
9 in accordance with Section 1329 of \$276.5 million based on the lower amount of the
10 purchase price versus the adjusted appraised value. I recommend certain
11 adjustments to the Buyer's and Seller's valuation approaches, that do not alter the
12 proposed ratemaking rate base, which is based on the purchase price. I recommend a
13 specific accounting treatment for the income tax impact of repairs deductions that
14 will be claimed by Aqua related to the DELCORA assets. I also note that some of
15 the protesting parties have raised various legal issues that should be addressed and
16 resolved.

17 **Q. Please summarize the conditions you recommend should be imposed on the**
18 **proposed transaction.**

19 **A.** If the Commission approves the acquisition, the following conditions and mitigation
20 measures are recommended to protect DELCORA customers and existing Aqua
21 wastewater and water customers from the risks associated with the acquisition:

- The 12.55% average rate increase for DELCORA ratepayers that Aqua has estimated could occur in the next Aqua wastewater rate case should be mitigated to avoid rate shock associated with the change in

1 ownership. The DELCORA Customer Trust (or some acceptable
2 alternative) should be used to limit the annual rate increases to
3 DELCORA wastewater utility customers under Aqua ownership to no
4 more than 3 percent annually, until the approximated \$200 million
5 projected for funding the DELCORA Customer Trust has been fully
6 applied for such rate increase mitigation purposes.

- 7 • While the Trust is functioning to limit increases to DELCORA
8 customers, the DELCORA customers should be a separate rate zone.
9 The separate rate zone and its separate cost of service study should
10 remain an obligation at least as long as the Trust provides the rate
11 mitigation.
- 12 • At the time of filing its next base rate case, Aqua should submit a cost
13 of service study that removes all costs and revenues associated with
14 the operations of the DELCORA wastewater system and should also
15 provide a separate cost of service study for the DELCORA system.
- 16 • When Aqua modifies its LTIP to include the DELCORA wastewater
17 system, any DELCORA-related projects reflected in the revised
18 LTIP should be in addition to, and not reprioritize, any capital
19 improvements that Aqua was already committed to undertake for
20 existing customers.
- 21 • DELCORA must address convincingly whether it has the legal
22 authority to transfer the wastewater utility assets and related contracts
23 to Aqua.
- 24 • DELCORA must provide clarity as to how the DELCORA Rate
25 Stabilization Fund Trust Agreement between DELCORA as Settlor
26 and Univest Bank and Trust Co. as Trustee, with the Effective Date of
27 December 27, 2019 will function to insulate DELCORA wastewater
28 customers from rate increases.
- 29 • Aqua and DELCORA should revise the MOU to add details regarding
30 how the Trust proceeds will be properly credited to the former
31 DELCORA customers as set forth in responses to OCA and County
32 discovery.
- 33 • The customer assistance payments from the DELCORA Customer
34 Trust on Aqua's billings to DELCORA wastewater utility customers
35 should be separately shown on the bills to help make this part of the
36 public benefit transparent to the DELCORA wastewater utility
37 customers who are receiving the bill assistance.
- 38 • The operation of the DELCORA Customer Trust, i.e., the DELCORA
39 Rate Stabilization Fund should be reviewed and monitored in
40 quarterly reports from Aqua which show how amounts are being

1 applied to reduce the Aqua rate increases to DELCORA wastewater
2 utility customers that would be occurring under Aqua ownership.

- 3 • In the period from the date when the acquisition is consummated
4 through the effective date of new rates for the acquired DELCORA
5 wastewater utility customers in Aqua's next base rate case, the impact
6 on income tax expense from repairs deductions claimed by Aqua on
7 DELCORA wastewater utility system assets should be recorded in a
8 regulatory liability account and addressed in Aqua's next base rate
9 case in which rates for the acquired DELCORA wastewater utility
10 customers are addressed.
- 11 • The issues being raised by some of the resale customers' resale
12 transfer of the agreements should be resolved before the transaction
13 can close. Those agreements are tied to expected revenues.

15 **II. STANDARD OF REVIEW**

16 **Q. Please state your understanding of the standard of review that must be met in**
17 **order for the proposed transaction to be approved by the Commission.**

18 A. The proposed transaction must be reviewed under Section 507, Section 1102(a) and
19 Section 1329 of the Public Utility Code.

21 **Section 1102(a) Requirements**

22 **Q. Please explain your understanding of the Section 1102(a) requirements.**

23 A. It is my understanding that Section 1102(a) of the Public Utility Code requires the
24 Commission to issue a Certificate of Public Convenience as a legal prerequisite to
25 certain property transfers by public utilities or their affiliated interests. This same
26 statute also requires that a certificate be granted only if "necessary or proper for the
27 service, accommodation, convenience or safety of the public." I have been advised
28 by counsel that the Pennsylvania Courts and the Commission have construed this as

1 requiring that a proposed acquisition of, or merger with, a public utility “will
2 affirmatively promote the service accommodation, convenience, or safety of the
3 public in some substantial way.” City of York v. Pennsylvania Public Utility
4 Commission, 449 Pa. 136, 141, 209 A.2d 825,828 (1973); Popowsky v. Pa. PUC,
5 594 Pa. 583, 937 A.2d 1040 (2007) (the Verizon decision).

6 Moreover, the provision of substantial benefits, as required by the City of
7 York case, cannot be limited to the mitigation of risks created or enhanced by the
8 acquisition. That would be equivalent to a no-adverse-effect standard, rather than an
9 affirmative benefit requirement.

11 **Section 1329 Requirements**

12 **Q. What changes did 66 Pa. C.S. § 1329 make to the Public Utility Code?**

13 A. Section 1329, among other things, provides that when a water or wastewater
14 municipal utility is acquired by a regulated water or wastewater public utility, the
15 utility may value the acquired utility’s assets using fair market value. Section 1329
16 details the procedure utilities must follow in order to use Section 1329 for utility
17 valuation.

18 **Q. Please explain your understanding of the Section 1329 requirements.**

19 A. 66 Pa. C.S. §1329(a)(2) requires that two utility valuation experts shall perform two
20 separate appraisals of the selling utility for the purpose of establishing its fair market
21 value. The average of the appraisals determines the “fair market value.” The lower
22 of the purchase price and the fair market value becomes the amount to be used as the
23 ratemaking rate base in the acquiring utility’s next rate case.

1 Section 1329(a)(3) requires that each utility valuation expert shall determine
2 fair market value in compliance with the Uniform Standards of Professional
3 Appraisal Practice, employing the cost, market, and income approaches. Section
4 1329(a)(2) requires that two appraisals should be averaged to determine the fair
5 market value.
6

7 **III. APPLICANT’S PROPOSED TRANSACTION**

8 **Q. Please provide a general description of DELCORA.**

9 A. DELCORA is a body corporate and politic, organized under the Pennsylvania
10 Municipal Authorities Act. DELCORA provides sanitary and combined wastewater
11 service to retail and wholesale customers in parts of Delaware and Chester Counties,
12 including direct retail service to approximately 16,000 customers and provides
13 wholesale conveyance and treatment service to municipal and municipal authority
14 customers within all or part of 40 municipalities.

15 **Q. Please provide a general description of Aqua Pennsylvania Wastewater.**

16 A. Aqua Pennsylvania Wastewater is a regulated public utility company that furnishes
17 wastewater service to approximately 35,000 customer accounts. It services various
18 Counties in Pennsylvania including parts of Delaware and Chester Counties.

19 **Q. Please provide a general comparison between DELCORA and Aqua**
20 **Pennsylvania Wastewater.**

21 A. From a retail customer comparison, Aqua Pennsylvania Wastewater serves
22 approximately double the number of retail customers that DELCORA serves;
23 however, DELCORA also serves several municipal and municipal authority

1 customers in 49 municipalities. DELCORA's annual wastewater utility revenues of
2 approximately \$71 million are more than double (2.7 times) Aqua Pennsylvania
3 Wastewater's annual revenue of approximately \$26.7 million.¹

4 **Q. How has the Applicant presented the proposed transaction?**

5 A. The Applicant presented the proposed transaction as having public benefits and a
6 contracted purchase price for the utility assets being acquired that is below the fair
7 market value of such assets.

8 **Q. Please describe the general nature of Aqua's Application.**

9 A. Aqua's Application, filed on March 3, 2020, proposes that the ratemaking rate base
10 for the acquired system, pursuant to Section 1329(c)(2) of the Public Utility Code, is
11 \$276,500,000.²

12 **Q. What amount has the Applicant identified for the amount of anticipated
13 Transaction Costs?**

14 A. The testimony of Aqua witness Feeney (Aqua Statement 3) at page 9 states that
15 Aqua estimates the anticipated transaction and closing costs to be approximately
16 \$750,000 including the Company's UVE fees. The exact closing costs will be
17 determined at closing.

18 **Q. Did the Application include valuations prepared by consultants to the buyer
19 (Aqua) and the seller (DELCORA)?**

¹ Revenue amounts are from the Application workpapers, Appendix A – DELCORA FINAL FOR FILING Excel file, "Appendix A" tab.

² Application at paragraph 60.

1 A. Yes. The Application includes valuations prepared by qualified appraisers from the
2 list maintained by the PUC. As Ms. Feeney explains at pages 7-8 of her Direct
3 Testimony:³

4 The two appraisals used the USPAP employing the cost, market, and
5 income approaches to arrive at the fair market value of the System.
6 The DELCORA-sponsored appraisal performed by ScottMadden
7 arrived at a System value of \$308,194,006. The Company-sponsored
8 appraisal performed by Gannett arrived at a System value of
9 \$408,883,000. Therefore, the fair market value as defined in Section
10 1329 of the Public Utility Code is the average of these two appraisals,
11 which is \$358,538,503.

12 The purchase price of \$276.5 million is below the average appraised value;
13 consequently, the Applicant is proposing the \$276.5 million purchase price amount
14 be included in rate base, if the transaction is approved.

15 **Q. What was the depreciated original cost of the assets (as defined by 1329, i.e., no**
16 **subtraction for contributions)?**

17 A. DELCORA's adjusted financial statements as of December 31, 2019 provided in
18 OCA-II-7, Attachment 1, page 13 shows that the capital assets, net of accumulated
19 depreciation as of December 31, 2019 was \$260,506,518. We could not ascertain the
20 amount of contributions included in this amount.

21 **Q. What other proposals does Aqua make pursuant to Section 1329 of the Public**
22 **Utility Code?**

23 A. Ms. Feeney states that Aqua intends to utilize the following provisions of the statute
24 (Aqua Statement No. 3, page 6):

25 Aqua intends to amend its Long-Term Infrastructure Improvement
26 Plan ("LTIIP") after closing to include the DELCORA system in the

³ Aqua Statement No. 3

1 LTIIIP and file the amended LTIIIP with the PUC. If the PUC approves
2 the amended LTIIIP, Aqua will begin charging a DSIC to DELCORA
3 customers.
4

5 **Q. Please briefly summarize the Transaction that the Joint Applicants are**
6 **proposing.**

7 A. Under the terms of the Proposed Transaction, PAWC would acquire the wastewater
8 utility assets of DELCORA for \$276.5 million.

9 **Q. Please briefly describe the DELCORA wastewater utility.**

10 A. As described in the Direct Testimony of Mr. Willert (Aqua Statement No. 5) at
11 pages 4-5:

12 DELCORA owns and operates an extensive system of pump stations,
13 force mains, and sewers that provide the core infrastructure for the
14 transmission of wastewater to treatment facilities in Delaware County
15 and the City of Philadelphia. DELCORA also owns and operates
16 smaller systems in Chester County. DELCORA owns and operates
17 over 180 miles of sewer infrastructure, the vast majority of which are
18 sanitary in nature. These flows are directed to two treatment facilities:
19 one in Delaware County, and one in Philadelphia. DELCORA
20 currently serves approximately 16,000 customers, and overall
21 collects, conveys and treats approximately 197,000 Equivalent
22 Dwelling Units ("EDUs") from all classes, including retail, wholesale,
23 municipal, industrial, and commercial.

24 DELCORA's system is divided into two service areas: Eastern and
25 Western. The facility located in, and owned by, Philadelphia - the
26 Philadelphia Water Department's ("PWD") Southwest Water
27 Pollution Control Plant ("SWPCP") - primarily serves the Eastern
28 service area, and the facility in Delaware County owned by
29 DELCORA - Western Regional Treatment Plant ("WRTP") -
30 primarily serves the Western service area. The dividing line between
31 the two areas generally tracks along Chester Creek.

32 As set forth in Exhibit G to the Application, DELCORA's rate groups are
33 categorized into the following groups: (1) Chester Ridley Creek, (2) Eastern

1 Authority, (3) Edgmont, (4) Pocopson Preserve, (5) Pocopson Riverside, (6)
2 Residential, Commercial, Marcus Hook, and Minimum Accounts, (7) Rose Valley
3 Area, (8) Western Wholesale, (9) Western Retail Industrial, (10) Western Wholesale
4 Industrial, and (11) Springhill Farms.⁴

5 **Q. Does the Application provide the terms of the Proposed Transaction?**

6 A. Yes, the Asset Purchase Agreement ("APA") dated November 4, 2019 was included
7 with the Application as Exhibit B1 and an Amendment to the APA is included as
8 Exhibit B2. The APA states that the purchase price is \$276,500,000. The
9 Application indicates that the purchase price is based on arm's length negotiations.
10 Aqua and DELCORA are not affiliated with each other.⁵

11 **Q. Was Aqua the only bidder for DELCORA?**

12 A. Yes. No other bids were permitted by DELCORA even though PAWC also
13 expressed interest in acquiring ownership.

14 **Q. Has DELCORA described how it would apply the proceeds from selling its**
15 **wastewater utility assets to Aqua?**

16 A. Yes. DELCORA's response to OCA-III-10, for example, states as follows:

17 The proceeds of the sale will first be used to pay any existing
18 liabilities of DELCORA. The balance of the sale proceeds will be
19 placed into the Trust, with the exception of any reasonable reserves.
20 The precise amounts of DELCORA's liabilities and any reserves have
21 not yet been determined; however, DELCORA's preliminary
22 estimates for the amount to be transferred to the trust is approximately
23 \$200 million. Continuing to administer the Trust in accordance with
24 DELCORA's charter is not expected to be a material expense.

25

⁴DELCORA currently has an agreement for the purchase of Springhill Farms which will conclude in 2020.

⁵ Application at paragraph 25.

1 Section V of my testimony discusses DELCORA's proposed Customer Trust in
2 additional detail.

3 **Q. What public benefits are claimed by DELCORA?**

4 A. DELCORA witness Robert Willert at pages 5 and 11-14 of his Direct Testimony⁶
5 claims the following benefits of the proposed transaction:

- 6 • Aqua has extensive experience in large scale capital investments over
7 multi-year periods, which will allow them to address needed capital
8 improvements and build the infrastructure needed to disconnect from
9 PWD in 2028.
- 10 • The impact on bills for DELCORA's customers is a primary benefit.
11 The majority of the sales proceeds will be placed in an irrevocable
12 trust for the benefit of DELCORA's customers by gradually
13 increasing the customer bills over an extended period of time.
- 14 • Aqua will be able to create a larger-scale, efficiently operated water
15 and wastewater utility by merging with DELCORA's system.
- 16 • DELCORA's customers will receive enhanced customer service from
17 Aqua.
- 18 • Aqua has committed to preserving jobs by hiring all DELCORA
19 employees.
- 20 • The proposed transaction provides environmental benefits because
21 disconnecting from PWD and a partnership with Aqua will provide
22 for water discharge into the Delaware River at a location that is less
23 environmentally sensitive.

24
25 **Q. What public benefits are claimed by Aqua?**

26 A. Aqua witness Marc A. Lucca's Direct Testimony (Aqua Statement No. 1) at pages 10
27 through 14 claims that the proposed Transaction would benefit DELCORA
28 customers by becoming part of a larger-scale, efficiently operating, water and
29 wastewater utility. He states that there will be no immediate impact on rates since

⁶ See Application Exhibit W1, Testimony of Robert Willert, Aqua Statement No. 5

1 Aqua will implement DELCORA's existing base customer rates which will remain
2 in effect until Aqua's next rate case.⁷ He states that DELCORA customers will have
3 access to additional customer service protections and programs provided by Aqua,
4 such as Aqua's Helping Hand program for low-income customers.

5 **Q. What has the Applicant proposed for rate stabilization?**

6 A. The seller, DELCORA, has proposed a Rate Stabilization Fund (DELCORA
7 Customer Trust) to mitigate future rate increases. Section 1329(g) defines a "rate
8 stabilization plan" as "[a] plan that will hold rates constant or phase rates in over a
9 period of time after the next base rate case." Aqua claims that it is not proposing a
10 rate stabilization plan pursuant to Section 1329(g). As detailed in Article 7.04 of the
11 APA, Aqua will implement DELCORA's wastewater rates that are effective at the
12 date of closing. Aqua will also implement surcharges such as the Distribution
13 System Improvement Charge (DSIC) and Tax Adjustment Surcharge to
14 DELCORA's base rates, after closing. Mr. Packer states that base rates for
15 DELCORA's wastewater customers will be addressed and adjusted, as appropriate
16 and without any form of contractual restriction, in Aqua's first base rate case
17 following the transaction (Aqua Statement No. 2, pages 4 through 5). In Aqua's first
18 base rate case following closing that includes DELCORA customers, he indicates
19 that the acquired DELCORA customers will be billed at the full Commission
20 approved rate from Aqua's base rate case. The rates will be stated in Aqua's tariff on
21 file with the Commission and available on Aqua's website. While the DELCORA

⁷ As shown in the Application on Exhibits I2 through I12 (and as summarized later in my testimony on page 29), Aqua has projected a 12.55% increase for DELCORA Wastewater customers.

1 Customer Trust funds are being used to offset the Aqua rate increases above 3% per
2 year, there would be a growing rate disparity between the rates charged by Aqua
3 Wastewater for DELCORA and non-DELCORA Wastewater utility customers.⁸
4 Once the offset to the Aqua Wastewater rates from the DELCORA Customer Trust
5 funds is used up, those DELCORA customers will experience much higher
6 wastewater utility rates at that time. The impact on DELCORA and as well as
7 existing Aqua customers (wastewater and water) will be discussed further below.

8 **Q. What has Aqua stated concerning its intention to start charging DELCORA**
9 **wastewater customers a DSIC?**

10 A. At page 6 of her direct testimony, Aqua witness Feeney states that Aqua is
11 requesting authority from the Commission to approve collection of a Distribution
12 System Improvement Charge in the future, prior to the first base rate case in which
13 the System plant-in-service is incorporated into rate base. Aqua would not begin
14 charging a DSIC until the Commission approves an amended Long-Term
15 Infrastructure Improvement Plan (LTIIP) for Aqua that includes eligible System
16 plant.

17

18 **IV. ANALYSIS OF THE PROPOSED TRANSACTION**

19 **Q. Please describe your approach to evaluating the proposed transaction.**

20 A. It is my understanding that in order to gain Commission approval, the proposed
21 transaction must provide substantial affirmative benefits to Pennsylvania ratepayers
22 and the public. To determine whether the acquisition, as proposed, is likely to

⁸This discussion assumes that the DELCORA Customer Trust is found to be lawful.

1 provide the required substantial benefits, I have considered both: (1) the potential
2 costs and risks that will result from the transaction and (2) the amount of benefits
3 proposed and the likelihood of Pennsylvania ratepayers enjoying those benefits. I
4 also testify and present recommended adjustments to certain parts of the appraisals
5 performed by the utility valuation experts (UVEs): Dylan W. D'Ascendis of
6 ScottMadden, Inc. ("ScottMadden") on behalf of DELCORA and Harold Walker of
7 Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming") on
8 behalf of Aqua. My testimony contains an analysis of the Cost Approach, Income
9 Approach, and Market Approach of each appraisal. I am also recommending
10 adjustments to the valuations of the DELCORA wastewater utility system that Aqua
11 is proposing to acquire. I have attached OCA Exhibits RCS-1 through RCS-7 to my
12 testimony to support various calculations in this testimony. Additionally, Exhibit
13 RCS-8 includes non-confidential responses to data requests that are referenced in my
14 testimony.

15 **Q. Please summarize the net book value of the DELCORA wastewater utility**
16 **system assets that are being acquired by Aqua.**

17 A. Aqua and DELCORA engaged Pennoni Associates Inc. ("Pennoni"), with support
18 from Weston Solutions, Inc., to complete the Engineer's Assessment, which was
19 presented as Exhibit D to the Application, and resulted in the following summary of
20 the original cost of the DELCORA wastewater utility assets:

DELCORA WASTEWATER SYSTEM		
SUMMARY OF ANALYSIS OF ORIGINAL COST OF WASTEWATER SYSTEM		
AS OF DECEMBER 13, 2019		
ACCOUNT	DESCRIPTION	ORIGINAL COST (\$)
353.3	LAND AND LAND RIGHTS - PUMPING	\$ 131,500.00
354.3	STRUCTURES AND IMPROVEMENTS - PUMPING	\$ 28,944,363.79
354.4	STRUCTURES AND IMPROVEMENTS - TREATMENT	\$ 12,681,792.80
354.7	STRUCTURES AND IMPROVEMENTS - GENERAL PLANT	\$ 2,434,828.00
360.21	COLLECTION SEWERS - FORCE - MAINS	\$ 40,269,449.52
361.21	COLLECTION SEWERS - GRAVITY - MAINS	\$ 8,324,260.54
361.23	COLLECTION SEWERS - GRAVITY - MANHOLES	\$ 3,473,591.30
362.2	SPECIAL COLLECTING STRUCTURES	\$ 8,739,493.81
363.2	SERVICES TO CUSTOMERS	\$ 307,904.86
364.2	FLOW MEASURING DEVICES	\$ 634,716.65
365.2	FLOW MEASURING INSTALLATIONS	\$ 12,625.00
371.3	PUMPING EQUIPMENT	\$ 11,042,301.00
380.3	TREATMENT AND DISPOSAL EQUIPMENT - PUMP STATIONS	\$ 37,071,005.38
380.4	TREATMENT AND DISPOSAL EQUIPMENT	\$ 105,317,582.56
390.7	COMPUTER AND SOFTWARE	\$ 311,997.68
391.7	TRANSPORTATION EQUIPMENT	\$ 3,788,348.39
396.7	COMMUNICATION EQUIPMENT	\$ 196,855.00
	SYSTEM TOTAL	\$ 263,682,616.27

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Using the engineering analysis developed by Pennoni, Gannett Fleming shows the original cost of DELCORA's wastewater collection and treatment system and land to be \$263,682,616.⁹ With calculated accumulated depreciation of \$71,908,130,¹⁰ the net book value of the DELCORA wastewater utility assets is \$191,774,486.¹¹

Q. By how much does the purchase price exceed the net book value?

⁹See Application Exhibit Q, Fair Market Value Appraisal Report As of December 31, 2019 for Aqua prepared by Gannett Fleming ("Gannett Fleming Report") at pages 27-28.

¹⁰Gannett Fleming Report at page 28.

¹¹This value does not reflect an offset for contributions, pursuant to 1329, as it would under normal ratemaking

1 A. Aqua agreed to pay \$276.5 million for the DELCORA collection and treatment
2 system, or \$84.7 million (44%) over the net book value that was computed by
3 Gannett Fleming.¹²

4 **Q. Please discuss how the appraised values relate to the purchase price.**

5 A. The appraisers, Gannett Fleming and ScottMadden, found appraised values of
6 \$408.883 million and \$308.194 million respectively, for an averaged appraised value
7 of \$358.538 million. According to Aqua witness Feeney, the ratemaking rate base is
8 \$276.5 million, pursuant to Section 1329 of the Public Utility Code (Aqua Statement
9 No. 3, page 8). As I will explain below, considering the adjustments described in my
10 testimony, which produces an adjusted fair value of \$280.655 million, the OCA
11 recommends a ratemaking rate base of \$276.5 million based on the purchase price if
12 the Commission approves the application for acquisition (OCA Exhibit RCS-1).

13

14 **Impact of the Proposed Transaction**

15 **Q. What has Aqua represented would be the impact of the proposed transaction?**

16 A. Aqua witness Feeney states at page 8 of her direct testimony that:

17 According to Section 1329, the ratemaking rate base is the lesser of
18 either the purchase price in the APA, which is \$276,500,000, or the
19 fair market value which is \$358,538,503. In this instance, since the
20 purchase price is lower than the fair market value, the ratemaking rate
21 base for the System is \$276,500,000.

22

¹² Purchase price of \$276.5 million / \$191.8 million = 1.44, which indicates a 44% increase over the \$191.8 million net book value for the DELCORA wastewater utility assets that are being acquired by Aqua that was computed by Gannett Fleming.

1 **Q. What rate increases does the Application present for Aqua's current**
2 **wastewater and water customers?**

3 A. Exhibit I1 in the Application, which is Aqua's notice to its existing wastewater and
4 water utility customers, presents the following estimated increases of 14.32% for
5 Aqua wastewater customers resulting from the proposed transaction:

Aqua Wastewater Customers

Rate Class	Average Usage	Estimated Monthly Increase	Estimated Percentage Increase
Residential	3,020 gal/month	\$9.78	14.32%
Commercial	21,940 gal/month	\$30.76	14.32%
Industrial	3,200 gal/month	\$7.92	14.32%

6
7 Exhibit I2 of the Application also presents the following estimated 4.58% increases
8 for Aqua water customers resulting from the proposed transaction:

Aqua Water Customers

Rate Class	Average Usage	Estimated Monthly Increase	Estimated Percentage Increase
Residential	4,080 gal/month	\$2.99	4.58%
Commercial	37,050 gal/month	\$18.77	4.58%
Industrial	211,510 gal/month	\$88.39	4.58%

9
10 It should be noted that the amounts stated above could change and will
11 depend on how the PUC chooses to apportion any increase among the types of
12 service, rate zones, and classes of customers.

13 **Q. What rates does Aqua propose to charge to the acquired DELCORA**
14 **wastewater utility customers?**

1 A. Initially, Aqua would charge DELCORA customers the DELCORA wastewater
2 utility rates that were in effect at closing. Aqua also states that the acquired
3 DELCORA customers will be billed at the full Commission approved rate from
4 Aqua's next base rate case. This rate will be stated in Aqua's tariff on file with the
5 Commission and available on Aqua's website.

6 **Q. What amount of revenue deficiency does the Application reflect for**
7 **DELCORA?**

8 A. As summarized in the following table, which reproduces calculations from the
9 Application, Appendix A, a revenue deficiency of \$8.908 million or 12.55% was
10 estimated for existing DELCORA customers:

Applicant's Estimated Revenue Deficiency for DELCORA Wastewater Utility Resulting from the Proposed Transactions			
Line No.	Description	Year 1 Amounts	References
	<u>I. Operating Income</u>		
1	Revenue	\$ 70,978,127	See Note
	Expenses:		
2	O&M	\$ 41,808,283	See Note
3	Depreciation	\$ 8,247,040	See Note
4	Taxes Other	\$ 1,585,974	See Note
5	Income Taxes	\$ 3,807,858	See Note
6	Total Expenses	\$ 55,449,155	Lines 2 through 5
7	Operating Income	\$ 15,528,972	Line 1 - Line 6
	<u>II. Rate Base</u>		
8	Rate Base at Fair Market Value	\$ 276,500,000	See Note
9	Capital Investments (<i>Year 1</i>)	\$ 26,700,000	See Note
10	Rate Base (<i>Including Capital Investments less depreciation year 1</i>)	\$ 294,952,960	Line 8 - Line 3 + Line 9
	<u>III. Revenue Deficiency</u>		
11	Rate Base	\$ 294,952,960	Line 10
12	Rate of Return	7.37%	See Note
13	Required Operating Income (<i>Rate Base x Rate of Return</i>)	\$ 21,749,079	Line 11 x Line 12
14	Operating Income	\$ 15,528,972	Line 7
15	Operating Income Deficiency	\$ 6,220,107	Line 13 - Line 14
16	Gross Revenue Conversion Factor	1.432171	See Note
17	Revenue Deficiency (Excess) \$	\$ 8,908,000	Line 15 x Line 16
18	DELCORA's Waste Water Revenue	\$ 70,978,127	Line 1
19	Revenue Deficiency (Excess) %	12.55%	Line 17 / Line 18
Notes and Source:			
Application workpapers: APPENDIX A - DELCORA - FINAL FOR FILING Excel file, "Appendix A" tab			

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The Application also estimates revenue deficiency amounts for existing Aqua Pennsylvania wastewater customers of \$4.45 million or a 14.32% rate increase and for existing Aqua Pennsylvania water customers of \$19.97 million or a 4.58% rate increase, as shown in the following table:

Applicant's Calculated Revenue Increases			
Line No.	Description	Year 1	Reference
1	Revenue Deficiency \$	\$ 8,908,000	See Note
2	DELCORA Wastewater Existing Revenue	\$ 70,978,127	See Note
3	Revenue Deficiency (Excess) %	12.55%	Line 1 / Line 2
4	Aqua Wastewater Existing Revenues	\$ 31,096,256	See Note
5	Aqua Water Existing Revenues	\$ 435,986,388	See Note
6	Increase applied to Acquired DELCORA Wastewater customers 100 %	\$ 8,908,000	Line 1
7	Increase %	12.55%	Line 6 / Line 2
8	Increase applied to Existing Aqua Wastewater customers 50 %	\$ 4,454,000	Line 1 x 0.5
9	Increase %	14.32%	Line 8 / Line 4
10	Increase applied to Existing Aqua Water customers (Act 11)	\$ 19,971,532	(Line 1 + Line 2) x 0.25
11	Increase %	4.58%	Line 10 / Line 5
Notes and Source:			
Lines 1-5: Application Workpapers: APPENDIX A - DELCORA - FINAL FOR FILING Excel file, "Appendix A" and			
Existing Cust.Revenue support tabs			

1

2 **Q. What rate increases does the Application present for DELCORA wastewater**
3 **customers?**

4 A. The Application in Exhibits I2 through I12 present the following estimated rate
5 increases (based on the DELCORA revenue requirement) for DELCORA
6 wastewater utility customers:

Applicant Projected Increases to DELCORA Wastewater Utility Customers				
DELCORA Rate Class	Application Exhibit	Average Usage	Dollar Increase	Percent Increase
Chester Ridley Creek	I2	65,395,830 gal/month	\$28,725.91	12.55%
Eastern Authority	I3	362,465,280 gal/month	\$123,279.64	12.55%
Edgmont Residential	I4	4,080 gal/month	\$13.33	12.55%
Edgmont Commerical	I4	29,490 gal/month	\$48.66	12.55%
Pocopson Preserve	I5	N/A	\$14.64	12.55%
Pocopson Riverside	I6	N/A	\$9.94	12.55%
Residential/Commercial	I7	6,810 gal/month	\$4.92	12.55%
Marcus Hook	I7	3,910 gal/month	\$4.30	12.55%
Minimum Accounts - Marcus Hook	I7	1,400 gal/month	\$1.54	12.55%
Minimum Accounts - Other	I7	1,560 gal/month	\$1.13	12.55%
Rose Valley Area	I8	N/A	\$10.17	12.55%
Springhill Farms	I9	N/A	\$8.72	12.55%
Western Retail Industrial	I10	735,870 gal/month	\$640.01	12.55%
Western Wholesale	I11	19,238,040 gal/month	\$6,946.25	12.55%
Western Wholesale Industrial	I12	40,014,580 gal/month	\$15,969.86	12.55%
The amounts stated above could change and will depend on how the PUC chooses to apportion any increase among the types of service, rate zones, and classes of customers.				

Q. Do the increases to the existing DELCORA wastewater customers reflect the impact of the DELCORA Customer Trust?

A. No. The estimated rate increases for DELCORA customers stated in the notifications to customers and summarized above do not include the effect that the DELCORA Customer Trust would have to assist DELCORA customers in paying for their own cost of service in their utility bills.

Q. Has DELCORA proposed to establish a DELCORA Customer Trust for the purpose of mitigating the impact of the rate increases that are projected to occur under Aqua ownership of the DELCORA wastewater utility system?

A. Yes. The Direct Testimony of Mr. Willert (Aqua Statement No. 5) describes how DELCORA is proposing to take a portion of the proceeds of the Proposed Transaction and place them into a trust for the benefit of the DELCORA customers, and has requested to apply payments to DELCORA customers from the DELCORA

1 Customer Trust through Aqua's billing process. As clarified in DELCORA's
2 response to SWDCMA-I-8, the funds from the DELCORA Customer Trust would be
3 applied to mitigate rate increases under Aqua's ownership for the following types of
4 customers:

5 a. Those who were retail customers of DELCORA on the date of the
6 Asset Purchase Agreement.

7 b. Those who were wholesale customers of DELCORA on the date of
8 the Asset Purchase Agreement where the wholesale customer agrees
9 to the assignment of its contract to Aqua.

10 c. Those who become retail customers of DELCORA between the
11 date of the Asset Purchase Agreement and the date of closing.

12 d. Those who become wholesale customers of DELCORA between
13 the date of the Asset Purchase Agreement and the date of closing.

14 e. Those who become retail customers of Aqua in the former
15 DELCORA service area after the date of closing.

16 f. Those who become wholesale customers of Aqua in the former
17 DELCORA service area after the date of closing.

18
19 In contrast, for wholesale customers of DELCORA on the date of the Asset
20 Purchase Agreement where the wholesale customer does not agree to the assignment
21 of its contract to Aqua, the Applicant's response to SWDCMA I-4 states that such an
22 entity may not be eligible to receive the benefit of the customer assistance payments
23 from the DELCORA Customer Trust:

24 If a municipality does not agree to assign and amend their contract
25 such that charges for service will be in accordance with Aqua's tariff,
26 Aqua will continue to provide service to that entity; however, that
27 entity may not be eligible to receive the benefit of the customer
28 assistance payments from the DELCORA Customer Trust. The
29 Company would operate under the provisions of its tariff.
30

1 Section V of my testimony contains additional discussion of the DELCORA
2 Customer Trust.

3 **Q. With regard to the estimated revenue requirement associated with the proposed**
4 **ratemaking rate base and the estimated revenues from DELCORA customers,**
5 **do you have any recommendations for Aqua's next rate filing?**

6 A. Yes. To ensure that the Commission and parties have complete information about the
7 cost of serving the DELCORA customers in Aqua's first base rate case in which
8 DELCORA is included, I recommend that if the Commission approves the
9 acquisition, the approval be conditioned on a requirement that Aqua provide a
10 separate Cost of Service Study for the DELCORA system. Also, in that first base
11 rate case, I recommend that Aqua keep DELCORA as a separate rate zone.

12 **Q. Do you have any concerns regarding the proposed benefits claimed by Aqua**
13 **and DELCORA?**

14 A. While Aqua claims that the transaction will create larger scale efficient wastewater
15 system by increasing the size of Aqua Pennsylvania Wastewater, the Company has
16 not demonstrated how, or when, economies of scale will be achieved as a result of
17 the transaction.

18 **Q. Do you have other concerns about the impact of the proposed transaction?**

19 A. Yes. The proposed transaction creates harm for the existing Aqua customers
20 (wastewater and water). The harms of the proposed transaction include rate
21 increases to existing Aqua wastewater and water utility customers. Aqua
22 Pennsylvania's current wastewater and water customers are projected to experience

1 rate increases as a result of Aqua's acquisition and will not receive any immediate
2 benefit from the transaction.

3 There are harms for DELCORA customers, too, including higher rates. As
4 noted above, even if the Trust remains and offsets the rates for some period of time,
5 when the proceeds are fully used, then the DELCORA customers will face large rate
6 increases to get to the level of rates that the other Aqua wastewater customers are
7 paying at that time.

8

9 **V. THE DELCORA CUSTOMER TRUST**

10 **Q. Is the DELCORA Customer Trust considered a key component of the proposed**
11 **transaction?**

12 A. Yes. The DELCORA Customer Trust is considered a key component. As part of the
13 Application, the following testimony of Robert Willert was submitted by Aqua (in
14 Statement No. 5, on page 11):

15 Q. Please further describe the benefits of the Proposed Transaction.

16 A. The impact on bills for DELCORA's customers was one of the
17 driving forces behind this transaction and is the primary benefit. The
18 majority of the sale proceeds will be placed in an irrevocable trust for
19 the benefit of DELCORA's customers. It is my understanding that this
20 is a relatively unique feature for a transaction of this nature and
21 provides a substantial benefit to our customers.

22

23 DELCORA witness Robert Willert at pages 11 of his Direct Testimony states that
24 the impact on bills for DELCORA's customers is the primary benefit of the proposed
25 transaction because the majority of the sales proceeds will be placed in an
26 irrevocable trust for the benefit of DELCORA's customers to be used to gradually

1 increase the customer bills over an extended period of time, rather than through
2 periodic rate increases that may be proposed by Aqua. The DELCORA Customer
3 Trust is thus being claimed as the primary benefit of the proposed transaction for
4 customers and as a unique feature of the transaction. This is very important
5 component of the proposed transaction.

6 **Q. Do the increases to the existing DELCORA wastewater customers of 12.55%**
7 **that were projected by Aqua reflect the impact of a Trust that DELCORA has**
8 **proposed to establish for the purpose of mitigating rate increases?**

9 A. No. The estimated rate increases for DELCORA customers stated in the
10 notifications to customers (Application Exhibits I2 through I12) and summarized
11 above on page 29 of my testimony do not include the effect that the Trust would
12 have to assist DELCORA customers in paying for their own cost of service in their
13 utility bills.

14 **Q. Has DELCORA clarified how the funds in the DELCORA Customer Trust**
15 **would be applied to offset the rate increases under Aqua ownership to**
16 **DELCORA wastewater utility customers?**

17 A. Yes. As clarified in DELCORA's response to SWDCMA-I-8, the funds from the
18 DELCORA Trust would be applied to mitigate rate increases under Aqua's
19 ownership for the following types of customers:

- 20 a. Those who were retail customers of DELCORA on the date of the
21 Asset Purchase Agreement.
- 22 b. Those who were wholesale customers of DELCORA on the date of
23 the Asset Purchase Agreement where the wholesale customer agrees
24 to the assignment of its contract to Aqua.

- 1 c. Those who become retail customers of DELCORA between the
2 date of the Asset Purchase Agreement and the date of closing.
- 3 d. Those who become wholesale customers of DELCORA between
4 the date of the Asset Purchase Agreement and the date of closing.
- 5 e. Those who become retail customers of Aqua in the former
6 DELCORA service area after the date of closing.
- 7 f. Those who become wholesale customers of Aqua in the former
8 DELCORA service area after the date of closing.
- 9

10 In contrast, for wholesale customers of DELCORA on the date of the Asset
11 Purchase Agreement where the wholesale customer does not agree to the assignment
12 of its contract to Aqua, the Applicant's response to SWDCMA I-4 states that such an
13 entity may not be eligible to receive the benefit of the customer assistance payments
14 from the DELCORA Customer Trust:

15 If a municipality does not agree to assign and amend their contract
16 such that charges for service will be in accordance with Aqua's tariff,
17 Aqua will continue to provide service to that entity; however, that
18 entity may not be eligible to receive the benefit of the customer
19 assistance payments from the DELCORA Customer Trust. The
20 Company would operate under the provisions of its tariff.

21

22 **Q. With the DELCORA Customer Trust, how would the proceeds from the sale be**
23 **applied for the benefit of DELCORA wastewater system ratepayers?**

24 A. The DELCORA Customer Trust (the "Trust" formed on December 27, 2019) would
25 hold a portion of the sales proceeds and make payments to the benefit of DELCORA
26 ratepayers to offset rate increases above 3% per year under Aqua ownership. As
27 explained in DELCORA's responses to OCA-VI-1(c) and (d), the Commission will
28 set rates for the DELCORA wastewater utility ratepayers after Closing. Customer
29 Assistance Payments from the DELCORA Customer Trust will then be used for

1 payments applied to the DELCORA Customer bills as described in the response to
2 OCA-I-36.

3 **Q. Without the DELCORA Customer Trust, how would the proceeds from the sale**
4 **be applied for the benefit of DELCORA wastewater system ratepayers?**

5 A. DELCORA's response to OCA-VI-4 provides the following explanation:

6 If the Trust is ruled invalid, DELCORA will provide the money to
7 ratepayers directly in a way of its choosing consistent with its
8 commitment made in the Trust and its commitment at multiple public
9 venues.

10 Additionally, DELCORA's response to OCA-VI-1(a) provides the following
11 explanation:

12 After considerable time and effort, we believe the Trust is the best
13 way to ensure our ratepayers benefit from the proceeds of this
14 transaction. However, in the unlikely event the Trust is invalidated,
15 DELCORA is still committed to use the proceeds from the transaction
16 to benefit its ratepayers and the money paid to DELCORA will still
17 be available for its ratepayers' benefit, and will still be used for that
18 purpose in another way. This may include individual payments to
19 customers on a quarterly or annual basis. However, this is not the
20 preferred method from an administrative perspective as stated in
21 Application Exhibit WI (Testimony of Robert Willert).

22

23 **Q. Is it DELCORA's position that the Commission has no jurisdiction over the use**
24 **of the proceeds for the benefit of DELCORA's ratepayers?**

25 A. Yes. DELCORA's response to OCA-VI-2 indicates that DELCORA's position is that
26 the Commission has no jurisdiction over the use of the sale proceeds for the benefit
27 of DELCORA wastewater utility ratepayers. DELCORA's response to OCA-VI-2,
28 however, provided no explanation for the basis for that DELCORA position.
29 DELCORA's response to OCA-VI-3 (b) states that: "The establishment of the Trust

1 is one of several benefits to this transaction." Moreover, DELCORA's response to
2 OCA-VI-3(c) states that:

3 The Trust is a mere vehicle designed to ensure that the sale proceeds
4 from this transaction will be used for the benefit of DELCORA's
5 ratepayers in the form of customer assistance payments applied to
6 offset future wastewater rate increases. Trust will hold the transaction
7 proceeds (and any of DELCORA's cash on hand at closing), and will
8 make customer assistance payments using that money to benefit
9 ratepayers. Payments will be made to the extent that ratepayers are
10 subject to any rate increases in excess of 3% per year to offset any
11 such increases. In order to reduce administrative expenses, the
12 payments will be placed on the bills for the benefit of the ratepayers.
13 Aqua and DELCORA's proposal is an efficient method to achieve
14 DELCORA's goals. If the customer assistance payments were not
15 allowed on the DELCORA customer bills, an alternative method
16 would need to be used to provide the proceeds to DELCORA
17 customers. See the response to OCA-VI-1, part a.

18

19 Having a means to mitigate the impact of future rate increases to DELCORA
20 wastewater customers is stated by the Applicants to be the primary benefit of the
21 proposed transaction. The Applicant's Direct Testimony in that regard was not
22 revised and the interrogatory response does not change the direct testimony. The
23 importance of the Trust to the transaction or an alternative rate increase mitigation
24 method to reach the substantive affirmative benefit standard should therefore be
25 acknowledged.

26 **Q. Has DELCORA described how it would apply the proceeds from selling its**
27 **wastewater utility assets to Aqua?**

28 A. Yes. DELCORA's response to OCA-III-10, for example, states as follows:

29 The proceeds of the sale will first be used to pay any existing
30 liabilities of DELCORA. The balance of the sale proceeds will be
31 placed into the Trust, with the exception of any reasonable reserves.

1 The precise amounts of DELCORA's liabilities and any reserves have
2 not yet been determined; however, DELCORA's preliminary
3 estimates for the amount to be transferred to the trust is approximately
4 \$200 million. Continuing to administer the Trust in accordance with
5 DELCORA's charter is not expected to be a material expense.
6

7 **Q. What amount has DELCORA indicated that it would place into the Trust?**

8 A. DELCORA has not yet identified a specific amount, but has provided an estimate of
9 approximately \$200 million in response to OCA-III-10. DELCORA has stated in
10 responding to OCA-I-36(a), that the transfer to the Trust will equal the proceeds
11 from the sale of the sewer system to Aqua, less DELCORA's liabilities, obligations,
12 expenses, and reasonable reserve, plus any transfers from the Escrow Agreement
13 dated December 27, 2019. In response to Delaware County data request County-I-1,
14 DELCORA has indicated that:

15 As of June 10, 2020, it would take approximately \$171,032,462 to
16 defease DELCORA's outstanding bond issues. As of May 31, 2020,
17 DELCORA has \$17,007,273 in other outstanding liabilities (which
18 includes \$6,383,067 in current portion of bond debt), as well as
19 \$14,099,693 in other long-term debt. There will be some expenses
20 related to reviewing the calculations agent's work.

21 Additionally, DELCORA has stated in response to County-I-1(d) concerning the
22 amounts of DELCORA's reasonable reserve, that:

23 There are no estimates at this time, however, after closing,
24 DELCORA anticipates retaining a de minimus amount of money on
25 hand to administer its obligations to oversee the Trust, which are
26 delineated in the trust documents.
27

28 DELCORA's response to County-I-2 provided the additional explanation concerning
29 DELCORA's reserve:

1 After closing, DELCORA anticipates retaining a de minimus amount
2 of money on hand to administer its obligations to oversee the Trust,
3 which are delineated in the trust documents. The precise amount has
4 not yet been determined. There are no anticipated reserves in the
5 Trust, the Trust is to be used in its entirety for the benefit of
6 customers.

7 Subtracting the above-identified amounts from the Applicant's proposed sales price
8 of \$276.5 million is consistent with DELCORA's estimate that funding for the
9 DELCORA Customer Trust could be as much as \$200 million when the additional
10 explanation provided by DELCORA in response to OCA-V-1 is considered.

11 **Q. Has DELCORA provided additional information as to the initial funding**
12 **amount for the DELCORA Customer Trust and how it compares with that**
13 **\$88.46 million amount?**

14 **A.** Yes. DELCORA's response to OCA V-1(a) provide additional explanations:

15 a. Missing in the calculation above is the inclusion of the cash on
16 hand. The estimate of \$200 million includes a cash balance as of
17 12/31/2019 of \$111,207,911.

18 The amount of \$17,007,273 of other outstanding liabilities referenced
19 in the calculation above includes \$6,383,067 which is the current
20 portion of bond debt. In effect, the \$6,383,067 is counted twice in the
21 calculation above since the amount is part of the defeasance. Also
22 omitted from the calculation above are the current non-cash
23 receivables. These receivables may offset many of the other
24 outstanding, non-bond liabilities.

25 A third factor to explain any differences is the timing of the closing.
26 The timing of closing affects the defeasance amount and the amount
27 that will be put into the trust. However, \$200 million is the best
28 estimate at this time.

29
30 DELCORA's response to OCA-V-1 in Attachment 1 provides a detailed
31 itemization of the \$276.5 million purchase price, and the sources and uses of funds

1 that result in the estimated deposit to the DELCORA Customer Trust of
2 approximately \$200.2 million.

3 **Q. If the Trust is ruled invalid as a result of the pending civil litigation in the Court**
4 **of Common Pleas of Delaware County that the County initiated against**
5 **DELCORA, what will happen to the approximately \$200 million of sales**
6 **proceeds that DELCORA has proposed to go into the Trust for the benefit of**
7 **DELCORA's ratepayers?**

8 A. DELCORA's response to OCA-VI-4 states as follows:

9 a. DELCORA is committed to use the proceeds from the transaction
10 to benefit its ratepayers. The Trust is a mechanism to handle the
11 proceeds of the transaction, not something inherent to the transaction
12 itself. DELCORA's desire to save its ratepayers money is inherent to
13 the transaction. See the response to OCA-VI-1, part a.

14 b. If the Trust is ruled invalid, DELCORA will provide the money to
15 ratepayers directly in a way of its choosing consistent with its
16 commitment made in the Trust and its commitment at multiple public
17 venues.

18 Additionally, DELCORA's response to OCA-VI-5(a) indicates that the transaction
19 proposed in Aqua's Application contemplates having a DELCORA-proposed Trust
20 funded in an amount of approximately \$200 million to be used for the purpose of
21 offsetting rate increases under Aqua ownership in excess of 3% per year. Moreover,
22 DELCORA's responses to OCA-VI-5(b) and (c) state as follows:

23 b. For DELCORA, saving our ratepayers money is central to us. The
24 Trust is a mere vehicle designed to ensure that the sale proceeds from
25 this transaction will be used for the benefit of DELCORA's ratepayers
26 in the form of customer assistance payments applied to offset future
27 wastewater rate increases. The Trust and the customer assistance
28 payments are just one of the benefits of the transaction, among other
29 significant benefits as set forth in the response to OCA-VI- 3.

1 c. Trust or no Trust, we will be providing the proceeds back to our
2 customers. DELCORA committed itself to use the proceeds from the
3 transaction to benefit its ratepayers. The Trust and the customer
4 assistance payments are just one of the benefits of the transaction,
5 among other significant benefits as set forth in the response to OCA-
6 VI-3.

7
8 Notably, while the Trust is DELCORA's preferred vehicle for providing for
9 mitigation of future rate increases, which the Applicant claims is the primary benefit
10 of the transaction, this is not a commitment from Aqua.

11 **Q. Has DELCORA explained how the Trust would be supervised?**

12 A. Yes. DELCORA's response to County-I-3 provides a description. There is also a
13 description in the draft Trust document.

14 **Q. Would amounts from the DELCORA Customer Trust also be applied to offset
15 DSIC charges from Aqua to customers in the DELCORA wastewater system?**

16 A. Yes. As stated above, Aqua has indicated that it would begin charging DELCORA
17 wastewater customers a DSIC after Aqua updates its LTIP. DELCORA's response
18 to County-I-4(a) indicates that funds from the DELCORA Customer Trust would be
19 used to offset DSIC charges. All funds in the DELCORA Customer Trust would be
20 used for the benefit of DELCORA's current wastewater utility customers or new
21 Aqua customers in the former DELCORA service territory. DELCORA's response to
22 County-I-4(c) indicates that the DELCORA Customer Trust will not make any
23 payments to Aqua that Aqua retains (and does not transfer back to customers in the
24 form of bill credits). The application of funds from the DELCORA Customer Trust
25 should be monitored and quarterly reporting should be required to ensure that the

1 DELCORA commitment to use the proceeds of the transaction to benefit customers
2 is being achieved.

3 **Q. How has DELCORA clarified which documents constitute the DELCORA**
4 **Customer Trust agreement?**

5 A. DELCORA's responses to OCA-I-36 and County-I-5 clarify which documents
6 constitute the Trust agreement. DELCORA's response to County-I-5, for example,
7 states that:

8 The Trust Agreement is the DELCORA Rate Stabilization Fund Trust
9 Agreement Between Delaware County Regional Water Quality
10 Control Authority, as Settlor, and Univest Bank and Trust Co.
11 executed December 27, 2019.

12 Moreover, as explained in DELCORA's response to County-I-5(b), Section
13 1.1, page 3 of the DELCORA Rate Stabilization Fund Trust Agreement between the
14 Delaware County Regional Water Quality Control Authority, as Settlor, and Univest
15 Bank and Trust Co. include a definition of a "Rate Stabilization Agreement to be
16 entered into by and between the Settlor and Aqua Resources, with Aqua Wastewater
17 as a designated third party Distribution Agent."¹³

18 **Q. Has the Applicant included a copy of the Memorandum of Understanding**
19 **(MOU) between Aqua and DELCORA with the Application?**

20 A. Yes. A copy of the draft MOU was filed with the Application as an attachment to
21 the Direct Testimony of Aqua witness Packer (Aqua Statement No. 2). DELCORA's
22 response to County-I-5(d) indicates that the Rate Stabilization Agreement is defined
23 in Article 1 of the Trust Agreement referenced in the draft Memorandum of

¹³ This "Rate Stabilization Agreement" has been distinguished from a "Rate Stabilization Plan" per Section 1329(g) although both would serve the purpose of mitigating the impact of future rate increases.

1 Understanding that was appended to Aqua Statement No. 2, and notes that the MOU
2 is in draft form. Applicants' supplemental response to OCA I-36 included a copy of
3 the executed Memorandum of Understanding dated August 27, 2020.

4 **Q. How would the DELCORA Customer Trust proposed by the Applicant limit**
5 **the rate increases to DELCORA wastewater utility customers under Aqua**
6 **ownership?**

7 A. As explained in DELCORA's response to OCA-I-36(c), "[t]he payment amount due
8 from the Trust is the difference in authorized tariff rates and a 3 percent increase
9 each year starting on the effective date of new rates of Aqua in the first base rate
10 case that includes DELCORA customers following a sale of the system."

11 **Q. Is the 3% limit stated in a tariff?**

12 A. No. As explained in DELCORA's response to County-I-6(b), there is no proposed
13 tariff provision referencing the 3% annual increase limit.

14 **Q. Will the funds in the DELCORA Customer Trust be used solely for customer**
15 **assistance payments to offset rate increases to DELCORA customers under**
16 **Aqua ownership?**

17 A. Yes. DELCORA's response to County-I-6(c) states as follows concerning the
18 purpose of the DELCORA Customer Trust - which is solely for customer assistance
19 payments to be applied to DELCORA customer bills, and indicates that the draft
20 MOU can be modified as necessary to include details concerning the 3% annual rate
21 increase limit:

22 To be clear, the Trust Agreement and the Trust's sole purpose is to be
23 used for customer assistance payments to be applied to DELCORA
24 customer bills. The Memorandum of Understanding, included in

1 Application Exhibit U2, Appendix B, is still in draft form and, if
2 needed, that detail and information can be included in that document.
3

4 **Q. DELCORA's response to OCA-I-36(d) stated that the parties can update the**
5 **MOU to include "checks and balances" of the commitment to the 3% annual**
6 **increase limit if the Commission approves Aqua's proposal to include a**
7 **customer assistance payment on DELCORA customer bills. Has DELCORA**
8 **explained what document would govern the "checks and balances" if the**
9 **Commission does not approve Aqua's proposal to apply Trust disbursements as**
10 **customer assistance payments on DELCORA customer bills?**

11 A. DELCORA's response to County-I-7(a), which had asked about this, provided the
12 following explanation:

13 DELCORA signed an Asset Purchase Agreement with Aqua.
14 DELCORA has decided to use the proceeds of the sale to be applied
15 to DELCORA customer bills for the benefit of DELCORA
16 customers. If the customer assistance payment cannot be included on
17 DELCORA customer bills, DELCORA will explore different options
18 whereby the Trust assets will be distributed directly to customers,
19 consistent with the signed irrevocable Trust Agreement.
20

21 **Q. Do you recommend that the Customer Assistance Payments from the**
22 **DELCORA Customer Trust be shown on Aqua's billings to DELCORA**
23 **wastewater utility customers?**

24 A. Yes. Providing that Aqua's billing system can accommodate this without incurring
25 costly modification, showing the customer assistance payments from the DELCORA
26 Customer Trust on Aqua's billings to DELCORA wastewater utility customers will

1 help to make this part of the public benefit transparent to the DELCORA wastewater
2 utility customers who are receiving the bill assistance.

3 **Q. Has Aqua stated that it will show the customer assistance payments from the**
4 **DELCORA Customer Trust on Aqua's billings to DELCORA wastewater**
5 **utility customers?**

6 A. Yes. On page 5 of William C Packer's direct testimony, he states that Aqua is
7 proposing to include a payment line item on the customer bill to show the customer
8 assistance payments.

9 **Q. Have legal issues been raised concerning the DELCORA Customer Trust?**

10 A. Yes. Delaware County is disputing the legality of that Trust in the Court of
11 Common Pleas. The disputed legality of the Trust before the Court of Common
12 Pleas will impact the Application and could come into conflict with the
13 Commission's determination in this proceeding. Approval of the Application
14 without a resolution of the issues identified in the Petition filed in the Court of
15 Common Pleas by Delaware County could therefore lead to irreparable harm for
16 existing Aqua and DELCORA customers. The Court of Common Pleas proceeding
17 encompasses the same Asset Purchase Agreement as the instant proceeding and
18 includes many of the same parties in the instant case, including Aqua and
19 DELCORA. On August 14, 2020, the OCA filed a Brief in Support of the Petition of
20 the County of Delaware, Pennsylvania for a Stay and Request for Commission
21 Review and Answer to a Material Question (OCA Brief in Support) in support of a
22 stay of the acquisition proceeding before the Commission pending resolution of the
23 outcome of the Court of Common Pleas proceeding. The Commission denied the

1 petition on August 31, 2020, which could result in parties litigating issues in this
2 docket that are also subject to an ongoing Court of Common Pleas proceeding.

3 **Q. Is the 3% annual increase limit conditioned on approval of Aqua's proposal to**
4 **apply Trust disbursements as customer assistance payments on DELCORA**
5 **customer bills?**

6 A. No. DELCORA's response to County-I-7(b) confirms this and states that:

7 Payments from the Trust to assist customers with payment toward
8 their bill is designed for a 3% annual increase to customers is not
9 conditioned on the approval of Aqua's ability to put the customer
10 assistance payment on the bill. However, this is Aqua and
11 DELCORA's proposal, provided in the Application and testimony.
12 This proposal will benefit customers through the administrative ease
13 of having the Trustee be able to direct the payments through customer
14 bills.

15

16 **Q. Should clarifications of how the customer assistance payments be addressed in**
17 **updates or revisions to the draft MOU?**

18 A. Yes. Clarifications including the above noted ones from Aqua's responses to OCA
19 discovery, such as OCA-VI-3 and OCA-VI-5, and DELCORA's responses to the
20 County set I discovery should be formalized in a revised MOU. DELCORA's
21 commitment to apply approximately \$200 million of the sales proceeds for the
22 benefit of the DELCORA wastewater utility customers, such as by using the Trust
23 proceeds to credit amounts on those customers' bills to effectuate limiting annual
24 increases under Aqua ownership to no more than 3% per year, should be formalized
25 in a manner that the fulfillment of this commitment by DELCORA can be monitored

1 and enforced, with or without the existence of the proposed DELCORA Customer
2 Trust.

3
4 **VI. REVIEW OF AQUA'S (BUYER'S) VALUATION (GANNETT**
5 **FLEMING)**

6 **Q. What valuation has been submitted on behalf of the buyer, Aqua?**

7 A. The buyer, Aqua, has presented the Direct Testimony of Harold Walker, III,
8 Manager, Financial Studies for its claimed valuation of the wastewater assets.

9 Aqua's valuation is summarized on Mr. Walker's testimony (Aqua Statement 8) at
10 page 11 as follows:

Gannett Fleming Valuation Summary			
Valuation Approach	Individual Result	Weight	Weighted Result
Cost Approach	\$ 399,664,113	33%	\$ 131,889,157
Income Approach	\$ 387,754,301	33%	\$ 127,958,919
Market Approach	\$ 438,337,696	34%	\$ 149,034,817
Total			\$ 408,882,893
Conclusion			\$ 408,883,000

11
12 **Review and Adjustments to Cost Approach**

13 **Q. What is the Cost Approach?**

14 A. The Cost Approach is defined by The American Society of Appraisers as follows:¹⁴

15 A procedure to estimate the current costs to reproduce or create a
16 property with another of comparable use and marketability.

17
18 **Q. Please discuss the engineer's assessment of tangible assets that was provided in**
19 **this case.**

¹⁴ "Approaches to Value." American Society of Appraisers accessed March 5, 2020,
<http://www.appraisers.org/Disciplines/Personal-Property/pp-appraiser-resources/approaches-to-value>.

1 A. The engineer's assessment in this case was performed by Pennoni Associates Inc.,
2 with support from Weston Solutions, Inc., and is presented in Exhibit D to the
3 Application.

4 **Q. What original cost and accrued depreciation was used in the Gannett Fleming**
5 **valuation?**

6 A. Mr. Walker used the original cost of the assets by NARUC account of \$263,682,616
7 from the engineer's assessment and calculated accrued depreciation related to those
8 assets through December 31, 2019 of \$71,908,130 for net original cost book value of
9 \$191,774,486.¹⁵

10 **Q. How does that compare with the cost of plant and accumulated depreciation for**
11 **the DELCORA wastewater utility treatment and collection system that was**
12 **reported on DELCORA's audited financial statements as of December 31,**
13 **2019?**

14 A. A DELCORA audited financial statement for December 31, 2018 was included as
15 Exhibit J2 in the Application. The cost of the DELCORA wastewater utility system
16 that was reported on DELCORA's audited financial statements as of December 31,
17 2018 is \$240,841,951 for capital assets net of accumulated depreciation (Application
18 Exhibit J2 at page 21, Delaware County Regional Water Quality Control Authority
19 Statement of Net Position at December 31, 2018).

20 A DELCORA audited financial statement for December 31, 2019 was not
21 included with the Application but was provided in response to OCA-II-7.¹⁶ The

¹⁵ Exhibit Q, Exhibit 20, page 110 of 267.

¹⁶ A copy of DELCORA's Adjusted 2019 financial statements is included in Exhibit RCS-8.

1 DELCORA capital assets, net of accumulated depreciation as of December 31, 2019
2 are \$260,506,518.¹⁷

3 Mr. Walker's calculated net book value on original cost of \$191.8 million at
4 December 31, 2019 is \$49 million or 25.5% lower than the \$240.8 million net plant
5 amount reported on DELCORA's audited financial statements as of December 31,
6 2018.

7 **Q. If Aqua is allowed to acquire the DELCORA wastewater utility assets, what**
8 **depreciation rates will Aqua be applying to the wastewater utility plant**
9 **accounts?**

10 A. Aqua's response to OCA-II-52 indicates that Aqua will use the depreciation rates
11 approved in the Company's last base rate case, which were set forth in Aqua's
12 response to OCA-II-10.

13 **Q. The testimony of Applicant witness Mark Bubel at page 5 refers to a**
14 **DELCORA office and operations center in the City of Chester, PA. Has the**
15 **Applicant provided additional details about the continuing use of that facility**
16 **and its depreciable life?**

17 A. Yes. Applicant's response to OCA-II-56 provides additional details about that
18 building, which Aqua plans to continue to utilize. The response to OCA-II-56(j)
19 indicates that DELCORA office was constructed in 1998. The response to OCA-II-
20 56(d) indicates that it is currently fully occupied with DELCORA employees.
21 Moreover, those employees will be transferred to Aqua. Aqua has no plans to move
22 out any of those DELCORA employees, or to sell or lease out any portions of that

¹⁷ See Exhibit RCS-8, page 64.

1 building. Furthermore, Applicant's response to OCA-II-56(i) states that Aqua will
2 depreciate the building over 50 years in accordance with Aqua's existing
3 depreciation rates for structures approved by the Commission in Aqua's last base rate
4 case proceeding.

5 **Q. For the valuation and appraisal should a 50-year life be used for the**
6 **DELCORA office that will continue to be used under Aqua ownership and**
7 **which Aqua has indicated that it will depreciate over 50 years?**

8 A. Yes. For the valuation and appraisal a 50-year life should be used for the
9 DELCORA office that will continue to be used under Aqua ownership and which
10 Aqua has indicated it will depreciate over 50 years. DELCORA's UVE, Mr.
11 D'Ascendis, used a 50-year depreciation life for that DELCORA office. However,
12 Aqua's UVE, Mr. Walker used a 60-year life. I have adjusted Mr. Walker's cost
13 approach to use a 50-year life.

14 **Q. What value for the Cost Approach was determined in the Gannett Fleming**
15 **valuation?**

16 A. A value of \$399,664,113 was determined in the Gannett Fleming valuation for the
17 Cost approach based on RCND (Exhibit Q, Gannett Fleming Appraisal, page 29).
18 Mr. Walker shows \$792,388,733 for the replacement cost, and calculates
19 \$392,724,620 of accumulated depreciation on that, for an RCND amount of
20 \$399,664,113, which he uses as the proposed fair market value amount under his
21 Cost Approach (Exhibit Q, Gannett Fleming Appraisal, page 29).

22 **Q. Are you recommending any adjustments to the Gannett Fleming Cost**
23 **Approach amount?**

1 A. Yes. I recommend using the depreciation rates approved in the Company's last base
2 rate case, which were set forth in Aqua's response to OCA-II-10. As shown on
3 Exhibit RCS-2, I recalculated accumulated depreciation using depreciation rates
4 which resulted in an adjusted RCND accumulated depreciation amount. This results
5 in an adjustment to reduce the Gannett Fleming Cost Approach by \$100,465,415, as
6 shown on Exhibit RCS-2, which I carried forward onto my valuation summary that
7 is shown on Exhibit RCS-1, column G, line 2.

8

9 **Review and Adjustments to Income Approach**

10 **Q. What is the Income Approach?**

11 A. The income approach involves capitalizing and discounting a future income stream
12 to a present value. The theory behind the income approach is that the value of the
13 business is the future economic benefit that ownership will provided. In other words,
14 it is:¹⁸

15 A procedure to conclude an opinion of present value by
16 calculating the anticipated monetary benefits (such as a stream
17 of income) for an income-producing property.

18

19 **Q. In applying the Income Approach is it necessary to recognize how the income of**
20 **a cost-based rate-regulated public utility is determined, and how that is**
21 **different from companies operating in competitive markets?**

22 A. Yes. Unlike unregulated businesses, public utilities' revenues, income streams, and
23 cash flows are a direct function of the capital investments required to operate the

¹⁸ "Approaches to Value." American Society of Appraisers accessed March 5, 2020,
<http://www.appraisers.org/Disciplines/Personal-Property/pp-appraiser-resources/approaches-to-value>.

1 utility. This is commonly referred to as the rate base/rate of return method of
2 ratemaking. A utility's allowable revenue requirement is equal to its cash operating
3 expenses plus depreciation plus a return on its net investment (rate base) plus income
4 taxes on the return. Therefore, the resulting annual net cash flow is equal to
5 depreciation plus the after-tax return on the net investment. As such, the higher the
6 assumed level of investment, the higher the periodic cash flows and the higher the
7 ultimate valuation.

8 **Q. Please discuss the concept of terminal value when applying the Income**
9 **Approach to a rate-regulated public utility.**

10 A. The income approach models utilized by both the buyer and seller employ a
11 discounted cash flow model wherein annual cash flows are projected based upon
12 forecasted levels of revenues, cash O&M expenses, income taxes, capital
13 expenditures and changes in working capital. These annual cash flows are modeled
14 for a set number of years into the future and then a terminal value is added to the
15 previous discounted annual cash flows as a measure of the expected cash flows in
16 perpetuity. The fundamental flaw in both of these analysts' models is their
17 calculation of the terminal values for DELCORA's wastewater operations.

18 In calculating the terminal value, both UVEs utilized what is known as a
19 "capitalization rate" to project future cash flows in perpetuity. In simple terms, each
20 UVE calculated a terminal value (in nominal terms) by applying the projected cash
21 flow in the last year of the model to a capitalization rate. Specifically, the last model
22 year's annual cash flow is multiplied by 1, and then divided by the calculated
23 capitalization rate. Mathematically, this approach escalates annual cash flows at a

1 constant annual growth rate (percent) in perpetuity. It essentially assumes that net
2 cash flows would grow at a constant annual growth rate to infinity. A capitalization
3 rate is defined as a firm's total cost of capital (k) minus its expected future annual
4 constant rate of growth (g).

5 **Q. Why is it inappropriate to apply a capitalization rate concept to estimate the**
6 **terminal value of a regulated public utility?**

7 A. While the use of capitalization rates may be appropriate for an unregulated/non-
8 utility business enterprise, this approach is not realistic or appropriate for
9 determining the terminal value of public utilities.

10 The theory underlying the use of capitalization rates is that a firm's net cash
11 flow will grow at a constant rate in perpetuity without significant reinvestment
12 greater than historical depreciation. However, such is not the case for regulated
13 utilities. A regulated utility's net cash flow is a direct function of its plant in service.
14 A utility's net cash flow can, and will, only grow with increases to its plant
15 investment and rate base. In recent years, the DELCORA wastewater net plant
16 balance/amount has been declining; however, over a sufficiently long period of time,
17 it is expected that the DELCORA wastewater utility plant investment will grow as
18 aging plant is replaced.

19 For a rate regulated utility, it is important to understand that for discounted
20 cash flow valuation purposes, capital expenditures (that give rise to plant additions)
21 are treated as a negative cash outflow during the year in which the expenditure is
22 made. The utility recoups these additional investments over time through future

1 depreciation rates. Spending on plant additions is a use of cash and depreciation
2 expense is a source of cash.

3 **Q. How does the failure to consider the source and use of cash in the valuation**
4 **estimates that have been submitted on behalf of the buyer and seller result in a**
5 **significant overstatement of the "terminal" value component?**

6 A. The fatal flaw in both the buyer and seller UVEs' estimation of a "terminal" value is
7 that the capital expenditures in the last year of the model are much less than the
8 depreciation expense on existing plant during that year. Therefore, under these
9 UVEs' assumptions and modeling techniques, the DELCORA wastewater utility is
10 depreciating and using up its existing plant faster, and to a higher degree, than it is
11 making investments to replace that plant. Clearly, this practice cannot be sustained.

12 **Q. What value has Mr. Walker used for his Income Approach?**

13 A. As summarized in Exhibit 19 of his fair market value appraisal, he used a value of
14 \$387,754,301 for his income approach.

15 **Q. How did Mr. Walker derive that amount?**

16 A. He averaged median indicated value amount results that are shown on his Exhibit 15,
17 (DCF with Capitalization of Terminal Value Model with Muni Ownership) and
18 median indicated value amounts that are shown on his Exhibit 16 (DCF with
19 Capitalization of Terminal Value Model with investor owned utility ownership).

20 **Q. Which amounts from his Exhibit 15 did Mr. Walker use?**

21 A. He averaged the \$427,428,533 and \$442,693,897 indicated value amounts shown on
22 Exhibit 15, page 6 for the DCF with Capitalization of Terminal Value Model at
23 3.38% and 3.18%, respectively, and the \$464,943,431 and \$464,943,431 DCF with

1 EBIT and EBITDA Terminal Value Model - Discount Rate of 3.38% and 3.18%,
2 respectively. The median of those four amounts is \$453,818,664 as summarized
3 below:

Municipal Ownership

	DCF With Capitalization of Terminal Value Model @ 3.38%	\$	427,428,533
	DCF With Capitalization of Terminal Value Model @ 3.18%	\$	442,693,897
	DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 3.38%	\$	464,943,431
	DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 3.18%	\$	464,943,431
4	Median	<u>\$</u>	<u>453,818,664</u>

5

6 **Q. What amounts on Exhibit 16 did Mr. Walker use?**

7 A. He averaged the four amounts from his Exhibit 16, page 6 as summarized below
8 (and shown on Exhibit RCS-2, page 1), to derive a median indicated value of
9 \$321,689,938 for his DCF approach with investor owned utility ownership:

IOU Ownership

	DCF With Capitalization of Terminal Value Model @ 5.71%	\$	294,523,598
	DCF With Capitalization of Terminal Value Model @ 6.96%	\$	234,688,946
	DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 5.91%	\$	427,048,173
	DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 7.16%	\$	348,856,278
10	Median	<u>\$</u>	<u>321,689,938</u>

11

12 **Q. Have you adjusted those results?**

13 A. Yes. The approach to quantifying the terminal value should recognize that the
14 wastewater assets are for a regulated utility, not an unregulated business. As shown
15 on Exhibit RCS-3, pages 2 and 3, I have recalculated the valuation of the terminal
16 value using the amount of Net Plant less Accumulated Deferred Income Taxes
17 (ADIT) remaining at the end of Year 24. Exhibit RCS-3, page 2, shows the

1 calculations under municipal ownership, with an indicated value result of
2 \$346,369,318. Page 3 shows the calculations under IOU ownership with an
3 indicated value result of \$263,757,613. The two indicated value results are
4 averaged, as shown on Exhibit RCS-3, page 1, for an adjusted Income Approach
5 value of \$305,063,465. The difference in the indicated value of \$82,690,835 results
6 from the different approach to calculating the "terminal" value for a regulated public
7 utility, which is different than the "terminal" value calculation for a non-regulated
8 business.

9 The adjusted Income Approach value of \$305,063,465 is \$82,690,835 lower
10 than Mr. Walker's proposed amount of \$387,754,301.

11

12 **Review and Adjustments to Market Approach**

13 **Q. What is the Market Approach?**

14 A. The Market Approach (called the Sales Comparison Approach by The American
15 Society of Appraisers) is defined by The American Society of Appraisers as
16 follows:¹⁹

17 A procedure to conclude an opinion of value for a property by
18 comparing it with similar properties that have been sold or are for sale
19 in the relevant marketplace by making adjustments to prices based on
20 marketplace conditions and the properties' characteristics of value.

21

22 **Q. What valuation did Mr. Walker calculate for his Market Approach?**

¹⁹ "Approaches to Value." American Society of Appraisers accessed March 5, 2020,
<http://www.appraisers.org/Disciplines/Personal-Property/pp-appraiser-resources/approaches-to-value>.

1 A. As summarized in his fair market value appraisal Exhibit 19, Mr. Walker calculated
2 a market value of the DELCORA wastewater utility assets of \$438,337,696.

3 **Q. How did Mr. Walker derive that amount?**

4 A. He used a combination of the results presented on his Exhibits 17 (Market Multiple
5 Method) and 18 (Selected Transactions Method). To derive his calculated a value of
6 the DELCORA wastewater utility assets of \$438,337,696, Mr. Walker averaged his
7 conclusion amount of \$518,366,727 for the Market Multiple Method that is shown
8 on his Exhibit 17, page 1 of 3, with a median value amount of \$358,308,666 for his
9 Selected Transactions Method, which is not shown on his exhibit but which can be
10 calculated from information presented on his original Exhibit 18.

11 Referring to his Exhibit 17, page 1 of 3, he calculated a median value of
12 \$518,366,727 by using his Market Multiple Method Valuation results of
13 \$518,366,727 for capital items. He also calculated an amount of \$916,703,276 for
14 demographic items, but that was given a zero (0%) weight in his overall Market
15 Multiple Method Valuation result.

16 Referring to his original Exhibit 18, page 1 of 4, Mr. Walker averaged the
17 \$364,699,039 indicated value shown on line 7 for all of his selected comparable
18 transaction companies and the \$351,918,292 shown on line 14 for his selected
19 transactions involving "integrated" companies, for a median value amount of
20 \$358,308,666.

21 He distinguished transactions involving water and wastewater utilities with
22 "integrated" systems, i.e., having both treatment plants and collection/distribution
23 and those not having treatment plants ("collection/ distribution" or "C/D"). Because

1 the DELCORA wastewater system includes treatment plants and a collection system,
2 Mr. Walker weighted his calculation to emphasize his comparable results for
3 "integrated" systems. By averaging his results for all of his selected comparable
4 transactions and the results of his comparable transactions involving "integrated"
5 systems, he effectively counts the "integrated" systems results twice and the results
6 of the "C/D" systems once, in his derivation of the median result of \$358,308,666.

7 **Q. What transactions were used by Mr. Walker for his Market Approach?**

8 A. Pages 22-23 of Mr. Walker's testimony indicates that he reviewed the following
9 transactions for his Market Approach:

- 10 • Sale of the Municipal Authority of the City of McKeesport wastewater
- 11 system to Pennsylvania-American Water Company in 2017.
- 12 • Sale of New Garden Township Sewer Authority to Aqua Pennsylvania in
- 13 2017.
- 14 • Sale of Limerick Township Wastewater to Aqua Pennsylvania in 2017.
- 15 • Sale of Steelton Borough Authority Water system to Pennsylvania-American
- 16 Water Company in 2019.
- 17 • Sale of Exeter Township Wastewater system to Pennsylvania-American
- 18 Water Company in 2019.
- 19 • Sale of Sadsbury Township Wastewater system to Pennsylvania-American
- 20 Water Company in 2018.
- 21 • Sale of East Bradford Township Wastewater to Aqua Pennsylvania in 2018.
- 22 • Sale of Mahoning Township Water system to Suez Water Pennsylvania Inc.
- 23 in 2018.
- 24 • Sale of Mahoning Township Wastewater system to Suez Water Pennsylvania
- 25 Inc. in 2018.
- 26 • Sale of Cheltenham Township Wastewater to Aqua Pennsylvania in 2019.
- 27 • Sale of East Norriton Township Wastewater to Aqua Pennsylvania in 2019.
- 28

29 Furthermore, as indicated on page 23 of his direct testimony, Mr. Walker reviewed
30 the purchase of Connecticut Water Service Inc. by SJW group.

31 **Q. Are you recommending any adjustments to Mr. Walker's Market Approach?**

1 A. Yes, I have made an adjustment to Mr. Walker's Selected Transactions Method. Mr.
2 Walker used medians of both Ex-Ante and Ex-Post amounts in his valuation. Since
3 Ex-Ante amounts are projected amounts and Ex-Post are actual amounts for
4 completed transactions, I removed the Ex-Ante amounts from the valuation
5 calculation and used only the median of Ex-Post amounts for the adjusted market
6 valuation shown on Exhibit RCS-4, page 1. The Ex-Ante amounts are essentially
7 initial estimates. The actual results reflected in the Ex-Post results reflect the actual
8 transaction and should therefore be used for this approach.

9 Additionally, as shown on page 3 of Exhibit RCS-4, some of the purchase
10 price amounts used by Mr. Walker did not reflect the final determination in the
11 respective acquisition case. The purchase prices used by Mr. Walker are in excess of
12 fair market value. As such, I recommend that the purchase prices be reduced to the
13 approved fair market value. Using the actual fair market value involved in the
14 respective acquisitions instead of proposed purchase prices is a more reasonable
15 approach as it reflects the actual amount ultimately spent by the respective acquiring
16 Companies. Reliance on purchase prices that were found to be in excess of fair
17 market value is not reasonable.

18 I have adjusted those to match the final rate base amounts approved per the
19 orders for each case. Some of the amounts for Gross Property, Plant & Equipment
20 "PP&E" and Net PP&E were also adjusted because the amounts shown for some of
21 the acquisitions were inconsistent with the amounts used for DELCORA. Mr.
22 Walker used OCNLD amounts for DELCORA. I adjusted the Gross PP&E and Net
23 PP&E amounts to OCNLD for the acquisitions in which the OCNLD amounts were

1 not used by Mr. Walker. As shown on Exhibit RCS-4, page 1, line 3, this resulted in
2 a decrease of \$15,591,769 to Mr. Walker's Market Valuation Approach.

3 **Q. Please summarize your adjustments to Mr. Walker's Cost, Income, and**
4 **Market approaches.**

5 A. A summary of my adjustments to Mr. Walker's Cost, Income, and Market
6 approaches can be found in Exhibit RCS-1, and is also shown in the table below:

	Gannett Fleming	OCA	Gannett Fleming		
	Individual Results	Adjustment	Individual Results	Weight	Weighted Result
Cost Approach	\$ 399,664,113	(100,465,415)	\$ 299,198,698	33.0000%	\$ 98,735,570
Income Approach	\$ 387,754,301	(82,690,835)	\$ 305,063,466	33.0000%	\$ 100,670,944
Market Approach	\$ 438,337,696	(15,591,769)	\$ 422,745,927	34.0000%	\$ 143,733,615
Total					\$ 343,140,129
Conclusion					\$ 343,140,000

7

8

9 **VII.REVIEW OF DELCORA'S (SELLER'S) VALUATION**
10 **(SCOTTMADDEN)**

11 **Q. What valuation has been submitted on behalf of the seller, DELCORA?**

12 A. The seller, DELCORA, has presented testimony and a valuation study sponsored by
13 Dylan W. D'Ascendis, Manager-Financial Studies at Scott Madden that claims a fair
14 market value of \$308,194,000 based on the following:²⁰

15

²⁰ Exhibit R, ScottMadden Fair Market Value Appraisal, page 12

ScottMadden Valuation Summary			
Valuation Approach	Individual Result	Weight	Weighted Result
Cost Approach	\$ 292,413,993	45%	\$ 131,586,297
Income Approach	\$ 291,863,370	50%	\$ 145,931,685
Market Approach	\$ 613,520,480	5%	\$ 30,676,024
Total			\$ 308,194,006
Conclusion			\$ 308,194,000

1

2 **Review and Adjustments to Cost Approach**

3 **Q. How did Mr. D'Ascendis determine his Cost Approach amount?**

4 A. As described in his fair market value appraisal on page 8, Mr. D'Ascendis calculated
5 a reproduction cost new minus depreciation value of \$292,413,993 using the Handy-
6 Whitman and Producers Pricing Indices to trend the original cost, from which he
7 subtracted a calculated amount for depreciation of DELCORA's wastewater utility
8 assets.

9 **Q. Are you recommending any adjustments to the DELCORA (ScottMadden) Cost**
10 **Approach amount?**

11 A. Yes. I recommend an adjustment to the ScottMadden Cost Approach, based on
12 using the depreciation rates approved in Aqua's last wastewater utility base rate case,
13 which were set forth in Aqua's response to OCA-II-10. As shown on Exhibit RCS-5,
14 I have adjusted the useful lives for three accounts:

- 15 (1) Account 362.2 Special Collecting Structures,
16 (2) Account 380.3 Treatment and Disposal Equipment – Pump Stations, and
17 (3) Account 380.4 Treatment and Disposal Equipment.

18 The useful lives for Account 362.2 were adjusted from 75 years to 40 years,
19 and from 50 years to 40 years for Accounts 380.3 and 380.4. This adjustment

1 reduces the ScottMadden Cost Approach amount by \$35,019,728, as shown on
2 Exhibit RCS-5.

3

4 **Review and Adjustments to Income Approach**

5 **Q. How did Mr. D'Ascendis determine his Income Approach amount?**

6 A. As described in his fair market value appraisal on pages 9-12, Mr. D'Ascendis
7 calculated his Income Approach amount using a discounted cash flows model
8 projected out to 2049 with a perpetuity value (i.e., a terminal value) used after the
9 year 2049. Using assumptions he made for operating revenues, operating expenses,
10 and future capital requirements and a weighted average cost of capital of 6.94%, he
11 calculated an Income Approach value of \$291,863,370.

12 **Q. Are you recommending any adjustments to the DELCORA (ScottMadden)**
13 **Income Approach amount?**

14 A. Yes. As shown on Exhibit RCS-6, I recommend an adjustment to the ScottMadden
15 Income Approach to adjust the terminal value. As shown on Exhibit RCS-6, I have
16 recalculated the valuation of the terminal value using the amount of Net Plant less
17 Accumulated Deferred Income Taxes (ADIT) projected to be remaining at the end of
18 2049. Since Mr. D'Ascendis did not calculate a projection of net plant, I used a net
19 plant amount based on the Gannett Fleming calculations of net plant. Gannett
20 Fleming projected net plant out to 2045. I extended the calculation to 2049 to derive
21 the net plant amount used in this adjustment. This adjustment to the terminal value
22 resulted in an indicated value of \$163,125,306. This adjustment reduces the

1 ScottMadden Income Approach amount by \$128,738,064 as shown on Exhibit RCS-
2 6.

3

4 **Review and Adjustments to Market Approach**

5 **Q. How did Mr. D'Ascendis determine his Market Approach amount?**

6 A. As described in his fair market value appraisal on pages 8-9, Mr. D'Ascendis used
7 two methods to calculate his market approach amount. The first method he used was
8 the Market-to-Book Multiple Method where he applied Market-to-Book ratios of
9 publicly traded water utilities to the net book value of DELCORA as of December
10 31, 2018. His recommended value of \$415,589,365 is calculated using a market-to-
11 book ratio of 2.246.

12 The second method Mr. D'Ascendis used, as described in his fair market
13 value appraisal on page 7, is the Comparable Sales Method where he researched
14 transactions involving companies who acquired 100% of a water or sewer interest
15 since 2015. His research showed 69 results from around the country, 20 of which
16 were Pennsylvania acquisitions. He calculated an implied enterprise value of 4.10
17 per utility connection for the country and 6.45 for Pennsylvania. Those two values
18 were then applied to the total number of DELCORA's wastewater connections to get
19 indicated values of \$811,451,596 and \$1,276,340,191, respectively. His
20 recommended value under this approach is \$811,451,596²¹.

21 Mr. D'Ascendis' total Market Approach value of \$613,520,480 is the average
22 of the recommended values of the two methods he used.

²¹ Exhibit R, ScottMadden Fair Market Value Appraisal, Schedule 2, page 1

1 **Q. Is the Comparable Sales Method using a cost per connection reliable?**

2 A. No. That is not a reliable method to value the DELCORA wastewater utility because
3 of the lack of demonstrated reliability and use in actual transactions and produces
4 extremely inflated valuation result. It should therefore be excluded from the
5 valuation results.

6 **Q. Are you recommending any adjustments to the DELCORA (ScottMadden)**
7 **Market Approach amount?**

8 A. Yes. As shown on Exhibit RCS-7, I recommend an adjustment to the ScottMadden
9 Market Approach, based on excluding his calculation using the Comparable Sales
10 Method, and using only the amount that Mr. D'Ascendis calculated for his Market-
11 to-Book Multiple method. This adjustment reduces the ScottMadden Market
12 Approach amount by \$197,931,116 as shown on Exhibit RCS-7.

13
14 **VIII. INCOME TAX SAVINGS FROM CLAIMING REPAIRS**
15 **DEDUCTIONS ON THE WASTEWATER UTILITY BEING**
16 **ACQUIRED FROM DELCORA**

17 **Q. Does Aqua anticipate having federal income tax deductions for repairs for the**
18 **DELCORA wastewater utility assets?**

19 A. Yes. Aqua can avail itself of tax deductions for repairs even where the accounting
20 treatment results in the repairs costs being capitalized for book purposes. The
21 repairs deductions can be substantial and result in reducing income tax expense. As
22 indicated in Aqua's response to OCA-II-45 Aqua anticipates that it expects to have
23 federal income tax deductions for repairs for the DELCORA wastewater utility
24 assets and to apply flow-through accounting for the impact of those deductions:

1 The Company expects to utilize flow-through accounting for the
2 impact of repair deductions related to the assets of DEL CORA. Prior
3 to doing so however, the Company must complete a full assessment
4 of the property relative to the IRS Tangible property regulations
5 which takes several months to do and would be a post-closing
6 activity. The Company would account for the deductions in a manner
7 similar to that approved in the Company's most recent rate case
8 Docket No. R-2018-3003561.
9

10 **Q. How has Aqua historically treated the impact on income taxes for repairs**
11 **deductions?**

12 A. Aqua has historically treated the impact on income taxes for repairs deductions as a
13 "flow-through" item for accounting and ratemaking purposes. In periods between
14 rate cases, the substantial income tax savings resulting from repairs deductions thus
15 increased Aqua's net operating income.

16 **Q. Do you have a recommended condition related to repairs deductions claimed by**
17 **Aqua on DELCORA wastewater utility system assets?**

18 A. Yes. I have a recommendation relating to income tax repairs deductions that are
19 claimed by Aqua for DELCORA wastewater utility for the period from the date
20 when the acquisition is consummated through the effective date of new rates for the
21 acquired DELCORA wastewater utility customers in Aqua's next base rate case.
22 Specifically, the impact on income tax expense from repairs deductions claimed by
23 Aqua for DELCORA wastewater utility system assets should be recorded in a
24 regulatory liability account and addressed in Aqua's first base rate case in which
25 rates for the acquired DELCORA wastewater utility customers are addressed. Aqua
26 will have potentially large federal income tax deductions for repairs once it acquires
27 DELCORA and Aqua has indicated that it wants to apply flow-through accounting

1 treatment for those. The flow-through treatment might be reasonable in the context
2 of an Aqua rate case that includes the acquired DELCORA wastewater customers;
3 however, during the period between the acquisition and the rate-effective date of that
4 first Aqua base rate case for acquired DELCORA customers, the impact of the
5 repairs deductions claimed for the acquired DELCORA wastewater should be
6 accumulated in a regulatory liability account and be addressed in Aqua's next rate
7 case where such impacts could potentially be used to help mitigate some portion of
8 the rate increases that will be resulting due to Aqua's ownership of the DELCORA
9 wastewater utility.

10

11 **IX. OTHER ISSUES**

12 **Q. Have other issues been raised in this proceeding?**

13 A. Yes. Resale customers of DELCORA have raised a number of issues about the
14 transfer of agreements that should be resolved before the transaction can close.

15 Also, as I noted above, there are legal issues related to the trust.

16

17 **X. CONCLUSIONS AND RECOMMENDATIONS**

18 **Q. Please summarize your conclusions regarding the claimed benefits of the**
19 **acquisition.**

20 A. Aqua's claims that the acquisition will benefit existing customers are vague,
21 unsupported, and unquantified. The costs of adding the \$276.5 million increase in
22 rate base due to the ownership change have been projected by Aqua to result in rate
23 increases of approximately 12.55% to the DELCORA wastewater customers (prior

1 to the application of any funds from a DELCORA Customer Trust - aka the
2 DELCORA Rate Stabilization Fund) in Aqua's next wastewater base rate case.
3 Additionally, capital additions by Aqua for the DELCORA system could result in
4 wastewater rates for the DELCORA wastewater customers continuing to increase.
5 Rates for the existing Aqua wastewater and water customers may continue to
6 increase (beyond the 14% and 4% in the first base rate case) due to the acquisition
7 costs and capital additions for the DELCORA system.

8 **Q. Please summarize your conclusions and recommendations if the Commission**
9 **allows the transaction to go forward.**

10 A. The transaction proposed by the Applicant would create significant additional costs
11 and presents significant risks to Pennsylvania ratepayers. As proposed, Aqua has not
12 supported that the acquisition will produce affirmative public benefits for its existing
13 wastewater and water customers and the acquired DELCORA customers. If the
14 Commission approves the acquisition, the Commission should adopt the OCA's
15 proposed adjustments to the appraisals. If the Commission approves the acquisition,
16 the OCA recommends a ratemaking rate base in accordance with Section 1329 of
17 \$276.5 million based on the lower amount of the purchase price versus the adjusted
18 appraised value.

19 Additionally, if the Commission approves the acquisition, the following
20 conditions are required to limit ratepayer exposure to the risks of the acquisition and
21 to ensure that ratepayers receive a fair allocation of the benefits of the acquisition:

22 1) The 12.55% average rate increase for DELCORA ratepayers that
23 Aqua has estimated could occur in the next Aqua wastewater rate case
24 should be mitigated to avoid rate shock associated with the change in

1 ownership. The DELCORA Customer Trust Fund (or some
2 acceptable alternative) should be used to limit the annual rate
3 increases to DELCORA waste water utility customers under Aqua
4 ownership to no more than 3 percent annually, until the approximated
5 \$200 million projected for funding the DELCORA Customer Trust
6 (or some acceptable alternative) has been fully applied for such rate
7 increase mitigation purposes.

- 8 2) While the Trust is functioning to limit increases to DELCORA
9 customers, the DELCORA customers should be a separate rate zone.
10 The separate rate zone and its separate cost of service study should
11 remain an obligation at least as long as the Trust provides the rate
12 mitigation.
- 13 3) At the time of filing its next base rate case, Aqua shall submit a cost
14 of service study that removes all costs and revenues associated with
15 the operations of the DELCORA wastewater system. Aqua shall also
16 provide a separate cost of service study for the DELCORA system at
17 the time of the filing of Aqua's next base rate case.
- 18 4) Consistent with Aqua's proposal, when Aqua modifies its LTIIP to
19 include the DELCORA wastewater utility, any DELCORA-related
20 projects reflected in the revised LTIIP should be in addition to, and
21 not reprioritize, any capital improvements that Aqua was already
22 committed to undertake for existing customers.
- 23 5) DELCORA must address convincingly whether it has the legal
24 authority to transfer the wastewater utility assets and related contracts
25 to Aqua.
- 26 6) DELCORA must provide clarity as to how the DELCORA Rate
27 Stabilization Fund Trust Agreement between DELCORA as Settlor
28 and Univest Bank and Trust Co. As Trustee, with the Effective Date
29 of December 27, 2019 will function to insulate DELCORA
30 wastewater customers from rate increases.
- 31 7) Aqua and DELCORA should revise the MOU to add details regarding
32 how the Trust proceeds will be properly credited to the former
33 DELCORA customers as set forth in responses to OCA and County
34 discovery.
- 35 8) The customer assistance payments from the DELCORA Customer
36 Trust on Aqua's billings to DELCORA wastewater utility customers
37 should be separately shown on the bills to help make this part of the
38 public benefit transparent to the DELCORA wastewater utility
39 customers who are receiving the bill assistance.
- 40 9) The operation of the DELCORA Customer Trust, i.e., the DELCORA
41 Rate Stabilization Fund should be reviewed and monitored in
42 quarterly reports which show how amounts are being applied to

1 reduce the Aqua rate increases to DELCORA wastewater utility
2 customers that would be occurring under Aqua ownership.

3 10) In the period from the date when the acquisition is consummated
4 through the effective date of new rates for the acquired DELCORA
5 wastewater utility customers in Aqua's next base rate case, the impact
6 on income tax expense from repairs deductions claimed by Aqua on
7 DELCORA wastewater utility system assets should be recorded in a
8 regulatory liability account and addressed in Aqua's next base rate
9 case in which rates for the acquired DELCORA wastewater utility
10 customers are addressed.

11 11) The issues being raised by some of the resale customers' resale
12 transfer of the agreements should be resolved before the transaction
13 can close. Those agreements are tied to expected revenues.

14
15
16 **Q. Does this conclude your testimony at this time?**

17 **A.** Yes, it does.

Attachment A

QUALIFICATIONS OF RALPH C. SMITH

Accomplishments

Mr. Smith's professional credentials include being a Certified Financial Planner™ professional, a Certified Rate of Return Analyst, a licensed Certified Public Accountant and attorney. He functions as project manager on consulting projects involving utility regulation, regulatory policy and ratemaking and utility management. His involvement in public utility regulation has included project management and in-depth analyses of numerous issues involving telephone, electric, gas, and water and sewer utilities.

Mr. Smith has performed work in the field of utility regulation on behalf of industry, public service commission staffs, state attorney generals, municipalities, and consumer groups concerning regulatory matters before regulatory agencies in Alabama, Alaska, Arizona, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, New Jersey, New Mexico, New York, Nevada, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, Washington DC, West Virginia, Canada, Federal Energy Regulatory Commission and various state and federal courts of law. He has presented expert testimony in regulatory hearings on behalf of utility commission staffs and intervenors on several occasions.

Project manager in Larkin & Associates' review, on behalf of the Georgia Commission Staff, of the budget and planning activities of Georgia Power Company; supervised 13 professionals; coordinated over 200 interviews with Company budget center managers and executives; organized and edited voluminous audit report; presented testimony before the Commission. Functional areas covered included fossil plant O&M, headquarters and district operations, internal audit, legal, affiliated transactions, and responsibility reporting. All of our findings and recommendations were accepted by the Commission.

Key team member in the firm's management audit of the Anchorage Water and Wastewater Utility on behalf of the Alaska Commission Staff, which assessed the effectiveness of the Utility's operations in several areas; responsible for in-depth investigation and report writing in areas involving information systems, finance and accounting, affiliated relationships and transactions, and use of outside contractors. Testified before the Alaska Commission concerning certain areas of the audit report. AWWU concurred with each of Mr. Smith's 40 plus recommendations for improvement.

Co-consultant in the analysis of the issues surrounding gas transportation performed for the law firm of Cravath, Swaine & Moore in conjunction with the case of Reynolds Metals Co. vs. the Columbia Gas System, Inc.; drafted in-depth report concerning the regulatory treatment at both state and federal levels of issues such as flexible pricing and mandatory gas transportation.

Lead consultant and expert witness in the analysis of the rate increase request of the City of Austin - Electric Utility on behalf of the residential consumers. Among the numerous ratemaking issues addressed were the economies of the Utility's employment of outside services; provided both written and oral testimony outlining recommendations and their bases. Most of Mr. Smith's recommendations were adopted by the City Council and Utility in a settlement.

Key team member performing an analysis of the rate stabilization plan submitted by the Southern Bell Telephone & Telegraph Company to the Florida PSC; performed comprehensive analysis of the Company's projections and budgets which were used as the basis for establishing rates.

Lead consultant in analyzing Southwestern Bell Telephone separations in Missouri; sponsored the complex technical analysis and calculations upon which the firm's testimony in that case was based. He has also assisted in analyzing changes in depreciation methodology for setting telephone rates.

Lead consultant in the review of gas cost recovery reconciliation applications of Michigan Gas Utilities Company, Michigan Consolidated Gas Company, and Consumers Power Company. Drafted recommendations regarding the appropriate rate of interest to be applied to any over or under collections and the proper procedures and allocation methodology to be used to distribute any refunds to customer classes.

Lead consultant in the review of Consumers Power Company's gas cost recovery refund plan. Addressed appropriate interest rate and compounding procedures and proper allocation methodology.

Project manager in the review of the request by Central Maine Power Company for an increase in rates. The major area addressed was the propriety of the Company's ratemaking attrition adjustment in relation to its corporate budgets and projections.

Project manager in an engagement designed to address the impacts of the Tax Reform Act of 1986 on gas distribution utility operations of the Northern States Power Company. Analyzed the reduction in the corporate tax rate, uncollectibles reserve, ACRS, unbilled revenues, customer advances, CIAC, and timing of TRA-related impacts associated with the Company's tax liability.

Project manager and expert witness in the determination of the impacts of the Tax Reform Act of 1986 on the operations of Connecticut Natural Gas Company on behalf of the Connecticut Department of Public Utility Control - Prosecutorial Division, Connecticut Attorney General, and Connecticut Department of Consumer Counsel.

Lead Consultant for The Minnesota Department of Public Service ("DPS") to review the Minnesota Incentive Plan ("Incentive Plan") proposal presented by Northwestern Bell Telephone Company ("NWB") doing business as U S West Communications ("USWC"). Objective was to express an opinion as to whether current rates addressed by the plan were appropriate from a Minnesota intrastate revenue requirements and accounting perspective, and to assist in developing recommended modifications to NWB's proposed Plan.

Performed a variety of analytical and review tasks related to our work effort on this project. Obtained and reviewed data and performed other procedures as necessary (1) to obtain an understanding of the Company's Incentive Plan filing package as it relates to rate base, operating income, revenue requirements, and plan operation, and (2) to formulate an opinion concerning the reasonableness of current rates and of amounts included within the Company's Incentive Plan filing. These procedures included requesting and reviewing extensive discovery, visiting the Company's offices to review data, issuing follow-up information requests in many instances, telephone and on-site discussions with Company representatives, and frequent discussions with counsel and DPS Staff assigned to the project.

Lead Consultant in the regulatory analysis of Jersey Central Power & Light Company for the Department of the Public Advocate, Division of Rate Counsel. Tasks performed included on-site review and audit of Company, identification and analysis of specific issues, preparation of data requests, testimony, and cross examination questions. Testified in Hearings.

Assisted the NARUC Committee on Management Analysis with drafting the Consultant Standards for Management Audits.

Presented training seminars covering public utility accounting, tax reform, ratemaking, affiliated transaction auditing, rate case management, and regulatory policy in Maine, Georgia, Kentucky, and Pennsylvania. Seminars were presented to commission staffs and consumer interest groups.

Previous Positions

With Larkin, Chapski and Co., the predecessor firm to Larkin & Associates, was involved primarily in utility regulatory consulting, and also in tax planning and tax research for businesses and individuals, tax return preparation and review, and independent audit, review and preparation of financial statements.

Installed computerized accounting system for a realty management firm.

Education

Bachelor of Science in Administration in Accounting, with distinction, University of Michigan, Dearborn, 1979.

Master of Science in Taxation, Walsh College, Michigan, 1981. Master's thesis dealt with investment tax credit and property tax on various assets.

Juris Doctor, cum laude, Wayne State University Law School, Detroit, Michigan, 1986. Recipient of American Jurisprudence Award for academic excellence.

Continuing education required to maintain CPA license and CFP® certificate.

Passed all parts of CPA examination in first sitting, 1979. Received CPA certificate in 1981 and Certified Financial Planning certificate in 1983. Admitted to Michigan and Federal bars in 1986.

Michigan Bar Association.

American Bar Association, sections on public utility law and taxation.

Partial list of utility cases participated in:

79-228-EL-FAC	Cincinnati Gas & Electric Company (Ohio PUC)
79-231-EL-FAC	Cleveland Electric Illuminating Company (Ohio PUC)
79-535-EL-AIR	East Ohio Gas Company (Ohio PUC)
80-235-EL-FAC	Ohio Edison Company (Ohio PUC)
80-240-EL-FAC	Cleveland Electric Illuminating Company (Ohio PUC)
U-1933	Tucson Electric Power Company (Arizona Corp. Commission)
U-6794	Michigan Consolidated Gas Co. --16 Refunds (Michigan PSC)
81-0035TP	Southern Bell Telephone Company (Florida PSC)
81-0095TP	General Telephone Company of Florida (Florida PSC)
81-308-EL-EFC	Dayton Power & Light Co.- Fuel Adjustment Clause (Ohio PUC)
810136-EU	Gulf Power Company (Florida PSC)
GR-81-342	Northern States Power Co. -- E-002/Minnesota (Minnesota PUC)
Tr-81-208	Southwestern Bell Telephone Company (Missouri PSC))
U-6949	Detroit Edison Company (Michigan PSC)
8400	East Kentucky Power Cooperative, Inc. (Kentucky PSC)
18328	Alabama Gas Corporation (Alabama PSC)
18416	Alabama Power Company (Alabama PSC)
820100-EU	Florida Power Corporation (Florida PSC)
8624	Kentucky Utilities (Kentucky PSC)
8648	East Kentucky Power Cooperative, Inc. (Kentucky PSC)
U-7236	Detroit Edison - Burlington Northern Refund (Michigan PSC)
U6633-R	Detroit Edison - MRCS Program (Michigan PSC)
U-6797-R	Consumers Power Company -MRCS Program (Michigan PSC)
U-5510-R	Consumers Power Company - Energy conservation Finance Program (Michigan PSC)
82-240E	South Carolina Electric & Gas Company (South Carolina PSC)
7350	Generic Working Capital Hearing (Michigan PSC)
RH-1-83	Westcoast Transmission Co., (National Energy Board of Canada)
820294-TP	Southern Bell Telephone & Telegraph Co. (Florida PSC)
82-165-EL-EFC (Subfile A)	Toledo Edison Company(Ohio PUC)
82-168-EL-EFC	Cleveland Electric Illuminating Company (Ohio PUC)
830012-EU	Tampa Electric Company (Florida PSC)
U-7065	The Detroit Edison Company - Fermi II (Michigan PSC)
8738	Columbia Gas of Kentucky, Inc. (Kentucky PSC)
ER-83-206	Arkansas Power & Light Company (Missouri PSC)
U-4758	The Detroit Edison Company – Refunds (Michigan PSC)
8836	Kentucky American Water Company (Kentucky PSC)
8839	Western Kentucky Gas Company (Kentucky PSC)
83-07-15	Connecticut Light & Power Co. (Connecticut DPU)
81-0485-WS	Palm Coast Utility Corporation (Florida PSC)
U-7650	Consumers Power Co. (Michigan PSC)
83-662	Continental Telephone Company of California, (Nevada PSC)
U-6488-R	Detroit Edison Co., FAC & PIPAC Reconciliation (Michigan PSC)
U-15684	Louisiana Power & Light Company (Louisiana PSC)
7395 & U-7397	Campaign Ballot Proposals (Michigan PSC)
820013-WS	Seacoast Utilities (Florida PSC)
U-7660	Detroit Edison Company (Michigan PSC)
83-1039	CP National Corporation (Nevada PSC)
U-7802	Michigan Gas Utilities Company (Michigan PSC)
83-1226	Sierra Pacific Power Company (Nevada PSC)
830465-EI	Florida Power & Light Company (Florida PSC)
U-7777	Michigan Consolidated Gas Company (Michigan PSC)
U-7779	Consumers Power Company (Michigan PSC)

U-7480-R	Michigan Consolidated Gas Company (Michigan PSC)
U-7488-R	Consumers Power Company – Gas (Michigan PSC)
U-7484-R	Michigan Gas Utilities Company (Michigan PSC)
U-7550-R	Detroit Edison Company (Michigan PSC)
U-7477-R**	Indiana & Michigan Electric Company (Michigan PSC)
18978	Continental Telephone Co. of the South Alabama (Alabama PSC)
R-842583	Duquesne Light Company (Pennsylvania PUC)
R-842740	Pennsylvania Power Company (Pennsylvania PUC)
850050-EI	Tampa Electric Company (Florida PSC)
16091	Louisiana Power & Light Company (Louisiana PSC)
19297	Continental Telephone Co. of the South Alabama (Alabama PSC)
76-18788AA	
&76-18793AA	Detroit Edison - Refund - Appeal of U-4807 (Ingham County, Michigan Circuit Court)
85-53476AA	
& 85-534785AA	Detroit Edison Refund - Appeal of U-4758 (Ingham County, Michigan Circuit Court)
U-8091/U-8239	Consumers Power Company - Gas Refunds (Michigan PSC)
TR-85-179**	United Telephone Company of Missouri (Missouri PSC)
85-212	Central Maine Power Company (Maine PSC)
ER-85646001	
& ER-85647001	New England Power Company (FERC)
850782-EI &	
850783-EI	Florida Power & Light Company (Florida PSC)
R-860378	Duquesne Light Company (Pennsylvania PUC)
R-850267	Pennsylvania Power Company (Pennsylvania PUC)
851007-WU	
& 840419-SU	Florida Cities Water Company (Florida PSC)
G-002/GR-86-160	Northern States Power Company (Minnesota PSC)
7195 (Interim)	Gulf States Utilities Company (Texas PUC)
87-01-03	Connecticut Natural Gas Company (Connecticut PUC))
87-01-02	Southern New England Telephone Company (Connecticut Department of Public Utility Control)
3673-	Georgia Power Company (Georgia PSC)
29484	Long Island Lighting Co. (New York Dept. of Public Service)
U-8924	Consumers Power Company – Gas (Michigan PSC)
Docket No. 1	Austin Electric Utility (City of Austin, Texas)
Docket E-2, Sub 527	Carolina Power & Light Company (North Carolina PUC)
870853	Pennsylvania Gas and Water Company (Pennsylvania PUC)
880069**	Southern Bell Telephone Company (Florida PSC)
U-1954-88-102	Citizens Utilities Rural Company, Inc. & Citizens Utilities Company, Kingman Telephone Division (Arizona CC)
T E-1032-88-102	Illinois Bell Telephone Company (Illinois CC)
89-0033	Puget Sound Power & Light Company (Washington UTC))
U-89-2688-T	Philadelphia Electric Company (Pennsylvania PUC)
R-891364	Potomac Electric Power Company (District of Columbia PSC)
F.C. 889	Niagara Mohawk Power Corporation, et al Plaintiffs, v. Gulf+Western, Inc. et al, defendants (Supreme Court County of Onondaga, State of New York)
Case No. 88/546	
87-11628	Duquesne Light Company, et al, plaintiffs, against Gulf+Western, Inc. et al, defendants (Court of the Common Pleas of Allegheny County, Pennsylvania Civil Division)
890319-EI	Florida Power & Light Company (Florida PSC)
891345-EI	Gulf Power Company (Florida PSC)
ER 8811 0912J	Jersey Central Power & Light Company (BPU)
6531	Hawaiian Electric Company (Hawaii PUCs)

R0901595	Equitable Gas Company (Pennsylvania Consumer Counsel)
90-10	Artesian Water Company (Delaware PSC)
89-12-05	Southern New England Telephone Company (Connecticut PUC)
900329-WS	Southern States Utilities, Inc. (Florida PSC)
90-12-018	Southern California Edison Company (California PUC)
90-E-1185	Long Island Lighting Company (New York DPS)
R-911966	Pennsylvania Gas & Water Company (Pennsylvania PUC)
I.90-07-037, Phase II	(Investigation of OPEBs) Department of the Navy and all Other Federal Executive Agencies (California PUC)
U-1551-90-322	Southwest Gas Corporation (Arizona CC)
U-1656-91-134	Sun City Water Company (Arizona RUCO)
U-2013-91-133	Havasu Water Company (Arizona RUCO)
91-174***	Central Maine Power Company (Department of the Navy and all Other Federal Executive Agencies)
U-1551-89-102	Southwest Gas Corporation - Rebuttal and PGA Audit (Arizona Corporation Commission)
& U-1551-89-103	
Docket No. 6998	Hawaiian Electric Company (Hawaii PUC)
TC-91-040A and	Intrastate Access Charge Methodology, Pool and Rates
TC-91-040B	Local Exchange Carriers Association and South Dakota Independent Telephone Coalition
9911030-WS &	General Development Utilities - Port Malabar and
911-67-WS	West Coast Divisions (Florida PSC)
922180	The Peoples Natural Gas Company (Pennsylvania PUC)
7233 and 7243	Hawaiian Nonpension Postretirement Benefits (Hawaiian PUC)
R-00922314	
& M-920313C006	Metropolitan Edison Company (Pennsylvania PUC)
R00922428	Pennsylvania American Water Company (Pennsylvania PUC)
E-1032-92-083 &	
U-1656-92-183	Citizens Utilities Company, Agua Fria Water Division (Arizona Corporation Commission)
92-09-19	Southern New England Telephone Company (Connecticut PUC)
E-1032-92-073	Citizens Utilities Company (Electric Division), (Arizona CC)
UE-92-1262	Puget Sound Power and Light Company (Washington UTC))
92-345	Central Maine Power Company (Maine PUC)
R-932667	Pennsylvania Gas & Water Company (Pennsylvania PUC)
U-93-60**	Matanuska Telephone Association, Inc. (Alaska PUC)
U-93-50**	Anchorage Telephone Utility (Alaska PUC)
U-93-64	PTI Communications (Alaska PUC)
7700	Hawaiian Electric Company, Inc. (Hawaii PUC)
E-1032-93-111 &	Citizens Utilities Company - Gas Division
U-1032-93-193	(Arizona Corporation Commission)
R-00932670	Pennsylvania American Water Company (Pennsylvania PUC)
U-1514-93-169/	Sale of Assets CC&N from Contel of the West, Inc. to
E-1032-93-169	Citizens Utilities Company (Arizona Corporation Commission)
7766	Hawaiian Electric Company, Inc. (Hawaii PUC)
93-2006- GA-AIR	The East Ohio Gas Company (Ohio PUC)
94-E-0334	Consolidated Edison Company (New York DPS)
94-0270	Inter-State Water Company (Illinois Commerce Commission)
94-0097	Citizens Utilities Company, Kauai Electric Division (Hawaii PUC)
PU-314-94-688	Application for Transfer of Local Exchanges (North Dakota PSC)
94-12-005-Phase I	Pacific Gas & Electric Company (California PUC)
R-953297	UGI Utilities, Inc. - Gas Division (Pennsylvania PUC)
95-03-01	Southern New England Telephone Company (Connecticut PUC)
95-0342	Consumer Illinois Water, Kankakee Water District (Illinois CC)
94-996-EL-AIR	Ohio Power Company (Ohio PUC)
95-1000-E	South Carolina Electric & Gas Company (South Carolina PSC)

Non-Docketed	Citizens Utility Company - Arizona Telephone Operations
Staff Investigation	(Arizona Corporation Commission)
E-1032-95-473	Citizens Utility Co. - Northern Arizona Gas Division (Arizona CC)
E-1032-95-433	Citizens Utility Co. - Arizona Electric Division (Arizona CC)
	Collaborative Ratemaking Process Columbia Gas of Pennsylvania
	(Pennsylvania PUC)
GR-96-285	Missouri Gas Energy (Missouri PSC)
94-10-45	Southern New England Telephone Company (Connecticut PUC)
A.96-08-001 et al.	California Utilities' Applications to Identify Sunk Costs of Non-
	Nuclear Generation Assets, & Transition Costs for Electric Utility
	Restructuring, & Consolidated Proceedings (California PUC)
96-324	Bell Atlantic - Delaware, Inc. (Delaware PSC)
96-08-070, et al.	Pacific Gas & Electric Co., Southern California Edison Co. and
	San Diego Gas & Electric Company (California PUC)
97-05-12	Connecticut Light & Power (Connecticut PUC)
R-00973953	Application of PECO Energy Company for Approval of its
	Restructuring Plan Under Section 2806 of the Public Utility Code
	(Pennsylvania PUC)
97-65	Application of Delmarva Power & Light Co. for Application of a
	Cost Accounting Manual and a Code of Conduct (Delaware PSC)
16705	Entergy Gulf States, Inc. (Cities Steering Committee)
E-1072-97-067	Southwestern Telephone Co. (Arizona Corporation Commission)
Non-Docketed	Delaware - Estimate Impact of Universal Services Issues
Staff Investigation	(Delaware PSC)
PU-314-97-12	US West Communications, Inc. Cost Studies (North Dakota PSC)
97-0351	Consumer Illinois Water Company (Illinois CC)
97-8001	Investigation of Issues to be Considered as a Result of Restructuring of Electric
	Industry (Nevada PSC)
U-0000-94-165	Generic Docket to Consider Competition in the Provision
	of Retail Electric Service (Arizona Corporation Commission)
98-05-006-Phase I	San Diego Gas & Electric Co., Section 386 costs (California PUC)
9355-U	Georgia Power Company Rate Case (Georgia PUC)
97-12-020 - Phase I	Pacific Gas & Electric Company (California PUC)
U-98-56, U-98-60,	Investigation of 1998 Intrastate Access charge filings
U-98-65, U-98-67	(Alaska PUC)
(U-99-66, U-99-65,	Investigation of 1999 Intrastate Access Charge filing
U-99-56, U-99-52)	(Alaska PUC)
Phase II of	
97-SCCC-149-GIT	Southwestern Bell Telephone Company Cost Studies (Kansas CC)
PU-314-97-465	US West Universal Service Cost Model (North Dakota PSC)
Non-docketed	Bell Atlantic - Delaware, Inc., Review of New Telecomm.
Assistance	and Tariff Filings (Delaware PSC)
Contract Dispute	City of Zeeland, MI - Water Contract with the City of Holland, MI
	(Before an arbitration panel)
Non-docketed Project	City of Danville, IL - Valuation of Water System (Danville, IL)
Non-docketed Project	Village of University Park, IL - Valuation of Water and
	Sewer System (Village of University Park, Illinois)

E-1032-95-417	Citizens Utility Co., Maricopa Water/Wastewater Companies et al. (Arizona Corporation Commission)
T-1051B-99-0497	Proposed Merger of the Parent Corporation of Qwest Communications Corporation, LCI International Telecom Corp., and US West Communications, Inc. (Arizona CC)
T-01051B-99-0105	US West Communications, Inc. Rate Case (Arizona CC)
A00-07-043	Pacific Gas & Electric - 2001 Attrition (California PUC)
T-01051B-99-0499	US West/Quest Broadband Asset Transfer (Arizona CC)
99-419/420	US West, Inc. Toll and Access Rebalancing (North Dakota PSC)
PU314-99-119	US West, Inc. Residential Rate Increase and Cost Study Review (North Dakota PSC)
98-0252	Ameritech - Illinois, Review of Alternative Regulation Plan (Illinois CUB)
00-108	Delmarva Billing System Investigation (Delaware PSC)
U-00-28	Matanuska Telephone Association (Alaska PUC)
Non-Docketed	Management Audit and Market Power Mitigation Analysis of the Merged Gas System Operation of Pacific Enterprises and Enova Corporation (California PUC)
00-11-038	Southern California Edison (California PUC)
00-11-056	Pacific Gas & Electric (California PUC)
00-10-028	The Utility Reform Network for Modification of Resolution E-3527 (California PUC)
98-479	Delmarva Power & Light Application for Approval of its Electric and Fuel Adjustments Costs (Delaware PSC)
99-457	Delaware Electric Cooperative Restructuring Filing (Delaware PSC)
99-582	Delmarva Power & Light dba Conectiv Power Delivery Analysis of Code of Conduct and Cost Accounting Manual (Delaware PSC)
99-03-04	United Illuminating Company Recovery of Stranded Costs (Connecticut OCC)
99-03-36	Connecticut Light & Power (Connecticut OCC)
Civil Action No.	
98-1117	West Penn Power Company vs. PA PUC (Pennsylvania PSC)
Case No. 12604	Upper Peninsula Power Company (Michigan AG)
Case No. 12613	Wisconsin Public Service Commission (Michigan AG)
41651	Northern Indiana Public Service Co Overearnings investigation (Indiana UCC)
13605-U	Savannah Electric & Power Company – FCR (Georgia PSC)
14000-U	Georgia Power Company Rate Case/M&S Review (Georgia PSC)
13196-U	Savannah Electric & Power Company Natural Gas Procurement and Risk Management/Hedging Proposal, Docket No. 13196-U (Georgia PSC)
Non-Docketed	Georgia Power Company & Savannah Electric & Power FPR Company Fuel Procurement Audit (Georgia PSC)
Non-Docketed	Transition Costs of Nevada Vertically Integrated Utilities (US Department of Navy)
Application No.	Post-Transition Ratemaking Mechanisms for the Electric Industry
99-01-016,	Restructuring (US Department of Navy)
Phase I	
99-02-05	Connecticut Light & Power (Connecticut OCC)
01-05-19-RE03	Yankee Gas Service Application for a Rate Increase, Phase I-2002-IERM (Connecticut OCC)
G-01551A-00-0309	Southwest Gas Corporation, Application to amend its rate Schedules (Arizona CC)
00-07-043	Pacific Gas & Electric Company Attrition & Application for a rate increase (California PUC)

97-12-020	Pacific Gas & Electric Company Rate Case (California PUC)
Phase II	United Illuminating Company (Connecticut OCC)
01-10-10	Georgia Power FCR (Georgia PSC)
13711-U	Verizon Delaware § 271(Delaware DPA)
02-001	Blue Valley Telephone Company Audit/General Rate Investigation (Kansas CC)
02-BLVT-377-AUD	S&T Telephone Cooperative Audit/General Rate Investigation (Kansas CC)
02-S&TT-390-AUD	Sunflower Telephone Company Inc., Audit/General Rate Investigation (Kansas CC)
01-SFLT-879-AUD	Bluestem Telephone Company, Inc. Audit/General Rate Investigation (Kansas CC)
01-BSTT-878-AUD	
P404, 407, 520, 413	
426, 427, 430, 421/	
CI-00-712	Sherburne County Rural Telephone Company, dba as Connections, Etc. (Minnesota DOC)
U-01-85	ACS of Alaska, dba as Alaska Communications Systems (ACS), Rate Case (Alaska Regulatory Commission PAS)
U-01-34	ACS of Anchorage, dba as Alaska Communications Systems (ACS), Rate Case (Alaska Regulatory Commission PAS)
U-01-83	ACS of Fairbanks, dba as Alaska Communications Systems (ACS), Rate Case (Alaska Regulatory Commission PAS)
U-01-87	ACS of the Northland, dba as Alaska Communications Systems (ACS), Rate Case (Alaska Regulatory Commission PAS)
96-324, Phase II	Verizon Delaware, Inc. UNE Rate Filing (Delaware PSC)
03-WHST-503-AUD	Wheat State Telephone Company (Kansas CC)
04-GNBT-130-AUD	Golden Belt Telephone Association (Kansas CC)
Docket 6914	Shoreham Telephone Company, Inc. (Vermont BPU)
Docket No.	
E-01345A-06-009	Arizona Public Service Company (Arizona Corporation Commission)
Case No.	
05-1278-E-PC-PW-42T	Appalachian Power Company and Wheeling Power Company both d/b/a American Electric Power (West Virginia PSC)
Docket No. 04-0113	Hawaiian Electric Company (Hawaii PUC)
Case No. U-14347	Consumers Energy Company (Michigan PSC)
Case No. 05-725-EL-UNC	Cincinnati Gas & Electric Company (PUC of Ohio)
Docket No. 21229-U	Savannah Electric & Power Company (Georgia PSC)
Docket No. 19142-U	Georgia Power Company (Georgia PSC)
Docket No.	
03-07-01RE01	Connecticut Light & Power Company (CT DPUC)
Docket No. 19042-U	Savannah Electric & Power Company (Georgia PSC)
Docket No. 2004-178-E	South Carolina Electric & Gas Company (South Carolina PSC)
Docket No. 03-07-02	Connecticut Light & Power Company (CT DPUC)
Docket No. EX02060363,	
Phases I&II	Rockland Electric Company (NJ BPU)
Docket No. U-00-88	ENSTAR Natural Gas Company and Alaska Pipeline Company (Regulatory Commission of Alaska)
Phase 1-2002 IERM,	
Docket No. U-02-075	Interior Telephone Company, Inc. (Regulatory Commission of Alaska)
Docket No. 05-SCNT-1048-AUD	South Central Telephone Company (Kansas CC)
Docket No. 05-TRCT-607-KSF	Tri-County Telephone Company (Kansas CC)
Docket No. 05-KOKT-060-AUD	Kan Okla Telephone Company (Kansas CC)
Docket No. 2002-747	Northland Telephone Company of Maine (Maine PUC)

Docket No. 2003-34	Sidney Telephone Company (Maine PUC)
Docket No. 2003-35	Maine Telephone Company (Maine PUC)
Docket No. 2003-36	China Telephone Company (Maine PUC)
Docket No. 2003-37	Standish Telephone Company (Maine PUC)
Docket Nos. U-04-022, U-04-023	Anchorage Water and Wastewater Utility (Regulatory Commission of Alaska)
Case 05-116-U/06-055-U	Entergy Arkansas, Inc. EFC (Arkansas Public Service Commission)
Case 04-137-U	Southwest Power Pool RTO (Arkansas Public Service Commission)
Case No. 7109/7160	Vermont Gas Systems (Department of Public Service)
Case No. ER-2006-0315	Empire District Electric Company (Missouri PSC)
Case No. ER-2006-0314	Kansas City Power & Light Company (Missouri PSC)
Docket No. U-05-043,44	Golden Heart Utilities/College Park Utilities (Regulatory Commission of Alaska)
A-122250F5000	Equitable Resources, Inc. and The Peoples Natural Gas Company, d/b/a Dominion Peoples (Pennsylvania PUC)
E-01345A-05-0816	Arizona Public Service Company (Arizona CC)
Docket No. 05-304	Delmarva Power & Light Company (Delaware PSC)
05-806-EL-UNC	Cincinnati Gas & Electric Company (Ohio PUC)
U-06-45	Anchorage Water Utility (Regulatory Commission of Alaska)
03-93-EL-ATA,	
06-1068-EL-UNC	Duke Energy Ohio (Ohio PUC)
PUE-2006-00065	Appalachian Power Company (Virginia Corporation Commission)
G-04204A-06-0463 et. al	UNS Gas, Inc. (Arizona CC)
U-06-134	Chugach Electric Association, Inc. (Regulatory Commission of Alaska)
Docket No. 2006-0386	Hawaiian Electric Company, Inc (Hawaii PUC)
E-01933A-07-0402	Tucson Electric Power Company (Arizona CC)
G-01551A-07-0504	Southwest Gas Corporation (Arizona CC)
Docket No.UE-072300	Puget Sound Energy, Inc. (Washington UTC)
PUE-2008-00009	Virginia-American Water Company (Virginia SCC)
PUE-2008-00046	Appalachian Power Company (Virginia SCC)
E-01345A-08-0172	Arizona Public Service Company (Arizona CC)
A-2008-2063737	Babcock & Brown Infrastructure Fund North America, LP. and The Peoples Natural Gas Company, d/b/a Dominion Peoples (Pennsylvania PUC)
08-1783-G-42T	Hope Gas, Inc., dba Dominion Hope (West Virginia PSC)
08-1761-G-PC	Hope Gas, Inc., dba Dominion Hope, Dominion Resources, Inc., and Peoples Hope Gas Companies (West Virginia PSC)
Docket No. 2008-0083	Hawaiian Electric Company, Inc. (Hawaii PUC)
Docket No. 2008-0266	Young Brothers, Limited (Hawaii PUC)
G-04024A-08-0571	UNS Gas, Inc. (Arizona CC)
Docket No. 09-29	Tidewater Utilities, Inc. (Delaware PSC)
Docket No. UE-090704	Puget Sound Energy, Inc. (Washington UTC)
09-0878-G-42T	Mountaineer Gas Company (West Virginia PSC)
2009-UA-0014	Mississippi Power Company (Mississippi PSC)
Docket No. 09-0319	Illinois-American Water Company (Illinois CC)
Docket No. 09-414	Delmarva Power & Light Company (Delaware PSC)
R-2009-2132019	Aqua Pennsylvania, Inc. (Pennsylvania PUC)
Docket Nos. U-09-069, U-09-070	ENSTAR Natural Gas Company (Regulatory Commission of Alaska)
Docket Nos. U-04-023, U-04-024	Anchorage Water and Wastewater Utility - Remand (Regulatory Commission of Alaska)
W-01303A-09-0343 & SW-01303A-09-0343	Arizona-American Water Company (Arizona CC)
09-872-EL-FAC & 09-873-EL-FAC	Financial Audits of the FAC of the Columbus Southern Power Company and the Ohio Power Company - Audit I (Ohio PUC)

2010-00036	Kentucky-American Water Company (Kentucky PSC)
E-04100A-09-0496	Southwest Transmission Cooperative, IHnc. (Arizona CC)
E-01773A-09-0472	Arizona Electric Power Cooperative, Inc. (Arizona CC)
R-2010-2166208,	
R-2010-2166210,	
R-2010-2166212, &	
R-2010-2166214	Pennsylvania-American Water Company (Pennsylvania PUC)
PSC Docket No. 09-0602	Central Illinois Light Company D/B/A AmerenCILCO; Central Illinois Public Service Company D/B/A AmerenCIPS; Illinois Power Company D/B/A AmerenIP (Illinois CC)
10-0713-E-PC	Allegheny Power and FirstEnergy Corp. (West Virginia PSC)
Docket No. 31958	Georgia Power Company (Georgia PSC)
Docket No. 10-0467	Commonwealth Edison Company (Illinois CC)
PSC Docket No. 10-237	Delmarva Power & Light Company (Delaware PSC)
U-10-51	Cook Inlet Natural Gas Storage Alaska, LLC (Regulatory Commission of Alaska)
10-0699-E-42T	Appalachian Power Company and Wheeling Power Company (West Virginia PSC)
10-0920-W-42T	West Virginia-American Water Company (West Virginia PSC)
A.10-07-007	California-American Water Company (California PUC)
A-2010-2210326	TWP Acquisition (Pennsylvania PUC)
09-1012-EL-FAC	Financial, Management, and Performance Audit of the FAC for Dayton Power and Light – Audit 1 (Ohio PUC)
10-268-EL FAC et al.	Financial Audit of the FAC of the Columbus Southern Power Company and the Ohio Power Company – Audit II (Ohio PUC)
Docket No. 2010-0080	Hawaiian Electric Company, Inc. (Hawaii PUC)
G-01551A-10-0458	Southwest Gas Corporation (Arizona CC)
10-KCPE-415-RTS	Kansas City Power & Light Company – Remand (Kansas CC)
PUE-2011-00037	Virginia Appalachian Power Company (Commonwealth of Virginia SCC)
R-2011-2232243	Pennsylvania-American Water (Pennsylvania PUC)
U-11-100	Power Purchase Agreement between Chugach Association, Inc. and Fire Island Wind, LLC (Regulatory Commission of Alaska)
A.10-12-005	San Diego Gas & Electric Company (California PUC)
PSC Docket No. 11-207	Artesian Water Company, Inc. (Delaware PSC)
Cause No. 44022	Indiana-American Water Company, Inc. (Indiana Utility Regulatory Commission)
PSC Docket No. 10-247	Management Audit of Tidewater Utilities, Inc. Affiliate Transactions (Delaware Public Service Commission)
G-04204A-11-0158	UNS Gas, Inc. (Arizona Corporation Commission)
E-01345A-11-0224	Arizona Public Service Company (Arizona CC)
UE-111048 & UE-111049	Puget Sound Energy, Inc. (Washington Utilities and Transportation Commission)
Docket No. 11-0721	Commonwealth Edison Company (Illinois CC)
11AL-947E	Public Service Company of Colorado (Colorado PSC)
U-11-77 & U-11-78	Golden Heart Utilities, Inc. and College Utilities Corporation (The Regulatory Commission of Alaska)
Docket No. 11-0767	Illinois-American Water Company (Illinois CC)
PSC Docket No. 11-397	Tidewater Utilities, Inc. (Delaware PSC)
Cause No. 44075	Indiana Michigan Power Company (Indiana Utility Regulatory Commission)
Docket No. 12-0001	Ameren Illinois Company (Illinois CC)
11-5730-EL-FAC	Financial, Management, and Performance Audit of the FAC for Dayton Power and Light – Audit 2 (Ohio PUC)
PSC Docket No. 11-528	Delmarva Power & Light Company (Delaware PSC)
11-281-EL-FAC et al.	Financial Audit of the FAC of the Columbus Southern Power Company and the Ohio Power Company – Audit III (Ohio PUC)

Cause No. 43114-IGCC-4S1	Duke Energy Indiana, Inc. (Indiana Utility Regulatory Commission)
Docket No. 12-0293	Ameren Illinois Company (Illinois CC)
Docket No. 12-0321	Commonwealth Edison Company (Illinois CC)
12-02019 & 12-04005	Southwest Gas Corporation (Public Utilities Commission of Nevada)
Docket No. 2012-218-E	South Carolina Electric & Gas (South Carolina PSC)
Docket No. E-72, Sub 479	Dominion North Carolina Power (North Carolina Utilities Commission)
12-0511 & 12-0512	North Shore Gas Company and The Peoples Gas Light and Coke Company (Illinois CC)
E-01933A-12-0291	Tucson Electric Power Company (Arizona CC)
Case No. 9311	Potomac Electric Power Company (Maryland PSC)
Cause No. 43114-IGCC-10	Duke Energy Indiana, Inc. (Indiana Utility Regulatory Commission)
Docket No. 36498	Georgia Power Company (Georgia PSC)
Case No. 9316	Columbia Gas of Maryland, Inc. (Maryland PSC)
Docket No. 13-0192	Ameren Illinois Company (Illinois CC)
12-1649-W-42T	West Virginia-American Water Company (West Virginia PSC)
E-04204A-12-0504	UNS Electric, Inc. (Arizona CC)
PUE-2013-00020	Virginia and Electric Power Company (Virginia SCC)
R-2013-2355276	Pennsylvania-American Water Company (Pennsylvania PUC)
Formal Case No. 1103	Potomac Electric Power Company (District of Columbia PSC)
U-13-007	Chugach Electric Association, Inc. (The Regulatory Commission of Alaska)
12-2881-EL-FAC	Financial, Management, and Performance Audit of the FAC for Dayton Power and Light – Audit 3 (Ohio PUC)
Docket No. 36989	Georgia Power Company (Georgia PSC)
Cause No. 43114-IGCC-11	Duke Energy Indiana, Inc. (Indiana Utility Regulatory Commission)
UM 1633	Investigation into Treatment of Pension Costs in Utility Rates (Oregon PUC)
13-1892-EL FAC	Financial Audit of the FAC and AER of the Ohio Power Company – Audit I (Ohio PUC)
E-04230A-14-0011 & E-01933A-14-0011	Reorganization of UNS Energy Corporation with Fortis, Inc. (Arizona CC)
14-255-EL RDR	Regulatory Compliance Audit of the 2013 DIR of Ohio Power Company (Ohio PUC)
U-14-001	Chugach Electric Association, Inc. (The Regulatory Commission of Alaska)
U-14-002	Alaska Power Company (The Regulatory Commission of Alaska)
PUE-2014-00026	Virginia Appalachian Power Company (Commonwealth of Virginia SCC)
14-0117-EL-FAC	Financial, Management, and Performance Audit of the FAC and Purchased Power Rider for Dayton Power and Light – Audit 1 (Ohio PUC)
14-0702-E-42T	Monongahela Power Company and The Potomac Edison Company (West Virginia PSC)
Formal Case No. 1119	Merger of Exelon Corporation, Pepco Holdings, Inc., Potomac Electric Power Company, Exelon Energy Delivery Company, LLC, and New Special Purpose Entity, LLC (District of Columbia PSC)
R-2014-2428742	West Penn Power Company (Pennsylvania PUC)
R-2014-2428743	Pennsylvania Electric Company (Pennsylvania PUC)
R-2014-2428744	Pennsylvania Power Company (Pennsylvania PUC)
R-2014-2428745	Metropolitan Edison Company (Pennsylvania PUC)
Cause No. 43114-IGCC-12/13	Duke Energy Indiana, Inc. (Indiana Utility Regulatory Commission)
14-1152-E-42T	Appalachian Power Company and Wheeling Power Company (West Virginia PSC)
WS-01303A-14-0010	EPCOR Water Arizona, Inc. (Arizona CC)
2014-000396	Kentucky Power Company (Kentucky PSC)
15-03-45 [^]	Iberdrola, S.A. Et Al, and UIL Holdings Corporation merger (Connecticut PURA)
A.14-11-003	San Diego Gas & Electric Company (California PUC)
U-14-111	ENSTAR Natural Gas Company (Regulatory Commission of Alaska)

2015-UN-049	Atmos Energy Corporation (Mississippi PSC)
15-0003-G-42T	Mountaineer Gas Company (West Virginia PSC)
PUE-2015-00027	Virginia Electric and Power Company (Commonwealth of Virginia SCC)
Docket No. 2015-0022	Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., Maui Electric Company Limited, and NextEra Energy, Inc. (Hawaii PUC)
15-0676-W-42T	West Virginia-American Water Company (West Virginia PSC)
15-07-38 ^{^^}	Iberdrola, S.A. Et Al, and UIL Holdings Corporation merger (Connecticut PURA)
15-26 ^{^^}	Iberdrola, S.A. Et Al, and UIL Holdings Corporation merger (Massachusetts DPU)
15-042-EL-FAC	Management/Performance and Financial Audit of the FAC and Purchased Power Rider for Dayton Power and Light (Ohio PUC)
2015-UN-0080	Mississippi Power Company (Mississippi PSC)
Docket No. 15-00042	B&W Pipeline, LLC (Tennessee Regulatory Authority)
WR-2015-0301/SR-2015-0302	Missouri American Water Company (Missouri PSC)
U-15-089, U-15-091, & U-15-092	Golden Heart Utilities, Inc. and College Utilities Corporation (The Regulatory Commission of Alaska)
Docket No. 16-00001	Kingsport Power Company d/b/a AEP Appalachian Power (Tennessee Regulatory Authority)
PUE-2015-00097	Virginia-American Water Company (Commonwealth of Virginia SCC)
15-1854-EL-RDR	Management/Performance and Financial Audit of the Alternative Energy Recovery Rider of Duke Energy Ohio, Inc. (Ohio PUC)
P-15-014	PTE Pipeline LLC (Regulatory Commission of Alaska)
P-15-020	Swanson River Oil Pipeline, LLC (Regulatory Commission of Alaska)
Docket No. 40161	Georgia Power Company – Integrated Resource Plan (Georgia PSC)
Formal Case No. 1137	Washington Gas Light Company (District of Columbia PSC)
160021-EI, et al.	Florida Power Company (Florida PSC)
R-2016-2537349	Metropolitan Edison Company (Pennsylvania PUC)
R-2016-2537352	Pennsylvania Electric Company (Pennsylvania PUC)
R-2016-2537355	Pennsylvania Power Company (Pennsylvania PUC)
R-2016-2537359	West Penn Power Company (Pennsylvania PUC)
16-0717-G-390P	Hope Gas, Inc., dba Dominion Hope (West Virginia PSC)
15-1256-G-390P	
(Reopening)/16-0922-G-390P	Mountaineer Gas Company (West Virginia PSC)
16-0550-W-P	West Virginia-American Water Company (West Virginia PSC)
CEPR-AP-2015-0001	Puerto Rico Electric Power Authority (Puerto Rico Energy Commission)
E-01345A-16-0036	Arizona Public Service Company (Arizona CC)
Docket No. 4618	Providence Water Supply Board (Rhode Island PUC)
Docket No. 46238	Joint Report and Application of Oncor Electric Delivery Company LLC and NextEra Energy Inc. (Texas State Office of Administrative Hearings; Texas PUC)
U-16-066	ENSTAR Natural Gas Company (Regulatory Commission of Alaska)
Case No. 2016-00370	Kentucky Utilities Company (Kentucky PSC)
Case No. 2016-00371	Louisville Gas and Electric Company (Kentucky PSC)
P-2015-2508942	Metropolitan Edison Company (Pennsylvania PUC)
P-2015-2508936	Pennsylvania Electric Company (Pennsylvania PUC)
P-2015-2508931	Pennsylvania Power Company (Pennsylvania PUC)
P-2015-2508948	West Penn Power Company (Pennsylvania PUC)
E-04204A-15-0142*	UNS Electric, Inc. (Arizona CC)
E-01933A-15-0322*	Tucson Electric Power Company (Arizona CC)
UE-170033 & UG-170034*	Puget Sound Energy, Inc. (Washington UTC)
Case No. U-18239	Consumers Energy Company (Michigan PSC)
Case No. U-18248	DTE Electric Company (Michigan PSC)

Case No. 9449	Merger of AltaGas Ltd. and WGL Holdings (Maryland PSC)
Formal Case No. 1142	Merger of AltaGas Ltd. and WGL Holdings (District of Columbia PSC)
Case No. 2017-00179	Kentucky Power Company (Kentucky PSC)
Docket No. 29849	Georgia Power Plant Vogtle Units 3 and 4, VCM 17 (Georgia PSC)
Docket No. 2017-AD-112	Mississippi Power Company (Mississippi PSC)
Docket No. D2017.9.79	Montana-Dakota Utilities Co. (Montana PSC)
SW-01428A-17-0058 et al	Liberty Utilities (Litchfield Park Water & Sewer) Corp. (Arizona CC)
U-18-021 & U-18-033	Chugach Electric Association, Inc. (Regulatory Commission of Alaska)
Docket No. 4800	Suez Water Rhode Island Inc. (Rhode Island PUC)
General Order No. 236.1	In the Matter of the Effects on Utilities of the 2017 Tax Cuts and Jobs Act (West Virginia PSC)
20180047-EI	Duke Energy Florida, LLC. (Florida PSC)
20180046-EI	Florida Power & Light Company (Florida PSC)
20180048-EI	Florida Public Utilities Company – Electric (Florida PSC)
20180052-GU	Florida Public Utilities Company – Indiantown (Florida PSC)
20180054-GU	Florida Division of Chesapeake Utilities Corporation (Florida PSC)
20180051-GU	Florida Public Utilities Company – Gas Division (Florida PSC)
20180053-GU	Florida Public Utilities Company - Fort Meade (Florida PSC)
Cause No. 45032 S4	Indiana American Water Company, Inc. Phase 2 (Indiana Utility Regulatory Commission)
Docket No. D2018.1.6	Montana-Dakota Utilities Co. (Montana PSC)
Docket No. D2018.4.24	NorthWestern Energy (Montana PSC)
Docket No. D2018.4.22	Montana-Dakota Utilities Co. (Montana PSC)
18-0573-W-42T & 18-0576-S-42T	West Virginia-American Water Company (West Virginia PSC)
18-0646-E-42T & 18-0645 E-D	Appalachian Power Company and Wheeling Power Company (West Virginia PSC)
18-0049-GA-ALT, 18-0298-GA-AIR, & 18-0299-GA-ALT	Vectren Energy Delivery of Ohio, Inc. (Ohio PUC)
R-2018-3003558, R-2018-3003561	Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc. (Pennsylvania PUC)
Cause No. 45142	Indiana-American Water Company, Inc. (Indiana Utility Regulatory Commission)
U-18-043	Cook Inlet Natural Gas Storage Alaska, LLC (Regulatory Commission of Alaska)
T-03214-17-0305	Citizens Telecommunications Company of The White Mountains, Inc. d/b/a Frontier Communications of The White Mountains (Arizona CC)
Docket No. D2018.9.60	Montana-Dakota Utilities Co. (Montana PSC)
Docket No. 4890	Narragansett Bay Commission (Rhode Island PUC)
PUR-2018-00131	Columbia Gas of Virginia (Virginia SCC)
EL18-152-000	Louisiana PSC v. System Energy Resources, Inc. and Entergy Services, Inc. (FERC)
PUR-2018-00175	Virginia-American Water Company (Virginia SCC)
A-2018-3006061, A-2018-3006062 and A-2018-3006063	Aqua America, Inc., Aqua Pennsylvania, Inc., Aqua Pennsylvania Wastewater, Inc., Peoples Natural Gas Company LLC, Peoples Gas Company LLC (Pennsylvania PUC)
Docket No. D2018.2.12	NorthWestern Energy (Montana PSC)
Docket No. 42310	Georgia Power Company – Integrated Resource Plan (Georgia PSC)
U-18-102	Municipality of Anchorage d/b/a Municipal Light & Power Department (Regulatory Commission of Alaska)

PUC Docket No. 49494	AEP Texas, Inc. (Texas PUC)
Application 18-12-009	Pacific Gas and Electric Company (California PUC)
19-0316-G-42T	Mountaineer Gas Company (West Virginia PSC)
19-0051-EL-RDR	Management/Performance and Financial Audit of the Alternative Energy Recovery Rider of Duke Energy Ohio, Inc. (Ohio PUC)
A-2018-3006061,	
A-2018-3006062, and	
A-2018-3006063	Joint Application of Aqua America, Inc., Aqua Pennsylvania, Inc. Aqua Pennsylvania Wastewater, Inc., Peoples Natural Gas Company LLC, and Peoples Gas Company LLC (Pennsylvania PUC)
ER-18-1182-001	System Energy Resources, Inc. (FERC)
E-01933A-19-0028	Tuscon Electric Power Company (Arizona CC)
G-01551A-19-0055	Southwest Gas Corporation (Arizona CC)
Docket No. 4975	Block Island Utility District d/b/a Block Island Power Company (Rhode Island PUC)
A-2019-3014248	Pennsylvania-American Water Company and Wastewater System Assets of Kane Borough (Pennsylvania PUC)
Docket No. 4994	Providence Water Supply Board (Rhode Island PUC)
19-0791-GA-ALT	Plant in Service and Capital Spending Prudence Audit of Duke Energy Ohio (Ohio PUC)
U-19-070/U-19-071/	
U-19-087/U-19-088	Golden Hear Utilities, Inc. and College Utilities Corporation (Regulatory Commission of Alaska)
20200070-EI	Gulf Power Company (Florida PSC)
20200071-EI	Florida Power & Light Company (Florida PSC)

* Testimony filed, examination not completed

** Issues stipulated

*** Company withdrew case

^ Testimony filed, case withdrawn after proposed decision issued

^^ Issues stipulated before testimony was filed

Line No.	Valuation Method	Appraisers' Results			Results with OCA Adjustments				Exhibit Reference
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	
		Gannett Fleming			Gannett Fleming				
		Individual Results	Weight	Weighted Result	OCA Adjustment	Individual Results	Weight	Weighted Result	
1	Cost Approach	\$ 399,664,113	33.0000%	\$ 131,889,157	(100,465,415)	\$ 299,198,698	33.0000%	\$ 98,735,570	RCS-2
2	Income Approach	\$ 387,754,301	33.0000%	\$ 127,958,919	(82,690,835)	\$ 305,063,466	33.0000%	\$ 100,670,944	RCS-3
3	Market Approach	\$ 438,337,696	34.0000%	\$ 149,034,817	(15,591,769)	\$ 422,745,927	34.0000%	\$ 143,733,615	RCS-4
4	Total			\$ 408,882,893				\$ 343,140,129	
5	Conclusion			\$ 408,883,000				\$ 343,140,000	
		ScottMadden			ScottMadden				
		Individual Results	Weight	Weighted Result	OCA Adjustment	Individual Results	Weight	Weighted Result	
6	Cost Approach	\$ 292,413,993	45.0000%	\$ 131,586,297	(35,019,728)	\$ 257,394,266	45.0000%	\$ 115,827,420	RCS-5
7	Income Approach	\$ 291,863,370	50.0000%	\$ 145,931,685	(128,738,064)	\$ 163,125,306	50.0000%	\$ 81,562,653	RCS-6
8	Market Approach	\$ 613,520,480	5.0000%	\$ 30,676,024	(197,931,116)	\$ 415,589,365	5.0000%	\$ 20,779,468	RCS-7
9	Total			\$ 308,194,006				\$ 218,169,541	
10	Conclusion			\$ 308,194,000				\$ 218,170,000	
		Summary of Results			OCA Adjusted Results				
11		Gannett Fleming		\$ 408,883,000				\$ 343,140,000	
12		ScottMadden		\$ 308,194,000				\$ 218,170,000	
13		Average		\$ 358,538,500				\$ 280,655,000	
14	Purchase Price			\$ 276,500,000				\$ 276,500,000	
15	Lesser of Purchase Price and Fair Market Value			\$ 276,500,000				\$ 276,500,000	

Notes and Source:

Lines 1-5, Cols. A through C: Exhibit Q, Gannett Fleming Fair Market Value Appraisal report, Exhibit 19
Lines 6-10, Cols. A through C: Exhibit R, ScottMadden Fair Market Value Appraisal report, page 12

Line No.	Account No.	Description	Per Gannett Fleming			Per OCA				
			Replacement Cost	Accumulated Depreciation on Replacement Cost	Replacement Cost Less Accumulated Depreciation (C) = (A) - (B)	OCA Original Cost Accumulated Depreciation to Plant Ratio (D)	Gannett Fleming RCND to OC Ratio (E)	Replacement Cost Accumulated Depreciation (F) = (A) x (D) x (E)	Replacement Cost Less Accumualted Depreciation (G) = (A) - (F)	OCA Adjustment (H) = (G) - (C)
			(A)	(B)	(C) = (A) - (B)	(D)	(E)	(F) = (A) x (D) x (E)	(G) = (A) - (F)	(H) = (G) - (C)
1	353.30	LAND AND LAND RIGHTS - PUMPING	\$ 131,500		\$ 131,500			\$ -	\$ 131,500	\$ -
2	354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	\$ 94,737,337	\$ 48,627,436	\$ 46,109,901	38%	158%	\$ 57,066,981	\$ 37,670,355	\$ (8,439,545)
3	354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	\$ 41,392,404	\$ 18,010,504	\$ 23,381,900	44%	130%	\$ 23,501,205	\$ 17,891,199	\$ (5,490,701)
4	354.70	STRUCTURES AND IMPROVEMENTS - GENERAL PLANT	\$ 4,526,550	\$ 1,383,438	\$ 3,143,112	33%	113%	\$ 1,700,475	\$ 2,826,075	\$ (317,037)
5	360.21	COLLECTION SEWERS - FORCE - MAINS	\$ 112,781,557	\$ 43,471,330	\$ 69,310,227			\$ 43,471,330	\$ 69,310,227	\$ -
6	361.21	COLLECTION SEWERS - GRAVITY - MAINS	\$ 91,584,840	\$ 71,000,745	\$ 20,584,095			\$ 71,000,745	\$ 20,584,095	\$ -
7	361.23	COLLECTION SEWERS - GRAVITY - MANHOLES	\$ 16,957,658	\$ 11,443,391	\$ 5,514,267			\$ 11,443,391	\$ 5,514,267	\$ -
8	362.20	SPECIAL COLLECTING STRUCTURES	\$ 22,676,813	\$ 10,374,244	\$ 12,302,569	40%	181%	\$ 16,348,744	\$ 6,328,069	\$ (5,974,500)
9	363.20	SERVICES TO CUSTOMERS	\$ 5,084,185	\$ 3,963,122	\$ 1,121,063			\$ 3,963,122	\$ 1,121,063	\$ -
10	364.20	FLOW MEASURING DEVICES	\$ 667,374	\$ 51,272	\$ 616,102	7%	105%	\$ 47,560	\$ 619,814	\$ 3,712
11	365.20	FLOW MEASURING INSTALLATIONS	\$ 66,074	\$ 57,503	\$ 8,571			\$ 57,503	\$ 8,571	\$ -
12	371.30	PUMPING EQUIPMENT	\$ 20,869,242	\$ 5,782,503	\$ 15,086,739	42%	127%	\$ 11,135,027	\$ 9,734,215	\$ (5,352,524)
13	380.30	TREATMENT AND DISPOSAL EQUIP - PUMP STATIONS	\$ 68,566,086	\$ 23,286,127	\$ 45,279,959	27%	171%	\$ 31,721,978	\$ 36,844,107	\$ (8,435,851)
14	380.40	TREATMENT AND DISPOSAL EQUIPMENT	\$ 307,705,283	\$ 152,768,306	\$ 154,936,977	40%	178%	\$ 219,214,491	\$ 88,490,792	\$ (66,446,185)
15	390.70	COMPUTER AND SOFTWARE	\$ 303,617	\$ 212,532	\$ 91,085			\$ 212,532	\$ 91,085	\$ -
16	391.70	TRANSPORTATION EQUIPMENT	\$ 4,146,484	\$ 2,247,431	\$ 1,899,053			\$ 2,247,431	\$ 1,899,053	\$ -
17	396.70	COMMUNICATION EQUIPMENT	\$ 191,730	\$ 44,736	\$ 146,994	30%	100%	\$ 57,519	\$ 134,211	\$ (12,783)
18		TOTAL	<u>\$ 792,388,733</u>	<u>\$ 392,724,620</u>	<u>\$ 399,664,113</u>			<u>\$ 493,190,035</u>	<u>\$ 299,198,698</u>	<u>\$ (100,465,415)</u>

Notes and Source:

Cols. A-C: Exhibit Q Gannett Fleming Fair Market Value Appraisal Report, Exhibit 9
Col. D: Per Exhibit RCS-7, page 2:

Account No.	Description	Original Cost			OCA Original Cost Accumulated Depreciation to Plant Ratio (L) = (J) / (I)
		Original Cost (I)	Accumulated Depreciation (J)	Original Cost Net Plant (K)	
353.30	LAND AND LAND RIGHTS - PUMPING	\$ 131,500		\$ 131,500	
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	<u>\$ 28,944,364</u>	<u>\$ 11,031,795</u>	<u>\$ 17,912,569</u>	38%
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	\$ 12,681,793	\$ 5,540,064	\$ 7,141,729	44%
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL PLANT	\$ 2,434,828	\$ 806,557	\$ 1,628,271	33%
360.21	COLLECTION SEWERS - FORCE - MAINS	\$ 40,269,450	\$ 9,392,620	\$ 30,876,830	
361.21	COLLECTION SEWERS - GRAVITY - MAINS	\$ 8,324,261	\$ 3,236,462	\$ 5,087,799	
361.23	COLLECTION SEWERS - GRAVITY - MANHOLES	\$ 3,473,591	\$ 1,012,002	\$ 2,461,589	
362.20	SPECIAL COLLECTING STRUCTURES	\$ 8,739,494	\$ 3,473,842	\$ 5,265,652	40%
363.20	SERVICES TO CUSTOMERS	\$ 307,905	\$ 240,012	\$ 67,893	
364.20	FLOW MEASURING DEVICES	\$ 634,717	\$ 42,958	\$ 591,758	7%
365.20	FLOW MEASURING INSTALLATIONS	\$ 12,625	\$ 10,987	\$ 1,638	
371.30	PUMPING EQUIPMENT	\$ 11,042,301	\$ 4,656,106	\$ 6,386,195	42%
380.30	TREATMENT AND DISPOSAL EQUIP - PUMP STATIONS	\$ 37,071,005	\$ 10,014,200	\$ 27,056,805	27%
380.40	TREATMENT AND DISPOSAL EQUIPMENT	\$ 105,317,583	\$ 42,227,497	\$ 63,090,085	40%
391.70	TRANSPORTATION EQUIPMENT	\$ 311,998	\$ 218,398	\$ 93,600	
396.70	COMMUNICATION EQUIPMENT	\$ 3,788,348	\$ 2,001,862	\$ 1,786,486	
396.70	COMMUNICATION EQUIPMENT	<u>\$ 196,855</u>	<u>\$ 59,057</u>	<u>\$ 137,799</u>	30%
	TOTAL	<u>\$ 263,682,616</u>	<u>\$ 93,964,419</u>	<u>\$ 169,718,197</u>	

Cols. E: Per Exhibit Q Gannett Fleming Fair Market Value Appraisal Report, Exhibit 7 and 9:

Account No.	Description	Original Cost			Replacement Cost			
		Original Cost (M)	Accumulated Depreciation (N)	Ratio (O) = (N) / (M)	Replacement Cost (P)	Accumulated Depreciation (Q)	Ratio (R) = (Q) / (P)	RCND to OC Ratio (S) = (R) / (O)
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	\$ 28,944,364	\$ 9,400,320	32%	\$ 94,737,337	\$ 48,627,436	51%	158%
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	\$ 12,681,793	\$ 4,245,712	33%	\$ 41,392,404	\$ 18,010,504	44%	130%
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL PLANT	\$ 2,434,828	\$ 656,182	27%	\$ 4,526,550	\$ 1,383,438	31%	113%
362.20	SPECIAL COLLECTING STRUCTURES	\$ 8,739,494	\$ 2,204,358	25%	\$ 22,676,813	\$ 10,374,244	46%	181%
364.20	FLOW MEASURING DEVICES	\$ 634,717	\$ 46,311	7%	\$ 667,374	\$ 51,272	8%	105%
371.30	PUMPING EQUIPMENT	\$ 11,042,301	\$ 2,417,951	22%	\$ 20,869,242	\$ 5,782,503	28%	127%
380.30	TREATMENT AND DISPOSAL EQUIP - PUMP STATIONS	\$ 37,071,005	\$ 7,351,116	20%	\$ 68,566,086	\$ 23,286,127	34%	171%
380.40	TREATMENT AND DISPOSAL EQUIPMENT	\$ 105,317,583	\$ 29,427,905	28%	\$ 307,705,283	\$ 152,768,306	50%	178%
396.70	COMMUNICATION EQUIPMENT	\$ 196,855	\$ 45,932	23%	\$ 191,730	\$ 44,736	23%	100%

Col. F, Lines 1,5-7,9,11,15-16: Gannett Fleming Fair Market Value Appraisal Report, Exhibit 7

Line No.	Account No.	Description	Per Gannett Fleming			Per OCA			OCA Adjustment (F) = (E) - (C)
			Replacement Cost (A)	Accumulated Depreciation on Replacement Cost (B)	Replacement Cost Less Accumulated Depreciation (C) = (A) - (B)	Replacement Cost Accumulated Depreciation (D) = (K)	Replacement Cost Less Accumulated Depreciation (E) = (A) - (D)		
1	353.30	LAND AND LAND RIGHTS - PUMPING	\$ 131,500		\$ 131,500	\$ -	\$ 131,500	\$ -	
2	354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	\$ 94,737,337	\$ 48,627,436	\$ 46,109,901	\$ 57,066,981	\$ 37,670,355	\$ (8,439,545)	
3	354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	\$ 41,392,404	\$ 18,010,504	\$ 23,381,900	\$ 23,501,205	\$ 17,891,199	\$ (5,490,701)	
4	354.70	STRUCTURES AND IMPROVEMENTS - GENERAL PLANT	\$ 4,526,550	\$ 1,383,438	\$ 3,143,112	\$ 1,700,475	\$ 2,826,075	\$ (317,037)	
5	360.21	COLLECTION SEWERS - FORCE - MAINS	\$ 112,781,557	\$ 43,471,330	\$ 69,310,227	\$ 43,471,330	\$ 69,310,227	\$ -	
6	361.21	COLLECTION SEWERS - GRAVITY - MAINS	\$ 91,584,840	\$ 71,000,745	\$ 20,584,095	\$ 71,000,745	\$ 20,584,095	\$ -	
7	361.23	COLLECTION SEWERS - GRAVITY - MANHOLES	\$ 16,957,658	\$ 11,443,391	\$ 5,514,267	\$ 11,443,391	\$ 5,514,267	\$ -	
8	362.20	SPECIAL COLLECTING STRUCTURES	\$ 22,676,813	\$ 10,374,244	\$ 12,302,569	\$ 16,348,744	\$ 6,328,069	\$ (5,974,500)	
9	363.20	SERVICES TO CUSTOMERS	\$ 5,084,185	\$ 3,963,122	\$ 1,121,063	\$ 3,963,122	\$ 1,121,063	\$ -	
10	364.20	FLOW MEASURING DEVICES	\$ 667,374	\$ 51,272	\$ 616,102	\$ 47,560	\$ 619,814	\$ 3,712	
11	365.20	FLOW MEASURING INSTALLATIONS	\$ 66,074	\$ 57,503	\$ 8,571	\$ 57,503	\$ 8,571	\$ -	
12	371.30	PUMPING EQUIPMENT	\$ 20,869,242	\$ 5,782,503	\$ 15,086,739	\$ 11,135,027	\$ 9,734,215	\$ (5,352,524)	
13	380.30	TREATMENT AND DISPOSAL EQUIP - PUMP STATIONS	\$ 68,566,086	\$ 23,286,127	\$ 45,279,959	\$ 31,721,978	\$ 36,844,107	\$ (8,435,851)	
14	380.40	TREATMENT AND DISPOSAL EQUIPMENT	\$ 307,705,283	\$ 152,768,306	\$ 154,936,977	\$ 219,214,491	\$ 88,490,792	\$ (66,446,185)	
15	390.70	COMPUTER AND SOFTWARE	\$ 303,617	\$ 212,532	\$ 91,085	\$ 212,532	\$ 91,085	\$ -	
16	391.70	TRANSPORTATION EQUIPMENT	\$ 4,146,484	\$ 2,247,431	\$ 1,899,053	\$ 2,247,431	\$ 1,899,053	\$ -	
17	396.70	COMMUNICATION EQUIPMENT	\$ 191,730	\$ 44,736	\$ 146,994	\$ 57,519	\$ 134,211	\$ (12,783)	
18		TOTAL	\$ 792,388,733	\$ 392,724,620	\$ 399,664,113	\$ 493,190,035	\$ 299,198,698	\$ (100,465,415)	

Notes and Source:

Cols. A-C: Exhibit Q Gannett Fleming Fair Market Value Appraisal Report, Exhibit 9
Col. D: Per Exhibit RCS-7, pages 1 and 3:

Account No.	Description	Original Cost (G)	Accumulated Depreciation (H)	GF OC A/D (I)	GF RC A/D (J)	OCA RC A/D (K) = (H) / (I) x (J)
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	\$ 28,944,364	\$ 11,031,795	\$ 9,400,320	\$ 48,627,436	\$ 57,066,981
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	\$ 12,681,793	\$ 5,540,064	\$ 4,245,712	\$ 18,010,504	\$ 23,501,205
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL PLANT	\$ 2,434,828	\$ 806,557	\$ 656,182	\$ 1,383,438	\$ 1,700,475
362.20	SPECIAL COLLECTING STRUCTURES	\$ 8,739,494	\$ 3,473,842	\$ 2,204,358	\$ 10,374,244	\$ 16,348,744
364.20	FLOW MEASURING DEVICES	\$ 634,717	\$ 42,958	\$ 46,311	\$ 51,272	\$ 47,560
371.30	PUMPING EQUIPMENT	\$ 11,042,301	\$ 4,656,106	\$ 2,417,951	\$ 5,782,503	\$ 11,135,027
380.30	TREATMENT AND DISPOSAL EQUIP - PUMP STATIONS	\$ 37,071,005	\$ 10,014,200	\$ 7,351,116	\$ 23,286,127	\$ 31,721,978
380.40	TREATMENT AND DISPOSAL EQUIPMENT	\$ 105,317,583	\$ 42,227,497	\$ 29,427,905	\$ 152,768,306	\$ 219,214,491
396.70	COMMUNICATION EQUIPMENT	\$ 196,855	\$ 59,057	\$ 45,932	\$ 44,736	\$ 57,519

Cols. E: Per Exhibit Q Gannett Fleming Fair Market Value Appraisal Report, Exhibit 7 and 9:

Account No.	Description	Original Cost (L)	Replacement Cost (M)	Ratio (N) = (M) / (L)
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	\$ 28,944,364	\$ 94,737,337	327%
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	\$ 12,681,793	\$ 41,392,404	326%
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL PLANT	\$ 2,434,828	\$ 4,526,550	186%
362.20	SPECIAL COLLECTING STRUCTURES	\$ 8,739,494	\$ 22,676,813	259%
364.20	FLOW MEASURING DEVICES	\$ 634,717	\$ 667,374	105%
371.30	PUMPING EQUIPMENT	\$ 11,042,301	\$ 20,869,242	189%
380.30	TREATMENT AND DISPOSAL EQUIP - PUMP STATIONS	\$ 37,071,005	\$ 68,566,086	185%
380.40	TREATMENT AND DISPOSAL EQUIPMENT	\$ 105,317,583	\$ 307,705,283	292%
396.70	COMMUNICATION EQUIPMENT	\$ 196,855	\$ 191,730	97%

Col. D, Lines 1,5-7,9,11,15-16: Gannett Fleming Fair Market Value Appraisal Report, Exhibit 9

Line No.	Description	Indicated Value
<u>Part I: Gannett Flemming Income Approach</u>		
<u>Municipal Ownership</u>		
1	DCF With Capitalization of Terminal Value Model @ 3.38%	\$ 427,428,533
2	DCF With Capitalization of Terminal Value Model @ 3.18%	\$ 442,693,897
3	DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 3.38%	\$ 464,943,431
4	DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 3.18%	\$ 464,943,431
5	Median	<u>\$ 453,818,664</u>
<u>IOU Ownership</u>		
6	DCF With Capitalization of Terminal Value Model @ 5.71%	\$ 294,523,598
7	DCF With Capitalization of Terminal Value Model @ 6.96%	\$ 234,688,946
8	DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 5.91%	\$ 427,048,173
9	DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 7.16%	\$ 348,856,278
10	Median	<u>\$ 321,689,938</u>
11	Total Income Approach Valuation (Median of Lines 3 and 8)	<u>\$ 387,754,301</u>
<u>Part II: OCA Adjusted Income Approach</u>		
12	Recalculated Municipal Ownership (Page 2)	\$ 346,369,318
13	Recalculated IOU Ownership (Page 3)	\$ 263,757,613
14	OCA Adjusted Income Approach Valuation (Median of Lines 10 and 11)	<u>\$ 305,063,465</u>
<u>Part III: Difference</u>		
15	Difference (Line 12 - Line 9)	<u>\$ (82,690,835)</u>
		To Exhibit RCS-1

Notes and Source:

Line 1-4: Exhibit Q Gannett Fleming Fair Market Value Appraisal Report, Exhibit 15
Lines 6-9: Exhibit Q Gannett Fleming Fair Market Value Appraisal Report, Exhibit 16
Line 12: Exhibit RCS-2, page 2
Line 13: Exhibit RCS-2, page 3

Notes and Source:		\$360,360,318
Lines 1-30 Exhibit Q Gamco's Fair Market Value Appraisal Report, Exhibit 15		
Line 29: Median of two discount factors used in Gamco's Discounting calculation:		
First Discount Rate Used	3.18%	
Second Discount Rate Used	3.38%	
Median	3.28%	
Line 32:		
Net Plant in 24th Year per Gamco's Discounting	\$40,645,943	
Present Value Factor at 3.28%	0.6104	
Present Value of Net Plant at 3.28 %	\$19,558,560	

	Estimated Year 1 2021	Estimated Year 2 2022	Estimated Year 3 2023	Estimated Year 4 2024	Estimated Year 5 2025	Estimated Year 6 2026	Estimated Year 7 2027	Estimated Year 8 2028	Estimated Year 9 2029	Estimated Year 10 2030	Estimated Year 11 2031	Estimated Year 12 2032	Estimated Year 13 2033	Estimated Year 14 2034	Estimated Year 15 2035	Estimated Year 16 2036	Estimated Year 17 2037	Estimated Year 18 2038	Estimated Year 19 2039	Estimated Year 20 2040	Estimated Year 21 2041	Estimated Year 22 2042	Estimated Year 23 2043	Estimated Year 24 2044
1. OPERATING REVENUES																								
2. Charges for services	70,729,539	70,780,913	87,186,904	87,313,285	87,442,008	97,031,073	97,176,620	97,322,384	108,189,889	108,352,173	108,514,702	123,566,288	123,751,637	123,937,264	136,783,734	136,988,909	150,639,443	150,865,402	153,358,076	153,588,113	160,740,328	160,981,438	168,639,164	168,892,123
3. Other operating revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4. Tip Fees	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5. Other (Rate Increases)	0	16,279,610	0	0	9,443,737	0	0	10,705,462	0	0	14,866,514	0	0	12,641,601	0	13,424,913	0	2,262,981	0	6,911,465	0	7,405,146	0	6,080,116
6. Total Operating Revenues	70,729,539	87,060,523	87,186,904	87,313,285	96,885,745	97,031,073	97,176,620	108,027,846	108,189,889	108,352,173	123,381,216	123,566,288	123,751,637	136,578,865	136,783,734	150,413,822	150,639,443	153,128,383	153,358,076	160,499,578	160,740,328	168,386,584	168,639,164	174,972,239
7. OPERATING EXPENSES																								
8. Operating & Maintenance Expenses	46,383,147	47,542,726	48,731,294	49,949,576	51,198,316	52,478,274	53,790,231	55,134,986	56,513,361	57,926,195	59,374,350	60,858,709	62,380,176	63,939,681	65,538,173	67,176,627	68,856,043	70,577,444	72,341,880	74,150,427	76,004,188	77,904,292	79,851,900	81,848,197
9. Remove Economies of Scale																								
10. LESS: EOS - Wages & Benefits	(3,065,159)	(3,141,788)	(3,220,333)	(3,300,841)	(3,383,362)	(3,467,946)	(3,554,645)	(3,643,511)	(3,734,599)	(3,827,964)	(3,923,663)	(4,021,754)	(4,122,298)	(4,225,356)	(4,330,990)	(4,439,264)	(4,550,246)	(4,664,002)	(4,780,602)	(4,900,117)	(5,022,620)	(5,148,186)	(5,276,890)	(5,408,812)
11. LESS: EOS - Professional Services	(1,925,719)	(1,973,862)	(2,023,208)	(2,073,788)	(2,125,633)	(2,178,774)	(2,233,243)	(2,289,074)	(2,346,301)	(2,404,959)	(2,465,083)	(2,526,710)	(2,589,878)	(2,654,625)	(2,720,990)	(2,789,015)	(2,858,740)	(2,930,209)	(3,003,464)	(3,078,551)	(3,155,514)	(3,234,402)	(3,315,262)	(3,398,144)
12. LESS: EOS - Eliminated Expenses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13. ADD: Additional O&M	3,038,584	4,494,002	4,113,573	6,083,889	8,997,944	13,307,772	19,681,917	15,108,845	18,564,735	22,811,100	28,028,749	34,439,847	29,914,616	33,794,057	38,176,598	43,127,484	48,720,421	42,144,331	43,993,869	45,924,576	47,940,014	50,043,900	51,294,998	52,577,372
14. ADD: PURTA & Reg Assessment	817,759	823,384	924,389	938,133	934,544	991,042	1,013,128	1,023,648	1,094,374	1,083,738	1,071,517	1,142,346	1,143,751	1,158,026	1,245,426	1,258,136	1,340,666	1,348,942	1,363,709	1,364,399	1,402,641	1,403,621	1,446,734	1,447,770
15. Operating Expenses Before Depreciation	45,248,612	47,744,462	48,525,715	51,596,969	55,621,809	61,130,368	68,697,387	65,334,894	70,091,570	75,588,111	82,085,870	89,892,437	86,726,368	92,011,784	97,908,217	104,333,968	111,508,144	106,476,506	109,915,392	113,460,734	117,168,708	120,969,226	124,001,479	127,066,383
16. Depreciation	11,470,658	11,425,940	11,826,594	12,084,342	12,260,589	12,471,213	12,960,810	13,276,569	13,497,209	13,577,578	13,641,539	13,766,720	14,052,671	14,434,773	14,817,642	15,157,097	15,467,784	15,767,199	16,023,336	16,267,229	16,512,585	16,775,207	17,042,006	17,313,048
17. Total Operating Expenses	56,719,271	59,270,402	60,352,309	63,681,311	67,882,398	73,701,581	81,658,198	78,611,463	83,588,779	89,165,689	95,727,409	103,638,667	100,779,039	106,446,537	112,725,859	119,491,065	126,975,928	122,243,705	125,938,728	129,727,963	133,681,294	137,744,433	141,043,485	144,379,431
18. Operating Income	14,210,268	27,790,121	26,834,595	23,631,974	29,003,347	23,329,492	15,518,422	29,416,383	24,601,110	19,186,484	27,653,807	19,907,621	22,972,598	30,132,308	24,057,875	30,922,757	23,663,515	30,884,678	27,419,348	30,771,615	27,059,034	30,642,151	27,995,679	30,592,808
19. Revenues	70,729,539	87,060,523	87,186,904	87,313,285	96,885,745	97,031,073	97,176,620	108,027,846	108,189,889	108,352,173	123,381,216	123,566,288	123,751,637	136,578,865	136,783,734	150,413,822	150,639,443	153,128,383	153,358,076	160,499,578	160,740,328	168,386,584	168,639,164	174,972,239
20. EBITDA	25,480,027	39,316,061	38,661,189	35,716,116	41,263,956	35,900,705	28,479,233	42,692,932	38,090,319	32,764,062	41,295,346	33,873,851	37,825,269	44,567,081	38,873,517	46,079,854	39,131,290	46,651,877	43,462,684	47,638,844	43,571,620	47,417,358	44,637,085	47,905,856
21. EBIT	14,210,268	27,790,121	26,834,595	23,631,974	29,003,347	23,329,492	15,518,422	29,416,383	24,601,110	19,186,484	27,653,807	19,907,621	22,972,598	30,132,308	24,057,875	30,922,757	23,663,515	30,884,678	27,419,348	30,771,615	27,059,034	30,642,151	27,995,679	30,592,808
22. EBIT	14,210,268	27,790,121	26,834,595	23,631,974	29,003,347	23,329,492	15,518,422	29,416,383	24,601,110	19,186,484	27,653,807	19,907,621	22,972,598	30,132,308	24,057,875	30,922,757	23,663,515	30,884,678	27,419,348	30,771,615	27,059,034	30,642,151	27,995,679	30,592,808
23. (-) Income Taxes	4,105,847	8,028,566	7,752,514	6,827,277	8,379,067	6,739,890	4,483,272	8,498,393	7,107,261	5,542,975	7,989,185	5,751,312	6,636,784	8,705,224	6,990,320	8,933,584	6,836,390	8,922,583	7,921,450	8,889,919	7,817,355	8,852,517	7,922,392	8,838,262
24. Debt Free Net Income	10,104,921	19,761,555	19,082,081	16,804,697	20,624,280	16,589,602	11,035,150	20,917,990	17,493,849	13,643,509	19,664,622	14,156,309	16,335,814	21,427,084	17,107,555	21,989,173	16,827,125	21,962,095	19,497,898	21,881,696	19,241,679	21,789,634	19,623,287	21,754,546
25. (+) Depreciation & Amortization	11,270,658	11,525,940	11,826,594	12,084,342	12,260,589	12,571,213	12,960,810	13,276,569	13,497,209	13,577,578	13,641,539	13,766,720	14,052,671	14,434,773	14,817,642	15,157,097	15,467,784	15,767,199	16,023,336	16,267,229	16,512,585	16,775,207	17,042,006	17,313,048
26. (-) Capital Expenditures	14,995,092	17,169,801	20,922,071	9,075,591	13,678,412	27,416,940	19,549,775	5,426,129	4,397,890	3,386,381	14,012,090	23,284,468	24,499,458	22,879,544	18,631,000	20,351,369	16,189,650	15,592,470	14,594,850	16,241,099	16,499,403	16,761,816	17,028,401	
27. (-) Changes in Working Capital	49,511	60,942	61,031	61,119	67,820	67,922	68,024	75,619	75,733	75,847	86,367	86,496	86,626	95,605	95,749	105,290	105,448	107,190	107,351	112,350	112,518	117,871	118,047	122,481
28. Debt Free Net Cash Flow	\$6,330,977	\$14,056,751	\$9,925,573	\$19,752,329	\$19,138,637	\$1,675,954	\$4,199,048	\$14,560,165	\$25,489,196	\$22,747,351	\$29,833,413	\$13,823,952	\$7,017,391	\$11,266,794	\$8,949,904	\$18,409,980	\$11,838,093	\$21,432,454	\$19,821,413	\$23,441,725	\$19,400,648	\$21,947,568	\$19,785,430	\$21,916,712
29. Present Value Factor: 6.44%	0.9693	0.9107	0.8556	0.8039	0.7553	0.7096	0.6667	0.6264	0.5885	0.5530	0.5195	0.4881	0.4586	0.4309	0.4048	0.3804	0.3574	0.3358	0.3155	0.2964	0.2785	0.2616	0.2458	0.2309
30. Present Value Debt Free Net Cash Flow	\$6,136,616	\$12,801,484	\$8,492,320	\$15,878,897	\$14,455,413	\$1,189,257	\$2,799,505	\$9,126,125	\$15,000,392	\$12,479,285	\$15,498,458	\$6,747,471	\$3,218,176	\$4,854,862	\$3,622,921	\$7,003,157	\$4,230,934	\$7,197,018	\$6,253,656	\$6,948,127	\$5,403,080	\$5,741,484	\$4,863,749	\$5,060,569
31. Present Value Cash Flows first 24 Years																								\$185,102,465
32. Present Value of Net Plant at 5.91 %																								\$78,655,148
33. Total Valuation																								\$263,757,613

Notes and Source:
Lines 1-28: Exhibit Q Gannett Fleming Fair Market Value Appraisal Report, Exhibit 16
Line 29: Median of four discount factors used in Gannett Fleming calculation:
First Discount Rate Used 5.71%
Second Discount Rate Used 6.96%
Third Discount Rate Used 5.91%
Fourth Discount Rate Used 7.16%
Median 6.44%
Line 32:
Net Plant in the 24th Year per Gannett Fleming 340,645,943
Present Value Factor at 5.91% 0.2309
Present Value of Net Plant at 5.91% 78,655,148
Line 33: Line 31 + Line 32

Line No.	Description	Gannett Fleming (A)	OCA Adjusted (B)	Difference (C) = (B) - (A)
1	Market Multiples	\$ 518,366,727	\$ 518,366,727	\$ -
2	Selected Transactions	\$ 358,308,666	\$ 327,125,128	\$ (31,183,537)
3	Median	\$ 438,337,696	\$ 422,745,928	\$ (15,591,769)

Notes and Source:

Line 1: Exhibit Q Gannett Fleming Fair Market Value Appraisal Report, Exhibit 17

Line 2: Per Exhibit Q Gannett Fleming Fair Market Value Appraisal Report, Exhibit 18 and Exhibit RCS-4, pages 2 and 3:

Capital Weight 100%
Demo Weight 0%

All Selected Transaction Companies

Ex-Ante (Median) - Asset Items	\$ 362,125,239		\$ (362,125,239)
Ex-Ante (Midpoint) - Asset Items	\$ 374,592,804		\$ (374,592,804)
Ex-Post (Median) - Asset Items	\$ 308,317,396	\$ 283,887,058	\$ (24,430,338)
Ex-Post (Midpoint) - Asset Items	\$ 413,760,718	\$ 375,896,225	\$ (37,864,493)
Value	\$ 364,699,039	\$ 329,891,642	\$ (34,807,398)
Ex-Ante (Median) - Demographic Items	\$ 289,996,282		\$ (289,996,282)
Ex-Ante (Midpoint) - Demographic Items	\$ 1,256,033,778		\$ (1,256,033,778)
Ex-Post (Median) - Demographic Items	\$ 289,996,282	\$ 270,411,774	\$ (19,584,508)
Ex-Post (Midpoint) - Demographic Items	\$ 1,256,033,778	\$1,090,141,241	\$ (165,892,536)
Value	\$ 773,015,030	\$ 680,276,508	\$ (92,738,522)
All Selected Transaction Companies - Indicated Value	\$ 364,699,039	\$ 329,891,642	\$ (34,807,398)

Fully Integrated Selected Transactions Companies

Ex-Ante (Median) - Asset Items	\$ 362,125,239		\$ (362,125,239)
Ex-Ante (Midpoint) - Asset Items	\$ 374,592,804		\$ (374,592,804)
Ex-Post (Median) - Asset Items	\$ 311,998,297	\$ 294,797,967	\$ (17,200,330)
Ex-Post (Midpoint) - Asset Items	\$ 358,956,828	\$ 353,919,264	\$ (5,037,564)
Value	\$ 351,918,292	\$ 324,358,615	\$ (27,559,677)
Ex-Ante (Median) - Demographic Items	\$ 289,996,282		\$ (289,996,282)
Ex-Ante (Midpoint) - Demographic Items	\$ 1,256,033,778		\$ (1,256,033,778)
Ex-Post (Median) - Demographic Items	\$ 886,207,354	\$ 866,622,846	\$ (19,584,508)
Ex-Post (Midpoint) - Demographic Items	\$ 1,303,952,596	\$1,127,135,568	\$ (176,817,028)
Value	\$ 934,047,503	\$ 996,879,207	\$ 62,831,704
Fully Integrated Selected Transactions Companies - Indicated Value	\$ 351,918,292	\$ 324,358,615	\$ (27,559,677)
Median	\$ 358,308,666	\$ 327,125,128	\$ (31,183,537)

		Per Gannett Fleming			Per OCA		
Line		Acquired System	Ratio of Purchase	Ratio Times	Acquired System	Ratio of Purchase	Ratio Times
No.	Acquired System/Purchase Price	Statistic	Price to Acquired	DELCORA	Statistic	Price to Acquired	DELCORA
		(A)	System	Statistic	(D)	System	Statistic
				(C)		(E)	(F)
Ex-Ante							
1	McKeesport	\$ 156,000,000			\$ 156,000,000		
2	Gross PP&E	\$ 91,435,797	1.7061	\$ 449,872,910	\$ 91,435,797	1.7061	\$ 449,872,910
3	Net PP&E	\$ 73,813,794	2.1134	\$ 405,301,207	\$ 73,813,794	2.1134	\$ 405,301,207
4	Customers	12,780	12,206.5728	\$ 201,078,873	12,780	12,206.5728	\$ 201,078,873
5	Population	50,570	3,084.8329	\$ 1,897,928,021	50,570	3,084.8329	\$ 1,897,928,021
6	New Garden	\$ 29,500,000			\$ 29,500,000		
7	Gross PP&E	\$ 25,988,330	1.1351	\$ 299,312,698	\$ 25,988,330	1.1351	\$ 299,312,698
8	Net PP&E	\$ 17,967,319	1.6419	\$ 314,868,753	\$ 17,967,319	1.6419	\$ 314,868,753
9	Customers	1,796	16,425.3898	\$ 270,575,445	1,796	16,425.3898	\$ 270,575,445
10	Population	12,085	2,441.0426	\$ 1,501,839,264	12,085	2,441.0426	\$ 1,501,839,264
11	Limerick	\$ 75,100,000			\$ 75,100,000		
12	Gross PP&E	\$ 60,847,250	1.2342	\$ 325,447,156	\$ 60,847,250	1.2342	\$ 325,447,156
13	Net PP&E	\$ 36,113,701	2.0795	\$ 398,803,321	\$ 36,113,701	2.0795	\$ 398,803,321
14	Customers	5,416	13,866.3220	\$ 228,419,922	5,416	13,866.3220	\$ 228,419,922
15	Population	18,798	3,995.1059	\$ 2,457,968,906	18,798	3,995.1059	\$ 2,457,968,906
16	Steelton	\$ 22,500,000			\$ 22,500,000		
17	Gross PP&E	N/A	N/A	N/A	N/A	N/A	N/A
18	Net PP&E	N/A	N/A	N/A	N/A	N/A	N/A
19	Customers	2,472	9,101.9417	\$ 149,936,286	2,472	9,101.9417	\$ 149,936,286
20	Population	5,932	3,792.9872	\$ 2,333,616,403	5,932	3,792.9872	\$ 2,333,616,403
21	Exeter	\$ 96,000,000			\$ 96,000,000		
22	Gross PP&E	N/A	N/A	N/A	N/A	N/A	N/A
23	Net PP&E	N/A	N/A	N/A	N/A	N/A	N/A
24	Customers	8,984	10,685.6634	\$ 176,024,933	8,984	10,685.6634	\$ 176,024,933
25	Population	27,609	3,477.1270	\$ 2,139,285,016	27,609	3,477.1270	\$ 2,139,285,016
26	Sadsbury	\$ 9,250,000			\$ 9,250,000		
27	Gross PP&E	N/A	N/A	N/A	N/A	N/A	N/A
28	Net PP&E	N/A	N/A	N/A	N/A	N/A	N/A
29	Customers	998	9,268.5371	\$ 152,680,611	998	9,268.5371	\$ 152,680,611
30	Population	3,850	2,402.5974	\$ 1,478,186,039	3,850	2,402.5974	\$ 1,478,186,039
31	East Bradford	\$ 5,000,000			\$ 5,000,000		
32	Gross PP&E	N/A	N/A	N/A	N/A	N/A	N/A
33	Net PP&E	N/A	N/A	N/A	N/A	N/A	N/A
34	Customers	1,248	4,006.4103	\$ 65,997,596	1,248	4,006.4103	\$ 65,997,596
35	Population	9,942	502.9169	\$ 309,417,119	9,942	502.9169	\$ 309,417,119
36	Mahoning Water	\$ 4,734,800			\$ 4,734,800		
37	Gross PP&E	N/A	N/A	N/A	N/A	N/A	N/A
38	Net PP&E	N/A	N/A	N/A	N/A	N/A	N/A
39	Customers	1,186	3,992.2428	\$ 65,764,216	1,186	3,992.2428	\$ 65,764,216
40	Population	4,218	1,122.5225	\$ 690,626,369	4,218	1,122.5225	\$ 690,626,369
41	Mahoning Sewer	\$ 4,765,200			\$ 4,765,200		
42	Gross PP&E	N/A	N/A	N/A	N/A	N/A	N/A
43	Net PP&E	N/A	N/A	N/A	N/A	N/A	N/A
44	Customers	1,451	3,284.0799	\$ 54,098,649	1,451	3,284.0799	\$ 54,098,649
45	Population	4,218	1,129.7297	\$ 695,060,568	4,218	1,129.7297	\$ 695,060,568
46	Cheltenham	\$ 50,250,000			\$ 50,250,000		
47	Gross PP&E	N/A	N/A	N/A	N/A	N/A	N/A
48	Net PP&E	N/A	N/A	N/A	N/A	N/A	N/A
49	Customers	10,219	4,917.3109	\$ 81,002,862	10,219	4,917.3109	\$ 81,002,862
50	Population	37,841	1,327.9247	\$ 816,999,055	37,841	1,327.9247	\$ 816,999,055
51	East Norriton	\$ 21,000,000			\$ 21,000,000		
52	Gross PP&E	N/A	N/A	N/A	N/A	N/A	N/A
53	Net PP&E	N/A	N/A	N/A	N/A	N/A	N/A
54	Customers	4,966	4,228.7555	\$ 69,660,290	4,966	4,228.7555	\$ 69,660,290
55	Population	14,296	1,468.9424	\$ 903,759,443	14,296	1,468.9424	\$ 903,759,443
All Selected Transactions Companies							
56	Ex-Ante (Median) - Asset Items			\$ 362,125,239			\$ 362,125,239
57	Ex-Ante (Midpoint) - Asset Items			\$ 374,592,804			\$ 374,592,804
58	Ex-Ante (Median) - Demographic Items			\$ 289,996,282			\$ 289,996,282
59	Ex-Ante (Midpoint) - Demographic Items			\$ 1,256,033,778			\$ 1,256,033,778
Fully Integrated Selected Transactions Companies							
60	Ex-Ante (Median) - Asset Items			\$ 362,125,239			\$ 362,125,239
61	Ex-Ante (Midpoint) - Asset Items			\$ 374,592,804			\$ 374,592,804
62	Ex-Ante (Median) - Demographic Items			\$ 886,207,354			\$ 886,207,354
63	Ex-Ante (Midpoint) - Demographic Items			\$ 1,303,952,596			\$ 1,303,952,596

Notes and Source:

Cols. A-C: Exhibit Q Gannett Fleming Fair Market Value Appraisal Report, Exhibit 18, page 2
DELCORA's OCNLD as determined by Gannett Fleming (Appraisal page 28) - Gross PP&E \$263,682,616
DELCORA's OCNLD as determined by Gannett Fleming (Appraisal page 28) - Net PP&E \$191,774,486
DELCORA's Customers 16,473
DELCORA's Population 615,245

Line No.		Per Gannett Fleming			Per OCA		
		Acquired System	Ratio of Purchase	Ratio Times	Acquired System	Ratio of Purchase	Ratio Times
	Acquired System/Purchase Price	Statistic	Price to Acquired System	DELCOA	Statistic	Price to Acquired System	DELCOA
		(A)	(B)	(C)	(D)	(E)	(F)
Ex-Post							
1	McKeesport	\$ 156,000,000			\$ 158,000,000		
2	Gross PP&E	\$ 108,231,570	1.4414	\$ 380,059,978	\$ 108,231,570	1.4598	\$ 384,932,542
3	Net PP&E	\$ 80,085,602	1.9479	\$ 373,560,529	\$ 80,085,602	1.9729	\$ 378,349,766
4	Customers	12,780	12,206.5728	\$ 201,078,873	20,320	7,775.5906	\$ 128,087,303
5	Population	50,570	3,084.8329	\$ 1,897,928,021	61,752	2,558.6216	\$1,574,179,136
6	New Garden	\$ 29,500,000			\$ 29,500,000		
7	Gross PP&E	\$ 27,146,852	1.0867	\$ 286,539,196	\$ 27,267,123	1.0819	\$ 285,275,318
8	Net PP&E	\$ 18,567,728	1.5888	\$ 304,687,107	\$ 18,590,089	1.5869	\$ 304,320,616
9	Customers	1,796	16,425.3898	\$ 270,575,445	2,100	14,047.6190	\$ 231,406,429
10	Population	12,085	2,441.0426	\$ 1,501,839,264	12,085	2,441.0426	\$1,501,839,264
11	Limerick	\$ 75,100,000			\$ 64,373,378		
12	Gross PP&E	\$ 63,480,402	1.1830	\$ 311,947,685	\$ 63,480,402	1.0141	\$ 267,391,827
13	Net PP&E	\$ 46,153,867	1.6272	\$ 312,048,909	\$ 46,153,867	1.3948	\$ 267,478,594
14	Customers	5,416	13,866.3220	\$ 228,419,922	5,434	11,846.4074	\$ 195,145,870
15	Population	18,798	3,995.1059	\$ 2,457,968,906	18,798	3,424.4802	\$2,106,894,294
16	Steelton	\$ 22,500,000			\$ 20,500,000		
17	Gross PP&E	\$ 19,739,906	1.1398	\$ 300,551,525	\$ 19,739,906	1.0385	\$ 273,835,834
18	Net PP&E	\$ 14,433,435	1.5589	\$ 298,953,507	\$ 14,433,435	1.4203	\$ 272,379,862
19	Customers	2,472	9,101.9417	\$ 149,936,286	2,472	8,292.8803	\$ 136,608,617
20	Population	5,932	3,792.9872	\$ 2,333,616,403	5,932	3,455.8328	\$2,126,183,833
21	Exeter	\$ 96,000,000			\$ 92,000,000		
22	Gross PP&E	\$ 68,404,345	1.4034	\$ 370,057,357	\$ 68,404,345	1.3449	\$ 354,638,300
23	Net PP&E	\$ 42,678,351	2.2494	\$ 431,374,460	\$ 40,057,634	2.2967	\$ 440,446,700
24	Customers	8,984	10,685.6634	\$ 176,024,933	8,984	10,240.4274	\$ 168,690,561
25	Population	27,609	3,477.1270	\$ 2,139,285,016	27,609	3,332.2467	\$2,050,148,140
26	Sadsbury	\$ 9,250,000			\$ 8,300,000		
27	Gross PP&E	\$ 7,480,601	1.2365	\$ 326,051,904	\$ 6,916,575	1.2000	\$ 316,423,333
28	Net PP&E	\$ 6,128,876	1.5092	\$ 289,435,452	\$ 6,128,876	1.3542	\$ 259,709,649
29	Customers	998	9,268.5371	\$ 152,680,611	998	8,316.6333	\$ 136,999,900
30	Population	3,850	2,402.5974	\$ 1,478,186,039	3,850	2,155.8442	\$1,326,372,338
31	East Bradford	\$ 5,000,000			\$ 5,000,000		
32	Gross PP&E	\$ 8,294,931	0.6028	\$ 158,942,015	\$ 8,294,931	0.6028	\$ 158,942,015
33	Net PP&E	\$ 5,473,948	0.9134	\$ 175,170,169	\$ 5,473,948	0.9134	\$ 175,170,169
34	Customers	1,248	4,006.4103	\$ 65,997,596	1,248	4,006.4103	\$ 65,997,596
35	Population	9,942	502.9169	\$ 309,417,119	9,942	502.9169	\$ 309,417,119
36	Mahoning Water	\$ 4,734,800			\$ 4,734,800		
37	Gross PP&E	\$ 5,294,272	0.8943	\$ 235,817,965	\$ 5,294,272	0.8943	\$ 235,817,965
38	Net PP&E	\$ 3,507,138	1.3500	\$ 258,904,507	\$ 3,507,138	1.3500	\$ 258,904,507
39	Customers	1,186	3,992.2428	\$ 65,764,216	1,186	3,992.2428	\$ 65,764,216
40	Population	4,218	1,122.5225	\$ 690,626,369	4,218	1,122.5225	\$ 690,626,369
41	Mahoning Sewer	\$ 4,765,200			\$ 4,765,200		
42	Gross PP&E	\$ 4,931,649	0.9662	\$ 254,783,015	\$ 4,931,649	0.9662	\$ 254,783,015
43	Net PP&E	\$ 3,234,859	1.4731	\$ 282,498,798	\$ 3,234,859	1.4731	\$ 282,498,798
44	Customers	1,451	3,284.0799	\$ 54,098,649	1,451	3,284.0799	\$ 54,098,649
45	Population	4,218	1,129.7297	\$ 695,060,568	4,218	1,129.7297	\$ 695,060,568
46	Cheltenham	\$ 50,250,000			\$ 44,558,258		
47	Gross PP&E	\$ 19,818,216	2.5355	\$ 668,579,421	\$ 19,818,216	2.2483	\$ 592,850,435
48	Net PP&E	\$ 15,408,458	3.2612	\$ 625,414,163	\$ 15,408,458	2.8918	\$ 554,574,440
49	Customers	10,219	4,917.3109	\$ 81,002,862	10,219	4,360.3345	\$ 71,827,790
50	Population	37,841	1,327.9247	\$ 816,999,055	37,841	1,177.5127	\$ 724,458,800
51	East Norriton	\$ 21,000,000			\$ 20,750,000		
52	Gross PP&E	\$ 16,916,212	1.2414	\$ 327,338,942	\$ 16,916,212	1.2266	\$ 323,442,050
53	Net PP&E	\$ 9,251,450	2.2699	\$ 435,311,676	\$ 9,251,450	2.2429	\$ 430,129,394
54	Customers	4,966	4,228.7555	\$ 69,660,290	4,966	4,178.4132	\$ 68,831,001
55	Population	14,296	1,468.9424	\$ 903,759,443	14,296	1,451.4550	\$ 893,000,402
All Selected Transactions Companies							
56	Ex-Post (Median) - Asset Items			\$ 308,317,396			\$ 283,887,058
57	Ex-Post (Midpoint) - Asset Items			\$ 413,760,718			\$ 375,896,225
58	Ex-Post (Median) - Demographic Items			\$ 289,996,282			\$ 270,411,774
59	Ex-Post (Midpoint) - Demographic Items			\$ 1,256,033,778			\$1,090,141,241
Fully Integrated Selected Transactions Companies							
60	Ex-Post (Median) - Asset Items			\$ 311,998,297			\$ 294,797,967
61	Ex-Post (Midpoint) - Asset Items			\$ 358,956,828			\$ 353,919,264
62	Ex-Post (Median) - Demographic Items			\$ 886,207,354			\$ 866,622,846
63	Ex-Post (Midpoint) - Demographic Items			\$ 1,303,952,596			\$1,127,135,568

Notes and Source:

Cols. A-C: Exhibit Q Gannett Fleming Fair Market Value Appraisal Report, Exhibit 18, page 3
DELCOA's OCNLD as determined by Gannett Fleming (Appraisal page 28) - Gross PP&E
DELCOA's OCNLD as determined by Gannett Fleming (Appraisal page 28) - Net PP&E
DELCOA's Customers
DELCOA's Population
Col. D, Line 23: Docket No. A-2018-3004933, AUS Appraisal Cost Approach Worksheets
Col. D, Line 27: Docket No. A-2018-3002437, Direct Testimony of Jerome C. Weinert, page 20
Col. D, Line 46: Docket No. A-2019-3008491, Final Order
Col. D, Line 51: Docket No. A-2019-3009052, Final Order

\$263,682,616
\$191,774,486
16,473
615,245

Line No.	Account Number	Description	Trended Original Cost Less Depreciation per ScottMadden (A)	Trended Original Cost Less Depreciation per OCA (B)	OCA Adjustment (C) = (B) - (A)
1	353.30	LAND AND LAND RIGHTS - PUMPING	\$ 131,500	\$ 131,500.00	\$ -
2	354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	\$ 26,233,002	\$ 26,233,002.41	\$ -
3	354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	\$ 12,565,981	\$ 12,565,981.34	\$ -
4	354.70	STRUCTURES AND IMPROVEMENTS - GENERAL PLANT	\$ 2,805,803	\$ 2,805,802.58	\$ -
5	360.21	COLLECTION SEWERS - FORCE - MAINS	\$ 63,969,046	\$ 63,969,045.96	\$ -
6	361.21	COLLECTION SEWERS - GRAVITY - MAINS	\$ 12,600,177	\$ 12,600,177.42	\$ -
7	361.23	COLLECTION SEWERS - GRAVITY - MANHOLES	\$ 4,356,991	\$ 4,356,990.57	\$ -
8	362.20	SPECIAL COLLECTING STRUCTURES	\$ 13,207,673	\$ 8,522,238.63	\$ (4,685,434.65)
9	363.20	SERVICES TO CUSTOMERS	\$ -	\$ -	\$ -
10	364.20	FLOW MEASURING DEVICES	\$ 547,417	\$ 547,417.45	\$ -
11	365.20	FLOW MEASURING INSTALLATIONS	\$ -	\$ -	\$ -
12	371.30	PUMPING EQUIPMENT	\$ 10,747,167	\$ 10,747,167.20	\$ -
13	380.30	TREATMENT AND DISPOSAL EQUIP - PUMP STATIONS	\$ 40,155,489	\$ 35,256,057.59	\$ (4,899,431.29)
14	380.40	TREATMENT AND DISPOSAL EQUIPMENT	\$ 103,532,711	\$ 78,097,849.08	\$ (25,434,861.59)
15	390.70	COMPUTER AND SOFTWARE	\$ 116,129	\$ 116,129.33	\$ -
16	391.70	TRANSPORTATION EQUIPMENT	\$ 1,367,908	\$ 1,367,907.98	\$ -
17	396.70	COMMUNICATION EQUIPMENT	\$ 76,998	\$ 76,998.30	\$ -
18		Total	<u>\$ 292,413,993</u>	<u>\$ 257,394,266</u>	<u>\$ (35,019,728)</u>

Notes and Source:

Col. A: Exhibit R - ScottMadden Fair Market Value Appraisal Report, Schedule 1, Page 1
Col. B: Exhibit RCS-6, page 2

Assumptions:	
Inflation	2.10%
WACC	6.94%
Rate Increase (Big Build)	11.00%
Rate Increase (Post Big Build)	3.00%
Tax Rate	28.892%

Line No.	Description	ACTUAL					BUDGET					PROJECTED						
		2017		2018		2019		2020		2021		2022		2023		2024		2025
										Rate Increase		Rate Increase		Rate Increase		Rate Increase		Rate Increase
REVENUES																		
Western Region																		
1	Major Industries	6,463,246	11.09%	6,817,336	10.97%	7,649,869	11.77%	8,695,159	\$	9,651,626	\$	10,713,305	\$	11,891,769	\$	13,199,864	\$	14,651,849
2	Residential	7,636,856	13.10%	8,044,641	12.94%	8,291,163	12.76%	9,054,343	\$	10,050,321	\$	11,155,856	\$	12,383,000	\$	13,745,130	\$	15,257,095
3	Municipal	7,727,009	13.26%	9,033,912	14.53%	9,607,128	14.79%	10,598,064	\$	11,763,851	\$	13,057,875	\$	14,494,241	\$	16,088,607	\$	17,858,354
4	Contract Operation Fees	539,268	0.93%	652,965	1.05%	400,000	0.62%	450,000	\$	499,500	\$	554,445	\$	615,434	\$	683,132	\$	758,276
5	Permit Industries	1,695,963	2.91%	1,498,561	2.41%	1,527,574	2.35%	1,518,450	\$	1,685,480	\$	1,870,882	\$	2,076,679	\$	2,305,114	\$	2,558,677
Eastern Region																		
6	Darby Creek Joint Authority	16,174,750	27.75%	17,299,667	27.83%	18,781,075	28.90%	20,277,575	\$	22,508,108	\$	24,984,000	\$	27,732,240	\$	30,782,787	\$	34,168,893
7	Central Delaware County Authority	8,678,216	14.89%	9,152,096	14.72%	9,619,575	14.80%	10,386,075	\$	11,528,543	\$	12,796,683	\$	14,204,318	\$	15,766,793	\$	17,501,740
8	Muckinipates Authority	3,764,569	6.46%	3,936,807	6.33%	4,351,713	6.70%	4,698,463	\$	5,215,294	\$	5,788,976	\$	6,425,764	\$	7,132,598	\$	7,917,183
9	Sludge Disposal and Processing	5,601,967	9.61%	5,721,999	9.21%	4,750,000	7.31%	5,000,000	\$	5,550,000	\$	6,160,500	\$	6,838,155	\$	7,590,352	\$	8,425,291
10	Total Operating Revenues	\$ 58,281,844		\$ 62,157,984		\$ 64,978,097		\$ 70,678,129	\$	78,452,723	\$	87,082,523	\$	96,661,600	\$	107,294,376	\$	119,096,758
EXPENSES																		
11	Advertising	\$ 26,367	0.05%	\$ 25,799	0.04%	\$ 25,000	0.04%	\$ 25,000	\$	25,525	\$	26,061	\$	26,608	\$	27,167	\$	27,738
12	Consulting	\$ 146,495	0.25%	\$ 270,054	0.43%	\$ 230,000	0.35%	\$ 350,000	\$	357,350	\$	364,854	\$	372,516	\$	380,339	\$	388,326
13	Dues and Conferences	\$ 53,283	0.09%	\$ 73,574	0.12%	\$ 104,250	0.16%	\$ 94,000	\$	95,974	\$	97,989	\$	100,047	\$	102,148	\$	104,293
14	Employee Benefits	\$ 4,655,986	7.99%	\$ 4,648,744	7.48%	\$ 4,669,721	7.19%	\$ 4,801,213	\$	4,902,038	\$	5,004,981	\$	5,110,086	\$	5,217,398	\$	5,326,963
15	Engineering and Tech Services	\$ 247,709	0.43%	\$ 198,361	0.32%	\$ 1,168,000	1.80%	\$ 1,485,000	\$	1,516,185	\$	1,548,025	\$	1,580,533	\$	1,613,725	\$	1,647,613
16	Insurance	\$ 744,418	1.28%	\$ 797,348	1.28%	\$ 968,122	1.49%	\$ 956,196	\$	976,276	\$	996,778	\$	1,017,710	\$	1,039,082	\$	1,060,903
17	Minor Equipment and Supplies	\$ 2,477,234	4.25%	\$ 2,915,007	4.69%	\$ 2,041,513	3.14%	\$ 2,300,901	\$	2,349,220	\$	2,398,554	\$	2,448,923	\$	2,500,351	\$	2,552,858
18	Office	\$ 161,393	0.28%	\$ 130,418	0.21%	\$ 226,850	0.35%	\$ 245,400	\$	250,553	\$	255,815	\$	261,187	\$	266,672	\$	272,272
19	Other Contracted Services	\$ 710,207	1.22%	\$ 477,313	0.77%	\$ 1,165,850	1.79%	\$ 1,453,500	\$	1,484,024	\$	1,515,188	\$	1,547,007	\$	1,579,494	\$	1,612,663
20	Pension	\$ 1,671,290	2.87%	\$ 1,944,894	3.13%	\$ 1,640,000	2.52%	\$ 1,725,000	\$	1,761,225	\$	1,798,211	\$	1,835,973	\$	1,874,529	\$	1,913,894
21	Philadelphia Plant Treatment Costs / BB Ops Costs	\$ 8,367,590	14.36%	\$ 9,625,120	15.48%	\$ 11,187,262	17.22%	\$ 13,002,566	\$	13,275,620	\$	13,554,408	\$	13,839,050	\$	14,129,671	\$	14,426,394
22	Provision for Doubtful Accounts	\$ 52,149	0.09%	\$ 61,782	0.10%	\$ 60,000	0.09%	\$ 60,000	\$	61,260	\$	62,546	\$	63,860	\$	65,201	\$	66,570
23	Repairs and Maintenance	\$ 2,951,073	5.06%	\$ 2,778,617	4.47%	\$ 2,848,450	4.38%	\$ 3,493,912	\$	3,567,284	\$	3,642,197	\$	3,718,683	\$	3,796,776	\$	3,876,508
24	Salaries and Wages	\$ 11,752,017	20.16%	\$ 12,396,648	19.94%	\$ 12,797,170	19.69%	\$ 13,409,781	\$	13,691,386	\$	13,978,906	\$	14,272,463	\$	14,572,184	\$	14,878,200
25	Solicitor	\$ 254,020	0.44%	\$ 172,119	0.28%	\$ 500,000	0.77%	\$ 750,000	\$	765,750	\$	781,831	\$	798,249	\$	815,012	\$	832,128
26	Solids Disposal	\$ 1,457,857	2.50%	\$ 1,329,837	2.14%	\$ 1,252,500	1.93%	\$ 1,278,803	\$	1,305,657	\$	1,333,076	\$	1,361,071	\$	1,389,653	\$	1,418,236
27	Utilities	\$ 3,028,848	5.20%	\$ 2,529,871	4.07%	\$ 2,690,100	4.14%	\$ 2,608,650	\$	2,663,432	\$	2,719,364	\$	2,776,470	\$	2,834,776	\$	2,894,307
28	Philadelphia LTCP			\$ 776,401	1.25%	\$ 1,107,513	1.70%	\$ 1,107,513		1,107,513		7,010,443		7,010,443		7,010,443		13,144,581
29	TOTAL OPERATING EXPENSES	\$ 38,757,936	66.50%	\$ 41,151,907	66.21%	\$ 44,682,301	68.77%	\$ 49,121,132	\$	50,129,418	\$	57,061,808	\$	58,112,887	\$	59,186,038	\$	66,415,863
30	Income Before Taxes							\$ 21,556,997		28,323,305		30,020,715		38,548,714		48,108,338		52,680,894
31	State and Federal Income Taxes							\$ 4,183,901		5,991,920		6,303,279		8,373,874		10,901,907		11,935,774
32	NET INCOME							\$ 17,373,096		22,331,385		23,717,436		30,174,839		37,206,432		40,745,120
33	TOTAL CAPITAL EXPENDITURES							\$ 25,944,320		27,414,995		32,374,301		62,658,066		41,954,066		50,142,442
34	CASH FLOW							\$ (8,571,224)		(5,083,610)		(8,656,865)		(32,483,227)		(4,747,634)		(9,397,322)
35	Period							0.5		1.5		2.5		3.5		4.5		5.5
36	PW Factor							0.9670		0.9043		0.8456		0.7907		0.7394		0.6914
37	PWCF							-8,288,439		-4,596,867		-7,319,985		-25,684,347		-3,510,318		-6,497,303
38	Value - Perpetuity per ScottMadden							<u>291,863,370</u>										
39	Present Value Cash Flows through 2049							<u>116,269,782</u>										
40	Present Value of Net Plant at 6.94 %							<u>46,855,524</u>										
41	Total Valuation per OCA							<u>163,125,306</u>										
42	OCA Adjustment to Income Approach							<u>\$ (128,738,064)</u>										

Notes and Source:
Lines 1-38: Exhibit R - SM Fair Market Value Appraisal, Schedule 3
Line 40:
Net Plant in 2049 per Larkin based on Gannett Fleming calcs 339,153,344
Present Value Factor at 6.94% 0.1382
Present Value of Net Plant at 6.94% 46,855,524

Assumptions:	
Inflation	2.10%
WACC	6.94%
Rate Increase (Big Build)	11.00%
Rate Increase (Post Big Build)	3.00%
Tax Rate	28.892%

Line No.	Description	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
		Rate Increase	Rate Increase	Rate Increase			Rate Increase			Rate Increase			Rate Increase		
	REVENUES														
	Western Region														
1	Major Industries	\$ 16,263,552	\$ 18,052,543	\$ 20,038,322	\$ 20,038,322	\$ 20,038,322	\$ 20,639,472	\$ 20,639,472	\$ 20,639,472	\$ 21,258,656	\$ 21,258,656	\$ 21,258,656	\$ 21,896,416	\$ 21,896,416	\$ 21,896,416
2	Residential	\$ 16,935,375	\$ 18,798,266	\$ 20,866,075	\$ 20,866,075	\$ 20,866,075	\$ 21,492,058	\$ 21,492,058	\$ 21,492,058	\$ 22,136,819	\$ 22,136,819	\$ 22,136,819	\$ 22,800,924	\$ 22,800,924	\$ 22,800,924
3	Municipal	\$ 19,822,773	\$ 22,003,278	\$ 24,423,639	\$ 24,423,639	\$ 24,423,639	\$ 25,156,348	\$ 25,156,348	\$ 25,156,348	\$ 25,911,038	\$ 25,911,038	\$ 25,911,038	\$ 26,688,370	\$ 26,688,370	\$ 26,688,370
4	Contract Operation Fees	\$ 841,687	\$ 934,272	\$ 1,037,042	\$ 1,037,042	\$ 1,037,042	\$ 1,068,153	\$ 1,068,153	\$ 1,068,153	\$ 1,100,198	\$ 1,100,198	\$ 1,100,198	\$ 1,133,204	\$ 1,133,204	\$ 1,133,204
5	Permit Industries	\$ 2,840,131	\$ 3,152,545	\$ 3,499,325	\$ 3,499,325	\$ 3,499,325	\$ 3,604,305	\$ 3,604,305	\$ 3,604,305	\$ 3,712,434	\$ 3,712,434	\$ 3,712,434	\$ 3,823,807	\$ 3,823,807	\$ 3,823,807
	Eastern Region														
6	Darby Creek Joint Authority	\$ 37,927,471	\$ 42,099,493	\$ 46,730,437	\$ 46,730,437	\$ 46,730,437	\$ 48,132,351	\$ 48,132,351	\$ 48,132,351	\$ 49,576,321	\$ 49,576,321	\$ 49,576,321	\$ 51,063,611	\$ 51,063,611	\$ 51,063,611
7	Central Delaware County Authority	\$ 19,426,266	\$ 21,563,155	\$ 23,935,102	\$ 23,935,102	\$ 23,935,102	\$ 24,653,155	\$ 24,653,155	\$ 24,653,155	\$ 25,392,750	\$ 25,392,750	\$ 25,392,750	\$ 26,154,532	\$ 26,154,532	\$ 26,154,532
8	Muckinipates Authority	\$ 8,788,074	\$ 9,754,762	\$ 10,827,785	\$ 10,827,785	\$ 10,827,785	\$ 11,152,619	\$ 11,152,619	\$ 11,152,619	\$ 11,487,198	\$ 11,487,198	\$ 11,487,198	\$ 11,831,814	\$ 11,831,814	\$ 11,831,814
9	Sludge Disposal and Processing	\$ 9,352,073	\$ 10,380,801	\$ 11,522,689	\$ 11,522,689	\$ 11,522,689	\$ 11,868,370	\$ 11,868,370	\$ 11,868,370	\$ 12,224,421	\$ 12,224,421	\$ 12,224,421	\$ 12,591,153	\$ 12,591,153	\$ 12,591,153
10	Total Operating Revenues	\$ 132,197,401	\$ 146,739,115	\$ 162,880,418	\$ 162,880,418	\$ 162,880,418	\$ 167,766,830	\$ 167,766,830	\$ 167,766,830	\$ 172,799,835	\$ 172,799,835	\$ 172,799,835	\$ 177,983,830	\$ 177,983,830	\$ 177,983,830
	EXPENSES														
11	Advertising	\$ 28,320	\$ 28,915	\$ 29,522	\$ 30,142	\$ 30,775	\$ 31,421	\$ 32,081	\$ 32,755	\$ 33,443	\$ 34,145	\$ 34,862	\$ 35,594	\$ 36,342	\$ 37,105
12	Consulting	\$ 396,481	\$ 404,807	\$ 413,308	\$ 421,988	\$ 430,849	\$ 439,897	\$ 449,135	\$ 458,567	\$ 468,197	\$ 478,029	\$ 488,068	\$ 498,317	\$ 508,782	\$ 519,466
13	Dues and Conferences	\$ 106,483	\$ 108,720	\$ 111,003	\$ 113,334	\$ 115,714	\$ 118,144	\$ 120,625	\$ 123,158	\$ 125,744	\$ 128,385	\$ 131,081	\$ 133,834	\$ 136,644	\$ 139,514
14	Employee Benefits	\$ 5,438,829	\$ 5,553,045	\$ 5,669,659	\$ 5,788,721	\$ 5,910,285	\$ 6,034,401	\$ 6,161,123	\$ 6,290,507	\$ 6,422,607	\$ 6,557,482	\$ 6,695,189	\$ 6,835,788	\$ 6,979,340	\$ 7,125,906
15	Engineering and Tech Services	\$ 1,682,213	\$ 1,717,539	\$ 1,753,607	\$ 1,790,433	\$ 1,828,032	\$ 1,866,421	\$ 1,905,616	\$ 1,945,634	\$ 1,986,492	\$ 2,028,208	\$ 2,070,801	\$ 2,114,288	\$ 2,158,688	\$ 2,204,020
16	Insurance	\$ 1,083,182	\$ 1,105,929	\$ 1,129,153	\$ 1,152,865	\$ 1,177,076	\$ 1,201,794	\$ 1,227,032	\$ 1,252,799	\$ 1,279,108	\$ 1,305,395	\$ 1,333,395	\$ 1,361,396	\$ 1,389,986	\$ 1,419,175
17	Minor Equipment and Supplies	\$ 2,606,468	\$ 2,661,204	\$ 2,717,089	\$ 2,774,148	\$ 2,832,405	\$ 2,891,886	\$ 2,952,615	\$ 3,014,620	\$ 3,077,927	\$ 3,142,564	\$ 3,208,557	\$ 3,275,937	\$ 3,344,732	\$ 3,414,971
18	Office	\$ 277,990	\$ 283,828	\$ 289,788	\$ 295,874	\$ 302,087	\$ 308,431	\$ 314,908	\$ 321,521	\$ 328,273	\$ 335,167	\$ 342,205	\$ 349,391	\$ 356,729	\$ 364,220
19	Other Contracted Services	\$ 1,646,529	\$ 1,681,107	\$ 1,716,410	\$ 1,752,454	\$ 1,789,256	\$ 1,826,830	\$ 1,865,194	\$ 1,904,363	\$ 1,944,354	\$ 1,985,186	\$ 2,026,875	\$ 2,069,439	\$ 2,112,897	\$ 2,157,268
20	Pension	\$ 1,954,085	\$ 1,995,121	\$ 2,037,019	\$ 2,079,796	\$ 2,123,472	\$ 2,168,065	\$ 2,213,594	\$ 2,260,080	\$ 2,307,541	\$ 2,356,000	\$ 2,405,476	\$ 2,455,991	\$ 2,507,566	\$ 2,560,225
21	Philadelphia Plant Treatment Costs / BB Ops Costs	\$ 14,729,348	\$ 15,038,664	\$ 15,354,476	\$ 13,795,690	\$ 14,085,399	\$ 14,381,193	\$ 14,683,198	\$ 14,991,545	\$ 15,306,367	\$ 15,627,801	\$ 15,955,985	\$ 16,291,060	\$ 16,633,173	\$ 16,982,469
22	Provision for Doubtful Accounts	\$ 67,968	\$ 69,396	\$ 70,853	\$ 72,341	\$ 73,860	\$ 75,411	\$ 76,995	\$ 78,611	\$ 80,262	\$ 81,948	\$ 83,669	\$ 85,426	\$ 87,220	\$ 89,051
23	Repairs and Maintenance	\$ 3,957,915	\$ 4,041,031	\$ 4,125,892	\$ 4,212,536	\$ 4,300,999	\$ 4,391,320	\$ 4,483,538	\$ 4,577,692	\$ 4,673,824	\$ 4,771,974	\$ 4,872,186	\$ 4,974,502	\$ 5,078,966	\$ 5,185,624
24	Salaries and Wages	\$ 15,190,642	\$ 15,509,646	\$ 15,835,348	\$ 16,167,891	\$ 16,507,416	\$ 16,854,072	\$ 17,208,008	\$ 17,569,376	\$ 17,938,333	\$ 18,315,038	\$ 18,699,653	\$ 19,092,346	\$ 19,493,285	\$ 19,902,644
25	Solicitor	\$ 849,602	\$ 867,444	\$ 885,660	\$ 904,259	\$ 923,249	\$ 942,637	\$ 962,432	\$ 982,643	\$ 1,003,279	\$ 1,024,348	\$ 1,045,859	\$ 1,067,822	\$ 1,090,246	\$ 1,113,141
26	Solids Disposal	\$ 1,418,836	\$ 1,448,632	\$ 1,479,053	\$ 1,510,113	\$ 1,541,825	\$ 1,574,204	\$ 1,607,262	\$ 1,641,014	\$ 1,675,476	\$ 1,710,661	\$ 1,746,585	\$ 1,783,263	\$ 1,820,711	\$ 1,858,946
27	Utilities	\$ 2,955,087	\$ 3,017,144	\$ 3,080,504	\$ 3,145,194	\$ 3,211,243	\$ 3,278,680	\$ 3,347,532	\$ 3,417,830	\$ 3,489,604	\$ 3,562,886	\$ 3,637,707	\$ 3,714,099	\$ 3,792,095	\$ 3,871,729
28	Philadelphia LTCP	\$ 13,144,581	\$ 13,144,581	\$ 23,220,666											
29	TOTAL OPERATING EXPENSES	\$ 67,534,560	\$ 68,676,750	\$ 79,919,011	\$ 56,007,779	\$ 57,183,943	\$ 58,384,806	\$ 59,610,886	\$ 60,862,715	\$ 62,140,832	\$ 63,445,790	\$ 64,778,151	\$ 66,138,492	\$ 67,527,401	\$ 68,945,476
30	Income Before Taxes	\$ 64,662,841	\$ 78,062,365	\$ 82,961,407	\$ 106,872,638	\$ 105,696,475	\$ 109,382,025	\$ 108,155,944	\$ 106,904,115	\$ 110,659,003	\$ 109,354,046	\$ 108,021,684	\$ 111,845,338	\$ 110,456,430	\$ 109,038,354
31	State and Federal Income Taxes	\$ 14,370,349	\$ 17,100,741	\$ 17,598,305	\$ 24,521,973	\$ 24,206,708	\$ 25,244,090	\$ 24,785,399	\$ 24,253,939	\$ 25,163,499	\$ 24,626,221	\$ 24,244,679	\$ 25,339,220	\$ 24,956,937	\$ 24,568,912
32	NET INCOME	\$ 50,292,492	\$ 60,961,625	\$ 65,363,102	\$ 82,350,665	\$ 81,489,768	\$ 84,137,934	\$ 83,370,545	\$ 82,650,176	\$ 85,495,504	\$ 84,727,824	\$ 83,777,005	\$ 86,506,118	\$ 85,499,493	\$ 84,469,442
33	TOTAL CAPITAL EXPENDITURES	\$ 153,589,690	\$ 172,893,622	\$ 145,949,849	\$ 19,945,006	\$ 18,599,133	\$ 25,713,661	\$ 36,469,189	\$ 45,875,280	\$ 47,227,995	\$ 45,749,936	\$ 23,647,504	\$ 25,518,368	\$ 21,511,659	\$ 21,074,140
34	CASH FLOW	\$ (103,297,198)	\$ (111,931,997)	\$ (80,586,747)	\$ 62,405,659	\$ 62,890,635	\$ 58,424,273	\$ 46,901,356	\$ 36,774,896	\$ 38,267,509	\$ 38,977,888	\$ 60,129,501	\$ 60,987,750	\$ 63,987,834	\$ 63,395,302
35	Period	6.5	7.5	8.5	9.5	10.5	11.5	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5
36	PW Factor	0.6465	0.6046	0.5653	0.5287	0.4943	0.4623	0.4323	0.4042	0.3780	0.3534	0.3305	0.3091	0.2890	0.2703
37	PWCF	-66,784,761	-67,671,048	-45,558,781	32,990,756	31,089,525	27,007,305	20,273,706	14,864,799	14,464,306	13,776,710	19,873,513	18,849,050	18,492,860	17,132,612
38	Value - Perpetuity per ScottMadden														
39	Present Value Cash Flows through 2049														
40	Present Value of Net Plant at 6.94 %														
41	Total Valuation per OCA														
42	OCA Adjustment to Income Approach														

Notes and Source:

Lines 1-38: Exhibit R - SM Fair Market Value Appraisal, Schedule 3

Line 40:

Net Plant in 2049 per Larkin based on Gannett Fleming calcs	339,153,344
Present Value Factor at 6.94%	0.1382
Present Value of Net Plant at 6.94%	46,855,524

Assumptions:	
Inflation	2.10%
WACC	6.94%
Rate Increase (Big Build)	11.00%
Rate Increase (Post Big Build)	3.00%
Tax Rate	28.892%

Line No.	Description	PROJECTED 2040		PROJECTED 2041		PROJECTED 2042		PROJECTED 2043		PROJECTED 2044		PROJECTED 2045		PROJECTED 2046		PROJECTED 2047		PROJECTED 2048		PROJECTED 2049		PROJECTED Perpetuity	
		Rate Increase		Rate Increase		Rate Increase		Rate Increase		Rate Increase		Rate Increase		Rate Increase		Rate Increase		Rate Increase		Rate Increase		Rate Increase	
REVENUES																							
Western Region																							
1	Major Industries	\$	22,553,308	\$	22,553,308	\$	22,553,308	\$	23,229,908	\$	23,229,908	\$	23,229,908	\$	23,926,805	\$	23,926,805	\$	23,926,805	\$	24,644,609	\$	24,644,609
2	Residential	\$	23,484,952	\$	23,484,952	\$	23,484,952	\$	24,189,500	\$	24,189,500	\$	24,189,500	\$	24,915,185	\$	24,915,185	\$	24,915,185	\$	25,662,641	\$	25,662,641
3	Municipal	\$	27,489,021	\$	27,489,021	\$	27,489,021	\$	28,313,691	\$	28,313,691	\$	28,313,691	\$	29,163,102	\$	29,163,102	\$	29,163,102	\$	30,037,995	\$	30,037,995
4	Contract Operation Fees	\$	1,167,200	\$	1,167,200	\$	1,167,200	\$	1,202,216	\$	1,202,216	\$	1,202,216	\$	1,238,282	\$	1,238,282	\$	1,238,282	\$	1,275,431	\$	1,275,431
5	Permit Industries	\$	3,938,522	\$	3,938,522	\$	3,938,522	\$	4,056,677	\$	4,056,677	\$	4,056,677	\$	4,178,378	\$	4,178,378	\$	4,178,378	\$	4,303,729	\$	4,303,729
Eastern Region																							
6	Darby Creek Joint Authority	\$	52,595,519	\$	52,595,519	\$	52,595,519	\$	54,173,385	\$	54,173,385	\$	54,173,385	\$	55,798,586	\$	55,798,586	\$	55,798,586	\$	57,472,544	\$	57,472,544
7	Central Delaware County Authority	\$	26,939,168	\$	26,939,168	\$	26,939,168	\$	27,747,343	\$	27,747,343	\$	27,747,343	\$	28,579,764	\$	28,579,764	\$	28,579,764	\$	29,437,157	\$	29,437,157
8	Muckinipates Authority	\$	12,186,768	\$	12,186,768	\$	12,186,768	\$	12,552,371	\$	12,552,371	\$	12,552,371	\$	12,928,942	\$	12,928,942	\$	12,928,942	\$	13,316,810	\$	13,316,810
9	Sludge Disposal and Processing	\$	12,968,888	\$	12,968,888	\$	12,968,888	\$	13,357,954	\$	13,357,954	\$	13,357,954	\$	13,758,693	\$	13,758,693	\$	13,758,693	\$	14,171,454	\$	14,171,454
10	Total Operating Revenues	\$	183,323,345	\$	183,323,345	\$	183,323,345	\$	188,823,046	\$	188,823,046	\$	188,823,046	\$	194,487,737	\$	194,487,737	\$	194,487,737	\$	200,322,369	\$	200,322,369
EXPENSES																							
11	Advertising	\$	37,884	\$	38,679	\$	39,492	\$	40,321	\$	41,168	\$	42,032	\$	42,915	\$	43,816	\$	44,736	\$	45,676	\$	46,635
12	Consulting	\$	530,375	\$	541,513	\$	552,884	\$	564,495	\$	576,349	\$	588,453	\$	600,810	\$	613,427	\$	626,309	\$	639,462	\$	652,890
13	Dues and Conferences	\$	142,444	\$	145,435	\$	148,489	\$	151,607	\$	154,791	\$	158,042	\$	161,360	\$	164,749	\$	168,209	\$	171,741	\$	175,348
14	Employee Benefits	\$	7,275,550	\$	7,428,336	\$	7,584,331	\$	7,743,602	\$	7,906,218	\$	8,072,249	\$	8,241,766	\$	8,414,843	\$	8,591,555	\$	8,771,977	\$	8,956,189
15	Engineering and Tech Services	\$	2,250,305	\$	2,297,561	\$	2,345,810	\$	2,395,072	\$	2,445,368	\$	2,496,721	\$	2,549,152	\$	2,602,684	\$	2,657,341	\$	2,713,145	\$	2,770,121
16	Insurance	\$	1,448,978	\$	1,479,406	\$	1,510,474	\$	1,542,194	\$	1,574,580	\$	1,607,646	\$	1,641,407	\$	1,675,876	\$	1,711,070	\$	1,747,002	\$	1,783,689
17	Minor Equipment and Supplies	\$	3,486,685	\$	3,559,906	\$	3,634,664	\$	3,710,992	\$	3,788,923	\$	3,868,490	\$	3,949,728	\$	4,032,673	\$	4,117,359	\$	4,203,823	\$	4,292,104
18	Office	\$	371,869	\$	379,678	\$	387,651	\$	395,792	\$	404,103	\$	412,589	\$	421,254	\$	430,100	\$	439,132	\$	448,354	\$	457,769
19	Other Contracted Services	\$	2,202,571	\$	2,248,825	\$	2,296,050	\$	2,344,267	\$	2,393,497	\$	2,443,760	\$	2,495,079	\$	2,547,476	\$	2,600,973	\$	2,655,593	\$	2,711,361
20	Pension	\$	2,613,990	\$	2,668,884	\$	2,724,930	\$	2,782,154	\$	2,840,579	\$	2,900,231	\$	2,961,136	\$	3,023,320	\$	3,086,810	\$	3,151,633	\$	3,217,817
21	Philadelphia Plant Treatment Costs / BB Ops Costs	\$	17,339,101	\$	17,703,222	\$	18,074,990	\$	18,454,565	\$	18,842,111	\$	19,237,795	\$	19,641,789	\$	20,054,266	\$	20,475,406	\$	20,905,389	\$	21,344,402
22	Provision for Doubtful Accounts	\$	90,921	\$	92,831	\$	94,780	\$	96,771	\$	98,803	\$	100,878	\$	102,996	\$	105,159	\$	107,367	\$	109,622	\$	111,924
23	Repairs and Maintenance	\$	5,294,523	\$	5,405,708	\$	5,519,227	\$	5,635,131	\$	5,753,469	\$	5,874,292	\$	5,997,652	\$	6,123,603	\$	6,252,198	\$	6,383,494	\$	6,517,548
24	Salaries and Wages	\$	20,320,600	\$	20,747,333	\$	21,183,027	\$	21,627,870	\$	22,082,055	\$	22,545,779	\$	23,019,240	\$	23,502,644	\$	23,996,199	\$	24,500,120	\$	25,014,622
25	Solicitor	\$	1,136,517	\$	1,160,384	\$	1,184,752	\$	1,209,632	\$	1,235,034	\$	1,260,970	\$	1,287,451	\$	1,314,487	\$	1,342,091	\$	1,370,275	\$	1,399,051
26	Solids Disposal	\$	1,897,984	\$	1,937,842	\$	1,978,536	\$	2,020,086	\$	2,062,508	\$	2,105,820	\$	2,150,042	\$	2,195,193	\$	2,241,292	\$	2,288,360	\$	2,336,415
27	Utilities	\$	3,953,035	\$	4,036,049	\$	4,120,806	\$	4,207,343	\$	4,295,697	\$	4,385,906	\$	4,478,011	\$	4,572,049	\$	4,668,062	\$	4,766,091	\$	4,866,179
28	Philadelphia LTCP																						
29	TOTAL OPERATING EXPENSES	\$	70,393,331	\$	71,871,591	\$	73,380,894	\$	74,921,893	\$	76,495,253	\$	78,101,653	\$	79,741,788	\$	81,416,366	\$	83,126,109	\$	84,871,757	\$	86,654,064
30	Income Before Taxes	\$	112,930,014	\$	111,451,754	\$	109,942,451	\$	113,901,152	\$	112,327,793	\$	110,721,392	\$	114,745,949	\$	113,071,371	\$	111,361,628	\$	115,450,612	\$	113,668,305
31	State and Federal Income Taxes	\$	25,720,457	\$	25,316,771	\$	24,900,395	\$	26,060,147	\$	25,617,904	\$	25,162,469	\$	26,330,313	\$	25,847,952	\$	25,351,844	\$	26,527,538	\$	26,003,333
32	NET INCOME	\$	87,209,557	\$	86,134,984	\$	85,042,056	\$	87,841,005	\$	86,709,889	\$	85,558,923	\$	88,415,636	\$	87,223,419	\$	86,009,784	\$	88,923,074	\$	87,664,972
33	TOTAL CAPITAL EXPENDITURES	\$	20,240,969	\$	20,666,029	\$	21,100,016	\$	21,543,116	\$	21,995,522	\$	22,457,428	\$	22,929,034	\$	23,410,543	\$	23,902,165	\$	24,404,110	\$	24,916,597
34	CASH FLOW	\$	66,968,588	\$	65,468,954	\$	63,942,040	\$	66,297,889	\$	64,714,367	\$	63,101,495	\$	65,486,602	\$	63,812,876	\$	62,107,619	\$	64,518,964	\$	62,748,375
35	Period		20.5		21.5		22.5		23.5		24.5		25.5		26.5		27.5		28.5		29.5		30.5
36	PW Factor		0.2527		0.2363		0.2210		0.2066		0.1932		0.1807		0.1690		0.1580		0.1477		0.1382		0.1292
37	PWCF		16,923,783		15,471,112		14,129,684		13,699,524		12,504,499		11,401,581		11,064,650		10,082,155		9,175,923		8,913,578		175,593,588
38	Value - Perpetuity per ScottMadden																						
39	Present Value Cash Flows through 2049																						
40	Present Value of Net Plant at 6.94 %																						
41	Total Valuation per OCA																						
42	OCA Adjustment to Income Approach																						

Notes and Source:

Lines 1-38: Exhibit R - SM Fair Market Value Appraisal, Schedule 3

Line 40:

Net Plant in 2049 per Larkin based on Gannett Fleming calcs	339,153,344
Present Value Factor at 6.94%	0.1382
Present Value of Net Plant at 6.94%	46,855,524

Line No.	Description	ScottMadden Market Approach (A)	OCA Adjusted Market Approach (B)	Difference (C) = (B) - (A)
	<u>Method</u>			
1	Application of Purchase Price to Customer Multiples to Customer Count	\$ 811,451,596		
2	Application of Market-to-Book Ratios of Publicly-Traded Water Utilities to Book Value of Equity	\$ 415,589,365	\$ 415,589,365	
3	Conclusion	<u>\$ 613,520,480</u>	<u>\$ 415,589,365</u>	<u>\$ (197,931,116)</u>

Notes and Source:

Col. A: Exhibit R - ScottMadden Fair Market Value Appraisal Report, Schedule 2, Page 1 of 5

Aqua Pennsylvania Wastewater Inc. and Delaware County Regional Water Quality Control Authority
Docket No. A-2019-3015173
Exhibit RCS-8
Copies of Non-Confidential Material Referenced in the
Direct Testimony of Ralph C. Smith

Document	Subject	Confidential	No. of Pages	Page No.
OCA-I-36	DELCORA Trust Fund: Explanation of how DELCORA will identify the amount of proceeds to be placed into the Trust and how these amounts will be accounted for; DELCORA will not directly make any payments to Aqua - DELCORA will direct the Trustee to make payments per a Distribution Order to be delivered to the Trustee; The Trust Agreement governs the Trustee and the operation of the Trust; The Trust Agreement was signed on December 27, 2020; Distribution payments will coincide with the billing cycle of the current DELCORA customers billed on a quarterly or annual basis; The payment amount is the difference in authorized tariff rates and 3% annual increase; The Memorandum of Understanding is a draft that is only applicable if the Commission approves Aqua's proposal to include a customer assistance payment line item on customer bill; Explanation of audit procedures and how the auditor will be selected and by whom.	No	27	3 - 29
OCA-I-36 Supplemental	DELCORA provided a copy of the executed Memorandum of Understanding dated August 27, 2020.	No	10	30 - 39
OCA-III-10	DELCORA Trust Fund: Estimate of the sales proceeds to be contributed to Trust	No	1	40
County-I-1	DELCORA Trust Fund: Amount of DELCORA's liabilities, obligations, expenses and reasonable reserve	No	1	41
OCA-V-1	Estimated amount to be transferred to DELCORA Customer Trust	No	4	42 - 45
County-I-2	DELCORA Trust Fund: DELCORA anticipates retaining a de minimus amount of money to administer its obligations to oversee the Trust. DELCORA does not anticipate reserves in the Trust.	No	1	46
County-I-3	DELCORA Trust Fund: Explanation of oversight of Trustee; Explanation of plan to facilitate a successor Trustee	No	1	47
County-I-4	DELCORA Trust Fund: Payments from Trust will offset DSIC charges, however DSIC will not Aqua updates its LTIIP per Section 1329; Current DELCORA customers will be subject to the DSIC following the transfer to Aqua; DELCORA will not directly make any payments to Aqua that Aqua retains.	No	1	48
County-I-5	DELCORA Trust Fund: The Trust Agreement is the DELCORA Rate Stabilization Fund Trust Agreement between Delaware County Regional Water Quality Control Authority, as Settlor, and Univest Bank and Trust Co.; Trust Agreement includes a definition of a "Rate Stabilization Agreement to be entered into by and between the Settlor and Aqua Resources, with Aqua Wastewater as a designated third party Distribution Agent"; Neither Aqua Resources nor Aqua Wastewater has entered into the Rate Stabilization Agreement; The Rate Stabilization Agreement is the draft Memorandum of Understanding	No	1	49
County-I-6	DELCORA Trust Fund: No documents related to the Trust explicitly reference, identify, or establish the 3% annual increase limit; The Trust Agreement and Trust's sole purpose is to be used for customer assistance payments to be applied to DELCORA customer bills; No proposed tariff provision references the 3% annual increase limit; Any binding obligation requiring the Trust to disburse payments sufficient to preserve the 3% annual increase limit can be included in the Memorandum of Understanding, which is still in draft form.	No	1	50
County-I-7	DELCORA Trust Fund: DELCORA signed an Asset Purchase Agreement with Aqua. If the Commission does not approve Aqua's proposal to apply Trust disbursements as customer assistance payment on DELCORA customer bills, DELCORA will explore other options whereby the Trust assets will be distributed directly to customers, consistent with the Trust Agreement; The 3% annual increase limit is not conditioned on approval of Aqua's proposal to apply Trust disbursements as customer assistance payments on DELCORA customer bills.	No	1	51
SWDCMA-I-4	DELCORA Trust Fund: Explanation of the effect on the proposed transaction and purchase price if the municipality or municipal authority does not agree to the assignment, or otherwise agree to modify the contract or agreement.	No	1	52
SWDCMA-I-8	DELCORA Trust Fund: The "customer assistance payment" would apply to all retail and wholesale customers where the customer agrees to the assignment of its contract to Aqua.	No	2	53 - 54
OCA-II-45	Repairs Deductions	No	1	55
OCA-II-3	DELCORA Audited 2019 Financial Statements	No	1	56

Document	Subject	Confidential	No. of Pages	Page No.
OCA-II-7	DELCORA Audited 2019 Financial Statements; Aqua has been able to obtain necessary financing for the wastewater utility system for the ten-year period through December 31, 2019.	No	53	57 - 109
OCA-II-10	Aqua Pennsylvania Wastewater Depreciation Rate Studies March 31, 2019 and 2020 (Includes selected pages of attachments)	No	7	110 - 116
OCA-II-52	Depreciation rates for each wastewater utility plant	No	1	117
OCA-II-56	Cost of operations and employee workforce and DELCORA office in the City of Chester, PA	No	2	118 - 119
OCA-VI-1	How the sale proceeds will be utilized with and without the Trust; Rate increases DELCORA customers will be subject to with and without the Trust; How the rate increases under Aqua ownership be offset without the Trust; How provisions of Trust would be enforced and by whom; Assurances DELCORA customers will have that the portion of sale proceeds will be used for their benefit to offset rate increases under Aqua ownership above 3% per year.	No	2	120 - 121
OCA-VI-2	DELCORA's position is that the Commission has no jurisdiction over the use of the sale proceeds for the benefit of DELCORA ratepayers, but did not provide an explanation of why.	No	1	122
OCA-VI-3	DELCORA's position is that the proposed transaction would be in the public interest if the establishment and use of the Trust is not permitted by the Court, resulting in no offset to the rate increases under Aqua ownership; The establishment of the Trust is one of several benefits to the transaction.	No	2	123 - 124
OCA-VI-4	If the Trust is ruled invalid: Explanation of what will happen to the sales proceeds that DELCORA proposed to go into the Trust; Documents that will govern how the sales proceeds will be utilized; Documents that will govern how the sales proceeds that are in excess of the payment of DELCORA's outstanding debt and transaction costs will be utilized and will govern how that portion of the sales proceed will be applied for the benefit of DELCORA system ratepayers; How the sale proceeds be used to offset rate increases to DELCORA ratepayers in excess of 3% per year.	No	2	125 - 126
OCA-VI-5	The transaction contemplates having a Trust funded in an amount of approximately \$200 million to be used for offsetting rate increases in excess of 3% per year; The creation and operation of the Trust for the purpose of offsetting rate increases in excess of 3% per year is a primary benefit concerning whether the transaction is in the public interest; The creation and operation of the Trust for the purpose of offsetting rate increases in excess of 3% per year does not have anything to do with the issue of whether the transaction is in the public interest.	No	1	127
Total Pages Including this Page			127	

Respondent: Robert Willert
Date: 7/24/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET I INTERROGATORIES DIRECTED TO DELCORA

- OCA-I-36** DELCORA's placement of proceeds into trust. Refer to the Application at page 8, paragraph 36, and to Exhibit U2, Mr. Packer's testimony, and Exhibit U2, Appendix B (Memorandum of Understanding) and to Exhibit W1, Mr. Willert's testimony.
- a. Show in detail how DELCORA will identify the amount of proceeds to be placed into the trust.
 - b. How will DELCORA account for these amounts while being held in the trust?
 - c. How frequently will DELCORA make payments to Aqua from the trust and how will DELCORA determine the amounts of such payments?
 - d. Is there a written agreement between Aqua and DELCORA concerning the operation of the trust and payments from the trust to Aqua? If not, explain fully why not. If so, please identify and provide it.
 - e. Have the documents for creating the irrevocable trust been drafted? If "yes" please identify and provide them. If not, when are they expected to be drafted and available for review?
 - f. Have DELCORA and Aqua worked out all of the details of how the trust and payments from it will work? If not, identify remaining details that are still under discussion between DELCORA and Aqua.
 - g. Is the memorandum of understanding a draft?
 - h. Has the memorandum of understanding been finalized? If so, identify and provide a copy. If not, identify when it is expected to be finalized.
 - i. How will the amounts put into the trust and distributed from the trust be audited? Explain the audit procedures and how the auditor will be selected and by whom.

RESPONSE:

- a. DELCORA established an irrevocable trust and the only purposes for use of the funds in the trust is to provide customer assistance payments to DELCORA customers. DELCORA is obligated to contribute and transfer to the Trust an amount equal to the total proceeds DELCORA receives from the sale of its sewer system to Aqua less DELCORA's liabilities and obligations, expenses, and reasonable reserve.

DELCORA is also obligated under the Funding Agreement to contribute and transfer to the Trust any amount DELCORA may receive as a final distribution under the Escrow Agreement between DELCORA and Aqua dated December 27, 2019.

- b. The Trustee of the Trust (the "Trustee") is solely responsible for receiving, investing, maintaining, and distributing the funds contributed to the Trust by DELCORA for the benefit of the DELCORA customers. In addition, the Trustee is responsible for directing the preparation and maintenance of full and accurate accounts of all receipts, investments, disbursements, and other transactions of the Trust Fund. DELCORA will have the right inspect and audit the accounts, books, and records of the Trust at any reasonable times. *See* Section 5.11 of the Trust Agreement.

The Trustee is required under the Trust Agreement to provide DELCORA with customary written reports of all receipts and expenditures made from the Trust either quarterly or monthly. The Trustee is also required to provide DELCORA as soon as possible, but in no event later than 3 months after the end of each fiscal year of the Trust, the Trust's revenue and expense statement and balance sheet, each accompanied by a certificate/opinion of a firm of independent certified public accountants selected by the Trustee and approved by DELCORA. *See* Section 5.12 of the Trust Agreement.

DELCORA has no reversionary interest in the Trust.

- c. To be clear, DELCORA will not directly make any payments to Aqua. Assuming Aqua can provide a customer assistance payment line item to DELCORA customers on the customer bill, DELCORA will direct the Trustee to make payments per a Distribution Order to be delivered to the Trustee. Distribution payments will coincide with the billing cycles of the current DELCORA customers who are billed either on a quarterly or an annual basis. The payment amount due from the Trust is the difference in authorized tariff rates and a 3 percent increase each year starting on the effective date of new rates of Aqua in the first base rate case that includes DELCORA customers.
- d. Yes. The Trust Agreement governs the Trustee and the operation of the Trust – please see the response to part e., below. If the Commission approves Aqua's proposal to include a customer assistance payment on DELCORA customer bills, the parties can update the MOU to include the checks and balances of the commitment to ensure that the payment amount due from the Trust is the difference in authorized tariff rates and a 3 percent increase each year starting on the effective date of new rates of Aqua in the first base rate case that includes DELCORA customers.

- e. The Trust Agreement has been finalized and was signed on December 27, 2020. A copy of the Trust Agreement is attached here as OCA-I-36 Attachment 1.
- f. To be clear, DELCORA will not directly make any payments to Aqua. Distribution payments will coincide with the billing cycles of the current DELCORA customers who are billed either on a quarterly or an annual basis. The payment amount due from the Trust is the difference in authorized tariff rates and a 3 percent increase each year starting on the effective date of new rates of Aqua in the first base rate case that includes DELCORA customers.
- g. Yes.
- h. See the response to part g., above. The MOU is only applicable if the Commission approves Aqua's proposal to include a customer assistance payment line item on the DELCORA customer bills. To the extent additional information or detail is required, the MOU will be updated and finalized.
- i. See response to subsection b above. The Trustee is responsible for directing the preparation and maintenance of full and accurate accounts of all receipts, investments, disbursements, and other transactions of the Trust Fund. The auditor will be selected by the Trustee and approved by DELCORA.

**DELCORA RATE STABILIZATION FUND
TRUST AGREEMENT**

between

**THE DELAWARE COUNTY REGIONAL
WATER QUALITY CONTROL AUTHORITY**

as SETTLOR

and

UNIVEST BANK AND TRUST CO.

as TRUSTEE

Effective Date: December 27, 2019

OCA-I-36 Attachment 1

TABLE OF CONTENTS

	Page
ARTICLE 1. DEFINITIONS AND INCORPORATION BY REFERENCE.....	2
Section 1.1. Definitions.....	2
Section 1.2 Other Definitional Provisions	4
ARTICLE 2. ORGANIZATION	4
Section 2.1 Declaration of Trust	4
Section 2.2 Purposes of the Trust	4
Section 2.3 Appointment of Trustee	4
Section 2.4 Title to Trust Property.....	4
Section 2.5 Situs of Trust.....	5
Section 2.6 Use of Trust Assets	5
ARTICLE 3. CONTRIBUTIONS TO THE TRUST.....	5
Section 3.1 Initial Contribution.....	5
Section 3.2 Contribution of Sale Proceeds	5
Section 3.3 Additional Contributions	5
Section 3.4 Acceptance by the Trust.....	5
ARTICLE 4. DISTRIBUTIONS FROM THE TRUST.....	5
Section 4.1 Distributions.....	5
Section 4.2 No Right of Reversion	6
ARTICLE 5. THE TRUSTEE	6
Section 5.1 Trustee Resignation, Removal and Succession	6
Section 5.2 Duties of Trustee.....	7
Section 5.3 Acceptance of Trust and Duties.....	7
Section 5.4 Refrain from Certain Actions.....	10
Section 5.5 Reliance.....	10
Section 5.6 Compensation and Expenses.....	10
Section 5.7 Investment of Trust Assets.....	11
Section 5.8 Trustee Powers.....	11
Section 5.9 Indemnity of Trustee.....	12
Section 5.10 Interpretation and Direction.....	12
Section 5.11 Books and Records	12
Section 5.12 Accounting and Reports.....	13
Section 5.13 Third Party Reliance	13
Section 5.14 Interpretation; Rules.....	14

OCA-I-36 Attachment 1

ARTICLE 6. POWER OF SUBSTITUTION	14
Section 6.1 Power of Substitution.....	14
Section 6.2 Confirmations	14
ARTICLE 7. TERMINATION.....	14
Section 7.1 Termination.....	14
Section 7.2 Trust Irrevocable.....	14
ARTICLE 8. AMENDMENTS	15
Section 8.1 Amendment of Agreement.....	15
ARTICLE 9. MISCELLANEOUS	15
Section 9.1 No Legal Title to Trust Property.....	15
Section 9.2 Limitations on Rights of Others.....	15
Section 9.3 Notices	15
Section 9.4 Counterparts.....	16
Section 9.5 Successors and Assigns.....	16
Section 9.6 Headings	16
Section 9.7 Governing Law	16
Section 9.8 Consent to Jurisdiction and Service or Process	17
Section 9.9 Tax Status of the Trust.....	17
Section 9.10 Entire Agreement.....	17
Section 9.11 Reliance on Trust Agreement	17

Exhibit A - Trustee Compensation and Reimbursement

**DELCORA RATE STABILIZATION FUND
TRUST AGREEMENT**

THIS DELCORA RATE STABILIZATION FUND TRUST AGREEMENT, dated as of the Effective Date, is by and between **THE DELAWARE COUNTY REGIONAL WATER QUALITY CONTROL AUTHORITY**, a body corporate and politic existing under the Pennsylvania Municipal Authorities Act, 42 P.S. 5601 *et seq.* (the "Settlor"), and **UNIVEST BANK AND TRUST CO.**, a Pennsylvania state-chartered bank and trust company, as trustee (the "Trustee").

WITNESSETH:

WHEREAS, the Settlor currently owns and operates a sewer system (the "Sewer System") serving various residential, commercial, industrial, and municipal customers in Delaware County, Pennsylvania (the "DELCORA Customers");

WHEREAS, pursuant to that certain agreement dated September 17, 2019 (the "Sewer System Sale Agreement") between the Settlor and Aqua Pennsylvania Wastewater, Inc. ("Aqua Wastewater"), the Settlor has agreed to sell the Sewer System to Aqua Wastewater;

WHEREAS, the Settlor has agreed to devote a majority of the proceeds which it receives from the sale of the Sewer System (the "Sale Proceeds") to stabilizing the amounts which the DELCORA Customers will pay for access to the Sewer System during a period of years following the closing under the Sewer System Sale Agreement (the "Closing Date");

WHEREAS, the Settlor and the Trustee desire to establish a trust for the benefit of the DELCORA Customers (the "Trust"), and the Trustee agrees to serve as trustee of such trust;

WHEREAS, the Settlor has entered into a Funding Agreement with the Trustee bearing even date herewith (the "Funding Agreement") pursuant to which the Settlor has agreed to contribute to the Trust a majority of the Sale Proceeds on the Closing Date, as well as any amounts which Settlor may receive under Section 9 of the Escrow Agreement;

WHEREAS, the Settlor and Aqua Resources, Inc., will enter into a rate stabilization agreement, of which Aqua Wastewater will be the designated third party Distribution Agent, pursuant to which (a) Aqua Wastewater will bill DELCORA Customers at reduced levels and (b) the Trust will reimburse Aqua Wastewater for such reductions, as and when so directed by the Settlor pursuant to Article 5 below; and

WHEREAS, the Settlor and the Trustee desire that the Sale Proceeds transferred to the Trust pursuant to this Agreement, together with all other funds transferred to the Trustee hereunder, be held and administered as an irrevocable trust for the benefit of the DELCORA Customers pursuant to the provisions of this Trust Agreement;

OCA-I-36 Attachment 1

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants expressed herein, and intending to be legally bound, the Settlor and the Trustee hereby agree as follows:

ARTICLE 1
DEFINITIONS

Section 1.1 Definitions. Except as otherwise specified herein, or as the context otherwise requires, the following terms have the respective meanings set forth below for all purposes of this Agreement, including, without limitation, the recitals hereto.

"Affiliate" means, with respect to any specified person, any other person controlling or controlled by or under common control with such specified person. For the purposes of this definition, "control" when used with respect to any specified person means the power to direct the management and policies of such person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms "controlling" and "controlled" have meanings correlative to the foregoing.

"Agreement" or "Trust Agreement" means this trust agreement between the Settlor and the Trustee, as such document is modified or reformed from time to time.

"Aqua Resources" means Aqua Resources, Inc., a Pennsylvania business corporation which is an Affiliate of Aqua Wastewater, and its successors and assigns.

"Aqua Wastewater" means Aqua Wastewater Pennsylvania, Inc., a Pennsylvania business corporation operating as a wastewater utility company, and its successors and assigns.

"Beneficiaries" shall refer to the DELCORA Customers.

"Calculation Agent" means the company engaged by the Settlor to provide calculation services in connection with the implementation of the Rate Stabilization Agreement.

"Closing Date" means the date of closing under the Sewer System Sale Agreement.

"Code" means the U.S. Internal Revenue Code of 1986, as amended, and all regulations promulgated thereunder. References to such Code shall be taken as references to any corresponding provisions of future law.

"County" means Delaware County, Pennsylvania.

"DELCORA Customers" means the customers connected to the Sewer System.

"Distribution Agent" shall refer to Aqua Wastewater or any successor thereto serving as the entity responsible for allocating rate reductions as provided under the Rate Stabilization Agreement to and among the Beneficiaries.

OCA-I-36 Attachment 1

“Distributions” means distributions made by the Trustee to the Distribution Agent from time to time, as directed by the Settlor, pursuant to Article 4 below.

“Distribution Order” means a written direction delivered by an authorized representative of the Settlor to the Trustee instructing the Trustee to make a Distribution.

“Effective Date” means December 27, 2019.

“Escrow Agreement” means that certain Escrow Agreement among the Settlor, the Trustee (as escrow agent), and Aqua Wastewater dated as of December 27, 2019.

“Fund” or “Trust” means the Delaware County Regional Water Quality Control Authority Rate Stabilization Trust, which is the trust created pursuant to this Trust Agreement.

“Funding Agreement” means that certain agreement between the Settlor and the Trustee bearing even date herewith, pursuant to which the Settlor will be required to transfer a majority of the Sale Proceeds to the Trust on the Closing Date, as well as any amounts which Settlor may receive under Section 9 of the Escrow Agreement.

“Investment Guidelines” means such guidelines for the investment of the Trust assets as shall be provided from time to time by the Settlor to the Trustee.

“Permitted Investments” means investments which an authority constituted under the Pennsylvania Municipal Authorities Act, 42 P.S. 5601 *et seq.* is permitted to make under applicable law.

“Rate Stabilization Agreement” means the agreement to be entered into by and between the Settlor and Aqua Resources, with Aqua Wastewater as a designated third party Distribution Agent, pursuant to which (a) the Distribution Agent will agree to bill the Beneficiaries at reduced levels and (b) the Settlor will agree to direct the Trust to reimburse the Distribution Agent for such reductions, pursuant to Article 4 of this Trust Agreement.

“Settlor” means the Delaware County Regional Water Quality Control Authority and its successors (including the County upon termination of the Settlor).

“Sewer System” means the sewer system which is currently owned and operated by the Settlor and which will be sold by the Settlor to Aqua Wastewater, as improved by Aqua Wastewater subsequent to the Closing Date.

“Trust Assets” means the assets held from time to time by the Trustee in the Trust Fund.

“Trust Expenses” means the trustee compensation and any other expenses of the Trust, including, without limitation, amounts payable out of the Trust Fund pursuant to Section 5.6 below.

OCA-I-36 Attachment 1

"Trustee" means Univest Bank and Trust Co., and its successors and permitted assigns.

"Trust Fund" means the trust estate managed, protected, and conserved pursuant to the terms and conditions of this Trust Agreement, which shall consist of the Sale Proceeds deposited by the Settlor hereunder, and any Additional Contributions made to the Trust under Section 3.3 hereof, together with any and all investment income earned from Permitted Investments made and held by the Trustee pursuant to this Trust Agreement.

Section 1.2 Other Definitional Provisions. (a) All references to Articles, Sections, and subsections are to Articles, Sections, and subsections of this Agreement unless otherwise specified. All terms defined in this Agreement shall have the defined meanings herein when used in any certificate, notice, or other document made or delivered pursuant hereto, unless otherwise defined therein.

(b) In the event of any change in the identity of the Settlor, Distribution Agent or Calculation Agent as defined above, whether by merger, incorporation or cessation of existence, written notice of the identity and contact information for the successor entity shall be provided in writing to the Trustee within ten (10) days of any change in accordance with the notice requirements of Section 9.3 below.

ARTICLE 2 ORGANIZATION

Section 2.1 Declaration of Trust. The name of the Trust shall be "The Delaware County Regional Water Quality Control Authority Rate Stabilization Trust." Effective as of the Effective Date, the Trustee shall have all of the rights, powers and duties set forth herein with respect to accomplishing the purposes of the Trust.

Section 2.2 Purposes of the Trust. The purposes of the Trust are to benefit the Beneficiaries by receiving Sale Proceeds deposited into the Trust Fund by the Settlor and any additional contributions made to the Trust under Section 3.3 hereof, investing and reinvesting such Sale Proceeds and any Additional Contributions, and making Distributions from time to time to the Distribution Agent for the benefit of the Beneficiaries, as directed by the Settlor pursuant to Article 4 below. The Distributions to the Distribution Agent are intended to reimburse the Distribution Agent for rate reductions which the Distribution Agent provides to the Beneficiaries pursuant to the Rate Stabilization Agreement. Neither the Distribution Agent nor any of its Affiliates is an intended beneficiary of the Trust.

Section 2.3 Appointment of Trustee. The Settlor hereby appoints the Trustee of the Trust, effective as of the Effective Date, to have all the rights, powers, and duties and all of the protections, indemnities, and immunities set forth herein. The Trustee hereby accepts such appointment.

Section 2.4 Title to Trust Property. Legal title to all the Trust Assets shall be vested at all times in the Trust as a separate legal entity, except where applicable law in any jurisdiction requires title to any part of the Trust Assets to be vested in the Trustee, in which case title shall

OCA-I-36 Attachment 1

be deemed to be vested in the Trustee or a Trustee, as the case may be, *provided* that the Trustee shall have the power to cause legal title to any Trust Assets to be held by or in the name of the Trust, a custodian, sub-custodian, securities depository, or their respective nominee.

Section 2.5 Situs of Trust. The Trust shall be located in the Commonwealth of Pennsylvania, and questions pertaining to the validity and construction of this Agreement and with respect to the administration of the Trust shall be determined in accordance with the laws of the Commonwealth of Pennsylvania. The Trustee may, however, at any time and from time to time transfer the situs of the Trust to any other jurisdiction that the Trustee may deem appropriate.

Section 2.6 Use of Trust Assets. Trust Assets shall be used solely to carry out the purposes set forth in Section 2.2 above, and shall not be subject (in whole or in part) to voluntary or involuntary assignment, anticipation, legal process, or claims of creditors of the Settlor, the Distribution Agent, the Aqua Parent, any Beneficiary, or any other person or entity.

ARTICLE 3 CONTRIBUTIONS TO THE TRUST

Section 3.1 Initial Contribution. The Settlor shall transfer one thousand dollars (\$1000.00) in cash to the Trust on the Effective Date.

Section 3.2 Contribution of Sale Proceeds. On or as soon as practicable after the Closing Date, the Settlor shall transfer to the Trust (or direct Aqua Wastewater to transfer to the Trust on the Settlor's behalf) that portion of the Sale Proceeds (comprising a majority of the Sale Proceeds) which the Settlor is required to contribute to the Trust pursuant to the Funding Agreement.

Section 3.3 Additional Contributions. In addition to the contributions described in Sections 3.1 and 3.2 above, the Trustee may receive such additional contributions as may be made to it from time to time by the Settlor or any other person in the form of cash, securities, or other property acceptable to the Trustee (the "Additional Contributions"). Such Additional Contributions may include (without limitation) funds released from time to time from one or more escrow accounts created under the Sewer System Sale Agreement. *Provided, however*, that the Trustee shall have no responsibility for collecting any such Additional Contributions.

Section 3.4 Acceptance by the Trustee. The Trustee hereby agrees to accept the contributions described in sections 3.1, 3.2, and 3.3 above for the benefit of the Beneficiaries, and agrees to use such funds pursuant to the terms of this Agreement.

ARTICLE 4 DISTRIBUTIONS FROM THE TRUST

Section 4.1 Distributions. (a) The Settlor shall direct the Trustee to make Distributions to Aqua Wastewater from time to time in accordance with the Rate Stabilization

OCA-I-36 Attachment 1

Agreement. The Trustee shall have no duty to determine whether or not the amounts or timing of such Distributions are proper under the Rate Stabilization Agreement.

(b) The Trustee shall make Distributions to the Distribution Agent from time to time in accordance with written directions received by the Trustee from a duly authorized representative of the Settlor (each a "Distribution Order"). *Provided, however*, that the Trustee shall make such Distribution no later than ten (10) business days after the date on which the Trustee receives the Distribution Order. Such Distributions will be made to the Distribution Agent solely for the purpose of reimbursing the Distribution Agent for rate reductions made pursuant to the Rate Stabilization Agreement. For purposes of this Section 4.1, written notification of the identity and contact information of the duly authorized representative of the Settlor shall be provided to the Trustee in writing at least annually on January 1, or upon any subsequent change in such authorized representative, within five (5) days thereof, in accordance with the requirements of Section 9.3 below.

Section 4.2 No Right of Reversion. Under no circumstances shall the Settlor or any successor thereto have any rights of reversion under this Trust Agreement. All Trust Assets shall be disbursed in furtherance of the purposes set forth in Section 2.2.

**ARTICLE 5
TRUSTEE**

Section 5.1 Trustee Resignation, Removal, and Succession. (a) Any Trustee serving hereunder shall have the right, upon ninety (90) days' prior written notice delivered to the Settlor, to resign as Trustee of this Trust. At any time after the sixth (6th) anniversary of the Closing Date, the Settlor shall have the right, upon ninety (90) days' prior written notice to the Trustee, and upon payment of all amounts due and owing hereunder, to remove such Trustee as a trustee. Upon notice of such resignation or removal, the Settlor shall appoint a successor Trustee in writing within thirty (30) days of the expiration of the ninety (90) day notice period, such appointment to be accepted in writing by the successor trustee so designated. If the Settlor fails to appoint a successor trustee, the Trustee may secure the appointment of a successor trustee in any manner permitted by law, including by petition or application to the appropriate court of jurisdiction. The resignation or removal of Trustee shall only become effective upon the appointment and qualification of the successor trustee. *Provided, however*, that the entity serving as Trustee hereunder shall at all times be a corporate trustee having assets of no less than one billion dollars (\$1,000,000,000).

(b) Upon the appointment, and timely written acceptance of the appointment of a successor trustee as provided herein, the Trustee shall transfer and convey to the successor Trustee all Trust Assets held by the Trustee. When such transfer and conveyance are completed, the Trustee shall be released and discharged from all liability relating to further administration and investment of the Trust.

OCA-I-36 Attachment 1

(c) No Trustee taking office shall be liable in any way for the acts or omissions of any Trustee prior to such Trustee's assumption of office, or shall have any duty to review the performance of a Trustee prior to that date.

(d) Except as specifically authorized hereunder, all powers of the Trustee shall be exercised by the Trustee alone.

Section 5.2 Duties of Trustee. The Trustee undertakes to perform such duties, and only such duties, as are specifically set forth in this Agreement, subject to and in accordance with the provisions of this Agreement. No implied duties, covenants, or obligations shall be read into this Agreement against the Trustee, the Settlor, or any Affiliate of either the Trustee or the Settlor. The Trustee shall oversee the conduct of the activities of the Trust, make and execute contracts and other instruments on behalf of the Trust, and may sue and be sued on behalf of the Trust in the name of the Trust, subject to the terms of this Agreement.

Section 5.3 Acceptance of Trust and Duties. (a) Except as otherwise provided in this Article 5, in accepting the trust hereby created, the Trustee acts solely as trustee hereunder and not in its individual capacity, and all persons having any claim against the Trustee by reason of the transactions contemplated by this Agreement shall look only to the Trust Assets for payment or satisfaction thereof. The Trustee accepts the trust hereby created and agrees to perform its duties hereunder, but only in accordance with the express terms of this Agreement.

(b) In carrying out its duties hereunder, the Trustee shall exercise the rights and powers vested in it hereunder in good faith, but only on the terms expressly set forth herein. Neither the Trustee nor any of its officers, directors, employees, agents or affiliates shall have any implied duties (including fiduciary duties) or liabilities otherwise existing at law or in equity with respect to the Trust, which implied duties and liabilities are hereby eliminated. No provision of this Agreement shall be construed to relieve the Trustee from liability for its own grossly negligent action, its own grossly negligent failure to act, its own bad faith, its own breach of its representations, warranties or covenants given in its individual capacity or its own willful misconduct. In addition:

(i) The Trustee shall be liable for its willful misconduct or gross negligence in acting or failing to act, except that the Trustee shall not be liable with respect to any action taken, suffered or omitted to be taken by it in accordance with a direction received by it from the Settlor or Calculation Agent pursuant to this Agreement;

(ii) The Trustee shall not be liable for any error of judgment, or for any action taken, suffered or omitted to be taken by it, in good faith, nor for any act or omission of any predecessor and/or successor Trustee;

(iii) The Trustee shall not be deemed to have notice or knowledge of any matter unless written notice thereof is received by the Trustee in accordance with this Agreement;

OCA-I-36 Attachment 1

(iv) The Trustee shall have no duty to monitor or supervise, or be liable for anything done or omitted by any other person, including the Settlor, the Distribution Agent or the Calculation Agent;

(v) The Trustee shall not be liable for the default or misconduct of the Settlor, the Distribution Agent, the Calculation Agent or any other person, and the Trustee shall not be deemed to have knowledge of any default on the part of any such person unless the Trustee receives written notice of such default in accordance with this Agreement; nor shall the Trustee be responsible for performing, monitoring or supervising the performance of any such person's obligations under this Agreement or any related agreement;

(vi) Under no circumstance shall the Trustee be liable for any representation, warranty, covenant, obligation or indebtedness of the Trust, or any other payment or distribution obligations evidenced by or arising under this Agreement;

(vii) The Trustee shall not be liable for or in respect of, and makes no representation with respect to, the validity or sufficiency of any provision of this Agreement, or the due execution hereof or thereof by any person, other than itself, or the value of the Trust Assets, or the efficacy of the Trust or its ability to generate the amounts intended to be distributed for the benefit of the Beneficiaries;

(viii) The Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, consent, entitlement order, approval or other paper or document;

(ix) The Trustee shall not be liable for (x) any special, consequential or punitive damages, however styled, including, without limitation, lost profits, (y) the acts or omissions of any nominee, correspondent, clearing agency or securities depository through which it holds the Trust's securities or assets, or (z) any losses due to forces beyond the reasonable control of the Trustee, as applicable, including, without limitation, strikes, lockouts, riots, work stoppages, acts of war or terrorism, insurrection, revolution, nuclear or natural catastrophes or acts of God and interruptions, loss or malfunctions of utilities, communications or computer (software and hardware) services; it being understood that the Trustee shall use commercially reasonable efforts which are consistent with accepted practices in the banking industry to resume performance as soon as reasonably practicable under the circumstances;

(x) Other than with respect to any report or information that the Trustee has an express duty to review under this Agreement, receipt by the Trustee of any report or other information delivered or otherwise made available to the Trustee pursuant to the terms of this Agreement or any other document related to the Trust shall not be deemed to constitute knowledge by the Trustee of such information, unless the Trustee receives written notice with respect thereto;

(xi) Except as otherwise expressly set forth in this Agreement, knowledge or information acquired by (x) Univest Bank and Trust Co. in any of its

OCA-I-36 Attachment 1

respective capacities hereunder or under any other document related to this transaction shall not be imputed to Univest Bank and Trust Co. in any of its other capacities hereunder or under such other documents, and (y) any Affiliate of Univest Bank and Trust Co. shall not be imputed to Univest Bank and Trust Co. in any of its respective capacities hereunder and vice versa;

(xii) The right of the Trustee to perform any discretionary act enumerated in this Agreement or in any other document to which the Trust is a party shall not be construed as a duty, and the Trustee shall not be answerable for other than its gross negligence or willful misconduct in the performance of any such act; the Trustee shall be under no obligation to exercise any of the discretionary rights or powers vested in it by this Agreement;

(xiii) The Trustee shall have no duty to recompile, recalculate or otherwise verify the accuracy of any information provided to it by the Settlor except as otherwise expressly set forth in this Agreement, and may conclusively rely thereon in good faith;

(xiv) The Trustee may consult with counsel, accountants and other experts, and the Trustee shall not be liable for anything done, suffered or omitted in good faith by it in accordance with the advice or opinion of any such counsel, accountants, or other experts selected by it in good faith, and any opinion of counsel shall be full and complete protection in respect of any action taken or suffered or omitted by it under this Agreement in good faith and in accordance with such opinion of counsel;

(xv) The Trustee shall be under no obligation to institute, conduct or defend any litigation under this Agreement or otherwise in relation to the Trust at the request, order or direction of the Settlor or any other person, unless such requesting person(s) shall have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities that may be incurred therein or thereby;

(xvi) The Trustee may execute any of the trusts or powers under this Agreement, or perform any duties under this Agreement, either directly or by or through agents or attorneys or one or more custodians (any of which may be Affiliates of the Trustee) and the Trustee shall not be liable for the acts or omissions of any agent, attorney or custodian selected by such Trustee in good faith;

(xvii) The Trustee shall have no duty or obligation to manage, make any payment in respect of, register, record, sell, dispose of or otherwise deal with the Trust Assets, or to otherwise take or refrain from taking any action under, or in connection with, any document contemplated hereby to which the Trustee is a party, except as expressly provided by the terms of this Agreement; and

(xviii) The Trustee shall have no responsibility to record this Agreement, to prepare or file any financing or continuation statement in any public office at any time or otherwise to perfect or maintain the perfection of any ownership or security interest or

OCA-I-36 Attachment 1

lien or to prepare or file any tax, qualification to do business or securities law filing or report except as expressly provided by the terms of this Agreement.

(c) Notwithstanding anything to the contrary in this Agreement, the Trustee shall not be required to expend or risk its own funds or otherwise incur financial liability in the performance of any of its duties under this Agreement, or in the exercise of any of its rights or powers, if there shall be reasonable grounds for believing that the repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it, and none of the provisions contained in this Agreement or any other document to which the Trust is a party, shall in any event require the Trustee, to perform, or be responsible for the manner or omission of performance of, any of the duties or obligations of the Settlor under any other agreement or document.

(d) Each of the parties hereto hereby agrees, and each Beneficiary, as evidenced by its acceptance of any benefits hereunder, understands and agrees, that the Trustee, in any capacity, has not provided and will not in the future provide, any advice, counsel or opinion regarding the tax, financial, investment, securities law or insurance implications and consequences of the formation, funding and ongoing administration of the Trust.

(e) Each of the parties hereto hereby agrees, and each Beneficiary, as evidenced by its acceptance of any benefits hereunder, understands and agrees, that that the Trustee, in any capacity, has not (i) made any investigation as to the accuracy of any representations, warranties or other obligations of the Trust under this Agreement or any other document contemplated hereby, and shall have no liability in connection therewith and (ii) prepared or verified, and shall have no liability for, any information, disclosure or other statement made in any document issued or delivered in connection with the transactions contemplated by this Agreement or any related document or agreement.

Section 5.4 Refrain from Certain Actions. The Trustee shall not be required to take any action under this Agreement if the Trustee shall have reasonably determined, or shall have been advised by counsel, that such action is likely to result in liability on the part of the Trustee, is contrary to the terms of this Agreement, or is otherwise contrary to applicable law.

Section 5.5 Reliance. The Trustee shall not incur any liability to anyone in acting upon any signature, instrument, notice, resolution, request, consent, order, certificate, report, opinion, bond, facsimile transmission, or other document or paper reasonably believed by it to be genuine and reasonably believed by it to be signed by an authorized representative of the proper party or parties, and need not investigate any fact or matter in any such document. As to any fact or matter the method of the determination of which is not specifically prescribed herein, the Trustee may for all purposes hereof rely on a certificate signed by an authorized officer of the Settlor, as to such fact or matter, and such certificate shall constitute full protection to the Trustee for any action taken or omitted to be taken by it in good faith in reliance thereon.

Section 5.6 Compensation and Expenses. (a) The Trustee shall be entitled to compensation and reimbursement from Trust Assets for all expenses incurred in the course of discharging its duties thereunder, as provided in the schedule attached hereto as Exhibit A.

OCA-I-36 Attachment 1

(b) Trust Assets may be used to pay compensation and expenses of the Calculation Agent, upon receipt by the Trustee of written directions to this effect from the Settlor.

Section 5.7 Investment of Trust Assets. (a) The Trustee shall invest and reinvest the principal and income of the Trust Fund and keep the Trust Assets invested, without distinction between principal and income, in Permitted Investments that comply with the Investment Guidelines. The Trustee may, however, reserve from investment and keep, either as uninvested contributions or the proceeds of sale of investments, such amounts as it may from time to time it deems advisable in order to provide for anticipated Distributions or other expenditures from the Trust Fund, notwithstanding the provisions of 20 Pa. C.S. §7207. The Trustee does not guaranty any positive return on any such investment and the Trustee shall not be liable for any loss, including without limitation any loss of principal or interest, or for any breakage fees or penalties, in connection with the purchase or liquidation of any investment made hereunder.

(b) The Settlor shall provide a draft set of Investment Guidelines to the Trustee no later than February 28, 2020, and the parties shall mutually agree in writing on final Investment Guidelines no later than the Closing Date. Such final Investment Guidelines may be subsequently revised by mutual written agreement of the Settlor and the Trustee, but only with the written approval of Aqua Wastewater.

Section 5.8 Trustee Powers. Except as otherwise specifically provided in this Trust Agreement, the Trustee shall have authority; in addition to and not in limitation of any authority given it by law, but shall have no obligation to exercise the following powers:

(a) To acquire or dispose of Permitted Investments which may from time to time or at any time constitute the Trust Fund for such prices and on such terms as the Trustee may deem proper, and to make, execute, and deliver to the purchasers thereof good and sufficient deeds of conveyance therefor and all assignments, transfers, and other legal instruments, either necessary or convenient for passing the title and ownership thereto, free and discharged of all trusts and without liability on the part of such purchasers to see to the application of the purchase money.

(b) To cause any Permitted Investment to be registered in or transferred into (i) its name as the Trustee, (ii) the name of the Trust, or (iii) the name or names of their nominee or nominees or to retain same unregistered or in form permitting transfer by delivery, and to maintain all such investments through such agents, custodians, and other means as it deems appropriate, *provided* that the books and records of the Trustee at all times shall show that all such investments are part of the Trust Fund.

(c) To vote upon any stocks, bonds, or other securities, and to give general or special proxies or powers of attorney with or without power of substitution; provided that the Trustee shall vote in favor of management or recommended proposals in all instances unless otherwise directed in writing by the Settlor.

(d) To exercise any option, to accept in exchange or to subscribe for additional securities, to exercise any conversion privileges, and to make any necessary payments therefor.

OCA-I-36 Attachment 1

(e) To keep such portion of the Trust Fund in cash or cash balances as the Trustee may, from time to time, deem to be in the best interests of the Trust, without liability for interest thereon.

(f) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted.

(g) To determine what is principal and what is income hereunder, and, in its sole discretion, to allocate or apportion gains and losses realized from the sale or other disposition of any assets between principal and income.

(h) Generally to exercise all rights of ownership and disposition over the Trust Fund and to do all acts and things which the Trustee may consider in the best interests of the Trust Fund.

Section 5.9 Indemnity of Trustee.

To the fullest extent permitted by applicable law, the Trustee and each of its directors, officers, employees, agents, affiliates, successors, assigns and legal representatives, (each an “Indemnified Person”) shall be indemnified, defended and held harmless by, and entitled to reimbursement from, the Trust out of Trust Assets with respect to any loss, liability, obligation, damages, penalty, tax, claim, action, investigation, proceeding, cost, expense or disbursement, including reasonable attorneys’, experts’ and other professionals’ fees and expenses of any kind or nature whatsoever (collectively “Costs”), arising out of or incurred in connection with this Agreement, the Trust Fund, the Trust Assets, the administration of the Trust Fund and the Trust Assets or any action or inaction of the Trustee hereunder, except to the extent that such Costs arise out of or result from the Trustee’s own willful misconduct, bad faith or gross negligence. The indemnities contained in this Section 5.9 shall survive the resignation or removal of the Trustee or the termination of this Agreement.

Section 5.10 Interpretation and Direction.

To the extent the Trustee determines that any substantial ambiguity exists in the interpretation of any definition, provision or term contained in this Agreement pertaining to the performance of its duties hereunder, or to the extent more than one methodology can be used to make any of the determinations or calculations to be performed by any Trustee hereunder, the Trustee may request written direction from the Settlor as to the interpretation or methodology it should adopt with respect thereto. The Settlor shall promptly provide such written direction, and the Trustee shall be entitled conclusively to rely upon, and shall be protected and held harmless in acting upon, such written direction.

Section 5.11 Books and Records. (a) The Trustee shall direct the preparation and maintenance of full and accurate accounts of all receipts, investments, disbursements, and other transactions of the Trust Fund. All such accounts, books, and records shall be open to inspection and audit at all reasonable times by any authorized representative of the Settlor.

OCA-I-36 Attachment 1

(b) The Trustee shall retain records relating to the Trust Fund for as long as necessary for the proper administration thereof, and at least for any period required by applicable law.

Section 5.12 Accounting and Reports. (a) The Trustee shall provide to the Settlor customary quarterly or monthly written reports of all receipts and expenditures made from the Trust Fund during the month, in such detail and format as may be agreed upon by the Trustee and the Settlor from time to time. Unless otherwise determined by the Trustee, the Trustee shall (a) maintain (or cause to be maintained) the books of the Trust on a calendar-year basis and on the cash method of accounting. The financial records of the Trust shall be kept in conformity with generally accepted accounting principles applied on a consistent basis, and with such other requirements as may reasonably be required by the Trustee or the Settlor.

(b) The Trustee shall as soon as practicable, but in no event later than three (3) months after the end of each fiscal year of the Trust, provide to the Settlor or its designee (i) the Trust's revenue and expense statement for such fiscal year and (ii) the Trust's balance sheet as of the end of such fiscal year, each accompanied by the certificate or opinion of a firm of independent certified public accountants selected by the Trustee and approved by the Settlor.

(c) Within ninety (90) days after termination of the duties of the Trustee, and at such other times (if any) as the Settlor may determine in its discretion, the Trustee shall render to the Settlor or its designee a written account setting forth all transactions effected by the Trustee since the period covered by its last such preceding account and showing at its then fair market value all property held at the end of the accounting period. Upon the expiration of ninety (90) days from the date such account is rendered, the Trustee shall be released and discharged from accountability to the Settlor as respects the same, unless the Settlor shall have filed with the Trustee a written statement claiming gross negligence, willful misconduct, or lack of good faith by the Trustee with respect thereto. If any such objection is filed and is not satisfactorily adjusted by the parties, the Trustee shall have the right to apply to a court of competent jurisdiction for judicial settlement of such account at the sole cost and expense of the Trust. Neither the Settlor nor any other person shall have the right to demand or be entitled to any further or different accounting by the Trustee, except as may otherwise be required by law.

(d) The Trustee shall also furnish to the Settlor or its designee such other reports as may be reasonably requested by the Settlor; provided that any costs or expenses incurred by the Trustee in preparing, directly or through a third party subcontractor, any reports that are outside of the scope of the trustee's usual and customary reporting shall be borne solely by the Trust.

Section 5.13 Third Party Reliance. (a) No person having any dealing with the Trust Fund or the Trustee shall be bound to inquire of the duty, authority, or power of the Trustee to perform any act which it undertakes to perform. No person purchasing or acquiring property or lending money to the Trustee shall be bound to see to the application of the purchase money or other property transferred or loaned to the Trustee, or to inquire into the propriety or validity of the said sale, disposition, or loan by the Trustee.

(b) Every instrument executed by the Trustee shall be conclusive in favor of any person, partnership, corporation relying thereon that (a) at the time of the delivery of the instrument the

OCA-I-36 Attachment 1

Trust was in full force and effect, (b) the instrument was effected in accordance with the terms and conditions of this Agreement, and (c) the Trustee was duly authorized and empowered to execute the instrument.

Section 5.14 Interpretation; Rules. The Trustee shall have the power to construe the provisions of this Agreement and the terms used in this Agreement, and any construction adopted by the Trustee in good faith consistent with the purpose of the Trust shall be binding upon all persons.

**ARTICLE 6
POWER OF SUBSTITUTION**

Section 6.1 Power of Substitution. (a) The Settlor shall have the right to acquire any asset of the Trust (an "*Acquired Asset*") by transferring to the Trustee in exchange for the Acquired Asset one or more other assets (collectively the "*Substituted Asset*") having a fair market value that is no less than the fair market value of the Acquired Asset.

(b) To the extent (if any) that the fair market value of the Substituted Asset exceeds the fair market value of the Acquired Asset, the Settlor shall be deemed to have made an Additional Contribution to the Trust under Section 3.3 above.

Section 6.2 Confirmations. (a) The Trustee shall take such reasonable steps as may be necessary in order to confirm, prior to the exchange of assets, that the fair market value of the Acquired Asset is no greater than the fair market value of the Substituted Asset. If the Trustee determines that the fair market value of the Acquired Asset is greater than the fair market value of the Substituted Asset, the Trustee shall not transfer the Acquired Asset to the Settlor or accept the Substituted Asset from the Settlor.

(b) The Trustee shall not accept any Acquired Asset in substitution for a Substituted Asset unless it has previously received written confirmation from the Calculation Agent that such substitution will not adversely affect the ability of the Settlor to fund Distributions (*e.g.*, due to a reduction in the liquidity of the Trust).

**ARTICLE 7
TERMINATION**

Section 7.1 Termination. The Trust shall terminate when all of the assets of the Trust have been exhausted in furtherance of the purposes set forth in Section 2.2 above.

Section 7.2 Trust Irrevocable. Neither the Settlor nor any other person is entitled to revoke or terminate the Trust.

OCA-I-36 Attachment 1

**ARTICLE 8
AMENDMENTS**

Section 8.1 Amendment of Agreement. Notwithstanding the irrevocability of the Trust, the Trustee is authorized to institute a judicial proceeding in a court of competent jurisdiction to reform this Trust for the sole purpose of meeting any and all federal statutory or regulatory requirements which may affect the taxability of the Trust and which were enacted or instituted subsequent to the inception of the Trust. *Provided, however,* that this provision shall not apply if its existence would result in the overall loss of favorable tax treatment, thereby defeating the purpose of this right of reformation.

**ARTICLE 9
MISCELLANEOUS**

Section 9.1 No Legal Title to Trust Property. No transfer, by operation of law or otherwise, of any right, title, or interest in the Trust assets shall operate to terminate this Agreement or the Trust, or shall entitle any transferee to an accounting or to the transfer to it of legal title to any part of the Trust Assets.

Section 9.2 Limitations on Rights of Others. The provisions of this Agreement are solely for the benefit of the Settlor, the Trustee, and the Beneficiaries, and nothing in this Agreement, whether express or implied, shall be construed to give to the Distribution Agent, any Affiliate of the Distribution Agent, any other person any legal or equitable right, remedy, or claim in the Trust Assets or under or in respect of this Agreement or any covenants, conditions, or provisions contained herein.

Section 9.3 Notices. All demands, notices and communications upon or to the Settlor or the Trustee under this Agreement (including Distribution Orders) shall be in writing, personally delivered, sent by electronic facsimile (with hard copy to follow via first class mail), sent by email (with hard copy to follow via first class mail), or mailed by certified mail return receipt requested, and shall be deemed to have been duly given upon receipt, to the following address (or to such other address as the notice party may direct):

To the Settlor:

DELCORA
100 East Fifth Street
Chester, PA 19013
Attention: Executive Director

with copies to:

DELCORA
100 East Fifth Street
Chester, PA 19013

OCA-I-36 Attachment 1

Attention: Solicitor

and

AQUA WASTEWATER PENNSYLVANIA, INC.
762 Lancaster Avenue
Bryn Mawr, PA 19010
Attention: General Counsel

To the Trustee:

Univest Bank and Trust Co.
14 North Main Street
PO Box 559
Souderton, PA 18964
Attention: John C. Kazary, Esq., CTFA – Vice President and Wealth Trust Advisor

with a copy to:

Univest Bank and Trust Co.
14 North Main Street
PO Box 64197
Souderton, PA 18964
Attention: Megan Duryea Santana, General Counsel

Section 9.4 Counterparts. This Agreement may be executed by the parties hereto in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument.

Section 9.5 Successors and Assigns. (a) Neither party hereto may assign any of its obligations or rights under this Agreement without the prior written consent of the other party except for obligations and rights delegated under 20 Pa. C.S. Section 7206.

(b) All covenants and agreements contained herein shall be binding upon and inure to the benefit of the Settlor, the Trustee, and their respective successors and permitted assigns.

Section 9.6 Headings, etc. Titles for sections are for general information only, and this Agreement shall not be construed by reference to such titles. Wherever required by context, the singular of any word used in this Agreement shall include the plural and the plural may be read in the singular. Words used in the masculine shall be read and construed in the feminine where they would so apply.

Section 9.7 Governing Law. This agreement shall in all respects be governed by, and construed in accordance with, the laws of the Commonwealth of Pennsylvania, including all matters of construction, validity, and performance.

OCA-I-36 Attachment 1

Section 9.8 Consent to Jurisdiction and Service of Process. Each of the parties to this Agreement hereby irrevocably submits to the jurisdiction of any Pennsylvania state court sitting in Delaware County, Pennsylvania or the U.S. District Court for the Eastern District of Pennsylvania, and any appellate courts thereof, in any action or proceeding arising out of or relating to this Agreement, and each of the parties hereby irrevocably agrees, to the extent permitted by law, that all claims in respect of such action or proceeding may be heard and determined in such Pennsylvania state or U.S. federal court. Each of the parties hereby irrevocably waives, to the fullest extent it may effectively do so, the defense of an inconvenient forum to the maintenance of such action or proceeding and any right of jurisdiction in such action or proceeding on account of the place of residence or domicile of such party. A final judgment in any such action or proceeding shall, to the extent permitted by law, be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Each of the parties consents to the service of process by mail. Nothing herein shall affect the right of any party to serve legal process in any manner permitted by law or affect its right to bring any action in any other court.

Section 9.9 Tax Status of the Trust. The Trust is intended to be a “grantor trust” of which the Settlor is treated as the owner for federal income-tax purposes under Code Sections 671 *et seq.* The Trust is intended to qualify as a governmental entity for state and local tax purposes.

Section 9.10 Entire Agreement. This Trust Agreement shall not be deemed to be varied, altered or amended by any other statement, representation or agreement by or between any person or persons whomsoever, whether written, oral or implied in any way, except as provided in this Agreement.

Section 9.11 Reliance on Trust Agreement. Any person dealing with the Trustee may rely upon a copy of this Agreement and any amendments thereto certified to be true and correct.

[Signature page follows]

OCA-I-36 Attachment 1

IN WITNESS WHEREOF, the parties hereto have duly executed and delivered this Agreement as of Effective Date.

SETTLOR:

DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY

By: Robert J. Willmet

Name: Robert J. Willmet

Title: Executive Director

TRUSTEE:

UNIVEST BANK AND TRUST CO.

By: Matthew Holliday

Name: J. Matthew Holliday

Title: Sr. V.P. and Sr. Trust Officer

EXHIBIT A

TRUSTEE COMPENSATION AND REIMBURSEMENT

The Trustee shall be entitled to receive a monthly fee in an amount equal to one-twelfth of the product obtained by multiplying (a) 0.0006 by (b) the aggregate value of Trust Assets. The aggregate value of Trust Assets for any calendar month shall be equal to the sum of the average daily valuations of all Trust Assets for such month. The Trustee shall be permitted to deduct its fees and expenses from the Trust Assets.

The Trustee shall be reimbursed from the Trust Assets for third party tax preparation and filing fees and costs. Any and all taxes due shall be paid by the Settlor, provided, however, that in the event that the Trust is responsible for the payment of any taxes, such taxes shall be paid from the Trust Assets.

The Trustee shall be entitled to reimbursement for any and all Costs and other indemnity amounts from the Trust out of Trust Assets.

In addition, the Trustee shall have the right to be reimbursed from the Trust Assets for fees for extraordinary/administrative services, including, without limitation:

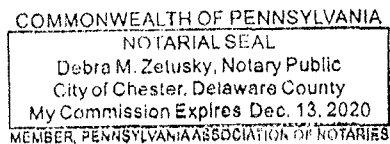
- Managing, selling or liquidating real estate
- Ascertaining the cost basis of securities for tax purposes
- Handling any assets outside the continental United States
- Assisting counsel with litigation
- Transferring securities from another account
- Preparation of court accountings and filings
- Preparation of any reports other than customary quarterly or monthly written reports

OCA-I-36 Attachment 1

COMMONWEALTH OF PENNSYLVANIA :
 :
COUNTY OF : ss.

On this, the 20th day of December 2019, before me, the undersigned officer, personally appeared Robert J. Willert, known to me, or satisfactorily proven, to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same on behalf of the Delaware County Regional Water Quality Control Authority for the purposes therein contained.

I have signed my name and affixed my seal.



Debra M. Zelusky
Notary Public
My Commission expires:

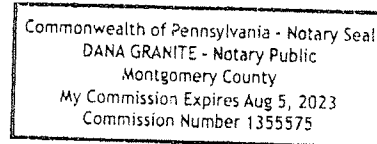
OCA-I-36 Attachment 1

COMMONWEALTH OF PENNSYLVANIA :
: ss.
COUNTY OF :

On this, the 27th day of December 2019, before me, the undersigned officer,
personally appeared J. Matthew Holiday who acknowledged himself to be a
Senior Trust officer of Univest Bank, and that he as such Senior Trust officer being
authorized to do so, executed the foregoing instrument for the purposes therein contained by
signing the name of the corporation by himself as trustee.

I have signed my name and affixed my seal.

Dana Granite
Notary Public



Respondent: Robert Willert
Date: 8/28/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET I INTERROGATORIES DIRECTED TO DELCORA

- OCA-I-36** DELCORA's placement of proceeds into trust. Refer to the Application at page 8, paragraph 36, and to Exhibit U2, Mr. Packer's testimony, and Exhibit U2, Appendix B (Memorandum of Understanding) and to Exhibit W1, Mr. Willert's testimony.
- a. Show in detail how DELCORA will identify the amount of proceeds to be placed into the trust.
 - b. How will DELCORA account for these amounts while being held in the trust?
 - c. How frequently will DELCORA make payments to Aqua from the trust and how will DELCORA determine the amounts of such payments?
 - d. Is there a written agreement between Aqua and DELCORA concerning the operation of the trust and payments from the trust to Aqua? If not, explain fully why not. If so, please identify and provide it.
 - e. Have the documents for creating the irrevocable trust been drafted? If "yes" please identify and provide them. If not, when are they expected to be drafted and available for review?
 - f. Have DELCORA and Aqua worked out all of the details of how the trust and payments from it will work? If not, identify remaining details that are still under discussion between DELCORA and Aqua.
 - g. Is the memorandum of understanding a draft?
 - h. Has the memorandum of understanding been finalized? If so, identify and provide a copy. If not, identify when it is expected to be finalized.
 - i. How will the amounts put into the trust and distributed from the trust be audited? Explain the audit procedures and how the auditor will be selected and by whom.

SUPPLEMENTAL RESPONSE

h. A copy of the executed MOU dated August 27, 2020 is attached here as OCA-I-36
SUPPLEMENTAL Attachment 1

OCA-I-36 SUPPLEMENTAL Attachment 1

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Execution Version

INFORMATION SHARING

MEMORANDUM OF UNDERSTANDING

This Information Sharing Memorandum of Understanding, dated as the 27th day of August, 2020 (this "Memorandum"), is by and between the Delaware County Regional Water Quality Control Authority, a body corporate and politic existing under the Pennsylvania Municipal Authorities Act, 42 P.S. 5601, *et seq.* ("DELCORA") and Aqua Pennsylvania Wastewater, Inc, a corporation organized and existing under the laws of the Commonwealth of Pennsylvania ("Aqua") and with DELCORA collectively, the "Parties").

WITNESSETH:

WHEREAS, DELCORA currently owns and operates a sewer system (the "Sewer System") that, in a specific service territory, serves residential, commercial, industrial, and municipal customers in Delaware County and Chester County, Pennsylvania;

WHEREAS, due to certain regulatory requirements and anticipated capital expenditures, DELCORA expects its rates for Wastewater Utility Services (defined below) to increase significantly in future years;

WHEREAS, pursuant to that certain agreement dated September 17, 2019, as amended, (the "Sewer System Sale Agreement") between DELCORA and Aqua, DELCORA has agreed to sell the Sewer System to Aqua (the "Sewer System Sale") in order to, among other things, mitigate the anticipated significant increases in DELCORA rates for Wastewater Utility Services to current customers at service locations served by DELCORA (the "DELCORA Service Locations") and new Sewer System customers within the DELCORA Service Locations to be served by Aqua after the Closing Date (defined below) who are connected to the Sewer System (collectively, the "DELCORA Customers"); Aqua has agreed, subject to applicable regulatory approvals including that from the Pennsylvania Public Utility Commission (the "PUC"), in the Sewer System Sale Agreement to implement the DELCORA rates in effect at the Closing Date (defined below) of the Sewer System Sale as its Tariff Rates for the period beginning on the Closing Date through and including the date of any final and unappealed order of the PUC approving Aqua's first base rate case applicable to the DELCORA customers (the "Rate Case Effective Date");

WHEREAS, in anticipation of any Tariff Rate increases for Wastewater Utility Services, DELCORA has agreed to devote a majority of the proceeds that it receives from the Sewer System Sale (the "Net Sale Proceeds") to mitigate those rate increases to DELCORA Customers for a specified period following the closing date of the Sewer System Sale Agreement (the "Closing Date");

WHEREAS, the Net Sale Proceeds will be contributed by DELCORA to the Delaware County Water Quality Control Authority Rate Stabilization Trust (the "Trust") established by DELCORA and Univest Bank and Trust Co. (the "Trustee") by entering into the DELCORA Rate Stabilization Fund Trust Agreement dated December 27, 2019 (the "Trust Agreement"), and the

OCA-I-36 SUPPLEMENTAL Attachment 1

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Net Sale Proceeds, along with investment earnings thereon and any other amounts contributed to the Trust, will be distributed in accordance with the Trust Agreement; and

WHEREAS, the Trustee in its fiduciary capacity will be in direct control over the funds that are contributed to the Trust pursuant to the Sewer System Sale Agreement; and

WHEREAS, pursuant to the Trust Agreement, the Trustee will make distributions from the Trust for the benefit of the DELCORA Customers to Aqua for the assistance payment amounts credited to DELCORA Customers' accounts in order to reduce the amounts DELCORA Customers pay for Wastewater Utility Services. To facilitate this action, DELCORA and Aqua have sought approval of the PUC to put a Customer Assistance Amount on Aqua's bills to DELCORA Customers. If the PUC approves the request to put the Customer Assistance Amount on DELCORA Customers' bills, the Parties are establishing the process to ensure the proper information is provided to the Trustee and the correct amount is distributed from the Trust to Aqua after it has provided the Customer Assistance Amounts to DELCORA Customers. The Parties include certain processes to provide accountability of the Trust distributions for the benefit of DELCORA Customers through the Customer Assistance Amount.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants expressed in this Memorandum, and intending to be legally bound, the Parties agree as follows:

ARTICLE I
Definitions

1.1 **Definitions.** Unless the context clearly requires otherwise, the following terms used in this Agreement shall have the following meanings:

a. "Adjusted Customer Payment" means the amount a DELCORA Customer is required to pay to Aqua (with Trust distributions) based on the effective rate on the Closing Date, and that rate being increased by 3%, compounded annually, on the Rate Case Effective Date and on each anniversary of such date.

b. "Billing Period" means the period for which a DELCORA Customer is billed by Aqua for Wastewater Utility Service in accordance with Aqua's PUC approved tariff.

c. "Business Days" means Monday through Friday excluding public holidays.

d. "Calculation Agent" means an accounting and/or financial advisory firm or its successor, or such other company as may be engaged by DELCORA to provide calculation services in connection with this Agreement.

e. "Calculation Agent Service Agreement" means the service agreement to be entered into between the Calculation Agent and DELCORA, which, inter alia, sets forth the Calculation Agent's duties and responsibilities with respect to the Trust and this Agreement, as amended, and any service agreement entered into between the Calculation Agent's successor and

OCA-I-36 SUPPLEMENTAL Attachment 1

DELCORA, which sets forth the Calculation Agent's successor's duties and responsibilities with respect to the Trust and this Agreement, as amended.

f. "Customer Assistance Amount" means the amount which equals: (i) the amount a DELCORA Customer would otherwise be required to pay to Aqua (without Trust distributions) based on the Tariff Rate, minus (ii) the Adjusted Customer Payment.

g. "DELCORA Customer Assistance Trust Payment Period" means the period beginning on the Rate Case Effective Date and ending on the date on which the assets of the Trust are reduced to zero (0).

h. "Tariff Rate" or "Tariff Rates" means the rates set forth in Aqua's tariff as approved by the PUC, and as amended from time to time, applicable to the DELCORA Customers.

i. "Total Customer Assistance Amount" means the sum of the Customer Assistance Amount for all DELCORA Customers billed for a Billing Period.

j. "Wastewater Treatment Services" means only the services provided by Aqua necessary to collect, convey and treat the wastewater of DELCORA Customers in accordance with Aqua's PUC approved tariff.

1.2 **Articles and Section Headings.** The headings or titles of the several Articles and Sections of this Memorandum are solely for convenience of reference and do not affect the meaning or construction of the provisions of this Memorandum.

ARTICLE II

Purpose

2.1 **Purpose.** Aqua agreed in the Sewer System Sales Agreement, subject to PUC jurisdiction and oversight, to implement DELCORA's rates for Wastewater Utility Services in effect on the Closing Date as its Tariff Rates for the period beginning on the Closing Date through the Rate Case Effective Date. In the normal course of business, the Parties anticipate that the Tariff Rates DELCORA Customers will pay for Wastewater Utility Services will increase in the future on and after the Rate Case Effective Date. If the PUC authorizes a Customer Assistance Amount calculation to be included on an Aqua bill to DELCORA Customers, the purpose of this Memorandum is to set forth the process by which the Customer Assistance Amount is calculated and distributed so that the effect of the rate to be paid by DELCORA Customers for Wastewater Utility Services will increase by no more than three percent (3%), compounded annually, on the Rate Case Effective Date and each anniversary of such date during the DELCORA Customer Assistance Trust Payment Period.

ARTICLE III

Billing

OCA-I-36 SUPPLEMENTAL Attachment 1

3.1 **Billing.** Aqua shall issue a bill to each DELCORA Customer for Wastewater Utility Services for each Billing Period. If permitted by the PUC, Aqua shall include a Customer Assistance Amount on the bills it issues to each DELCORA Customer. The bill issued by Aqua to each DELCORA Customer will include the payment amount based on the Tariff Rate, the Customer Assistance Amount, and the Adjusted Customer Payment. Notwithstanding the foregoing, if the payment amount based on the Tariff Rate is less than the Adjusted Customer Payment, then the DELCORA Customer pays the lesser amount.

ARTICLE IV
Calculation of Customer Assistance Amount

4.1 **Calculation of Customer Assistance Amount and Total Customer Assistance Amount.** For each Billing Period, Aqua shall provide the information to the Calculation Agent that enables it to calculate the Customer Assistance Amount for each DELCORA Customer and the Total Customer Assistance Amount.

4.2 **Payment of Total Customer Assistance Amount.**

a. Aqua shall provide the information to the Calculation Agent that enables the Calculation Agent to calculate the Total Customer Assistance Amount within twenty (20) Business Days after the last day of each Billing Period.

b. DELCORA shall cause the Calculation Agent to review the calculation of the Total Customer Assistance Amount and notify DELCORA in writing of the confirmation of such calculation, within ten (10) Business Days of the Calculation Agent's receipt of the information for a Billing Period. DELCORA shall direct the Trustee in writing to transfer to Aqua by Fedwire an amount equal to the Total Customer Assistance Amount (or, if applicable pursuant to 4.2(c)), the undisputed portion of the Total Customer Assistance Amount) for such Billing Period within ten (10) Business Days of the confirmation.

c. If the Calculation Agent is unable to confirm the calculation of the Total Customer Assistance Amount, the Calculation Agent shall notify DELCORA and Aqua within ten (10) Business Days and submit a written request to Aqua for additional information. Aqua shall provide the additional information within five (5) business days.

d. If the Calculation Agent is still unable to confirm the calculation of the remaining disputed portion of the Total Customer Assistance Amount for a Billing Period, DELCORA shall cause the Calculation Agent to provide all relevant information to an independent accountant to review and determine the proper calculation of such amount. The Parties shall mutually agree on the accountant selected. All decisions made by the chosen accountant are final and binding on the Parties unless the Parties otherwise agree.

4.3 **Cooperation of the Parties.** Aqua shall cooperate with the Calculation Agent to confirm the Total Customer Assistance Amount, and Aqua shall provide any additional information determined to be reasonably necessary by either the Calculation Agent or DELCORA to confirm the Total Customer Assistance Amount.

OCA-I-36 SUPPLEMENTAL Attachment 1

ARTICLE V
Understanding of the Parties**5.1 Understanding of the Parties.**

a. After the Closing Date, changes to the residential DELCORA Customers will occur. For instance, existing customers will sell their residential home and purchasers of that home will become DELCORA Customers. Aqua may provide Customer Assistance Amount to new residential DELCORA Customers upon DELCORA's approval which shall not be unreasonably withheld; however, Aqua may not include additional commercial, industrial, or municipal entities after the Closing Date without DELCORA's express written consent to provide the Customer Assistance Amount to an additional commercial, industrial, or municipal entity.

ARTICLE VI
Miscellaneous Provisions

6.1 **Anti-Assignment; Successors and Assigns.** Neither Party to this Memorandum may assign any right or delegate any performance under this Agreement without the prior written consent of the other Party. A purported assignment or purported delegation without prior written consent is void. This Memorandum is binding upon, and inures to the benefit of, the Parties and their permitted respective successors and assigns.

6.2 **Entire Agreement.** This Memorandum represents all the agreements between the Parties pertaining to the subject matter hereof and they supersede all prior agreements, negotiations, discussions and understandings, written or oral, between the Parties relating to the subject matter of this Memorandum.

6.3 **Severability.** If any term, provision, covenant or restriction contained in this Memorandum is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions contained in this Memorandum remain in full force and effect and in no way be affected, impaired or invalidated.

6.4 **Amendment.** The Parties may amend this Memorandum only by a written agreement signed by both Parties and which identifies itself as an amendment to this Memorandum. Any waiver of, or consent to depart from, the requirements of any provision of this Memorandum will be effective only if such waiver or consent is in writing and signed by both Parties, and only in the specific instance and for the specific purpose for which it has been given.

6.5 **Governing Law.** This Memorandum is governed by, and construed in accordance with, the laws of the Commonwealth of Pennsylvania, including all matters of construction, validity, and performance, including torts.

6.6 **Notices.** All demands, notices, and communications upon or to DELCORA and Aqua under this Memorandum shall be in writing, personally delivered, sent by electronic facsimile (with hard copy to follow via first class mail), or mailed by certified mail return receipt

OCA-I-36 SUPPLEMENTAL Attachment 1

requested, and shall be deemed to have been duly given upon receipt, to the following address (or to such address as the notice party may direct):

To DELCORA:

DELCORA
100 East Fifth Street
Chester, PA 19013
Attention: Executive Director

with copies to:

Obermayer Rebmann Maxwell & Hoppel LLP
1500 Market Street, Suite 3400
Philadelphia, PA 19102-2101
Attention: Thomas Wyatt

To Aqua:

Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Ave.
Bryn Mawr, PA 19010
Attention: President

With copies to

Aqua Pennsylvania Wastewater, Inc.
762 W. Lancaster Ave,
Bryn Mawr, PA 19010
Attention: General Counsel

6.7 **Counterparts.** This Memorandum may be executed by the Parties in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument.

[Signature page follows]

OCA-I-36 SUPPLEMENTAL Attachment 1

IN WITNESS WHEREOF, the Parties have duly executed this Memorandum the day and year first set forth above.

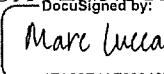
DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY

By: _____

Name: _____

Title: _____

AQUA PENNSYLVANIA WASTEWATER, INC.

By:  _____
DocuSigned by: 4EA22E4AF39946E...

Name: Marc A. Lucca

Title: President

OCA-I-36 SUPPLEMENTAL Attachment 1

IN WITNESS WHEREOF, the Parties have duly executed this Memorandum the day and year first set forth above.

DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY

By: *Robert J. Willert*

Name: *Robert J. Willert*

Title: *Executive Director*

AQUA PENNSYLVANIA WASTEWATER, INC.

By: _____

Name: _____

Title: _____

Respondent: Robert Willert
Date: 8/07/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET III INTERROGATORIES DIRECTED TO DELCORA

OCA-III-10 The DELCORA Rate Stabilization Trust Agreement (i.e., the DELCORA RATE STABILIZATION FUND TRUST AGREEMENT between THE DELAWARE COUNTY REGIONAL WATER QUALITY CONTROL AUTHORITY as SETTLOR and UNIVEST BANK AND TRUST CO. as TRUSTEE, Effective Date: December 27, 2019) provides that a majority of the sales proceeds be contributed to the Trust. Has DELCORA determined what dollar amount would be contributed to the Trust? If not, explain fully why not. If so, please identify that dollar amount.

RESPONSE:

The proceeds of the sale will first be used to pay any existing liabilities of DELCORA. The balance of the sale proceeds will be placed into the Trust, with the exception of any reasonable reserves. The precise amounts of DELCORA's liabilities and any reserves have not yet been determined; however, DELCORA's preliminary estimates for the amount to be transferred to the trust is approximately \$200 million. Continuing to administer the Trust in accordance with DELCORA's charter is not expected to be a material expense.

Respondent: John Pileggi
Date: August 12, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

THE COUNTY OF DELAWARE, PENNSYLVANIA

SET I INTERROGATORIES

- COUNTY-I-1** In responding to OCA-I-36(a), DELCORA states that the transfer to the Trust will equal the proceeds from the sale of the sewer system to Aqua, less DELCORA's liabilities, obligations, expenses, and reasonable reserve, plus any transfers from the Escrow Agreement dated December 27, 2019. Assuming no transfers from the Escrow Agreement, provide a detailed accounting of the following, including an estimate of total cost and a narrative description of the component costs:
- a. DELCORA's liabilities, as referenced above;
 - b. DELCORA's obligations, as referenced above;
 - c. DELCORA's expenses, as referenced above; and
 - d. DELCORA's reasonable reserve, as referenced above.

RESPONSE:

- a. As of June 10, 2020, it would take approximately \$171,032,462 to defease DELCORA's outstanding bond issues. As of May 31, 2020, DELCORA has \$17,007,273 in other outstanding liabilities (which includes \$6,383,067 in current portion of bond debt), as well as \$14,099,693 in other long-term debt. There will be some expenses related to reviewing the calculations agent's work.
- b. See a., above.
- c. See a., above.
- d. There are no estimates at this time, however, after closing, DELCORA anticipates retaining a de minimus amount of money on hand to administer its obligations to oversee the Trust, which are delineated in the trust documents.

Respondent: John Pileggi
Date: August 18, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET V INTERROGATORIES

OCA-V-1

DELCORA's response to OCA-III-10 mentioned an estimate of the amount to be transferred to the DELCORA Customer Trust of approximately \$200 million. DELCORA has stated in responding to OCA-I-36(a), that the transfer to the Trust will equal the proceeds from the sale of the sewer system to Aqua, less DELCORA's liabilities, obligations, expenses, and reasonable reserve, plus any transfers from the Escrow Agreement dated December 27, 2019. In response to Delaware County data request County-I-1, DELCORA indicated that:

As of June 10, 2020, it would take approximately \$171,032,462 to defease DELCORA's outstanding bond issues. As of May 31, 2020, DELCORA has \$17,007,273 in other outstanding liabilities (which includes \$6.383,067 in current portion of bond debt), as well as \$14,099,693 in other long-term debt. There will be some expenses related to reviewing the calculations agent's work.

Additionally, DELCORA stated in response to County-I-1(d) concerning the amounts of DELCORA's reasonable reserve, that:

There are no estimates at this time, however, after closing, DELCORA anticipates retaining a de minimus amount of money on hand to administer its obligations to oversee the Trust, which are delineated in the trust documents.

DELCORA's response to County-I-2 provided the additional explanation concerning DELCORA's reserve:

After closing, DELCORA anticipates retaining a de minimus amount of money on hand to administer its obligations to oversee the Trust, which are delineated in the trust documents. The precise amount has not yet been determined. There are no anticipated reserves in the Trust, the Trust is to be used in its entirety for the benefit of customers.

Subtracting the above-identified amounts (that were stated in DELCORA's response to County-I-1) from the Applicant's proposed sales price of \$276.5

million suggests that funding for the DELCORA Customer Trust would be approximately \$88.46 million, as shown below:

Estimated DELCORA Customer Trust Funding			
Line	Description	Amount	
1	Proceeds from sale of Wastewater Utility Assets	\$ 276,500,000	[A]
	Less:		
2	Amount to defease DELCORA's outstanding bond issues	\$ 171,032,462	
3	DELCORA other outstanding liabilities	\$ 17,007,273	
4	Expenses related to reviewing the calculations agent's work	Currently Unknown	
5	Reserve to administer its obligations to oversee the Trust	de minimus	
6	Subtotal	\$ 188,039,735	[B]
7	Potential funding for DELCORA Customer Trust	\$ 88,460,265	[A - B]
Source: DELCORA Response to County-I-1			

Please respond to the following:

- a. Show in detail how DELCORA estimated the approximately \$200 million amount stated in response to OCA-III-10. Include complete supporting calculations showing all amounts considering in making that estimate and identifying each component considered in deriving that estimate and the amount used for each component.
- b. Why is there significant difference between the approximately \$200 million amount stated in response to OCA-III-10 and the approximately \$88.46 million amount calculated above from DELCORA's County-I-1 response? Identify, quantify and explain each reconciling item. If exact amounts are not currently know, please use estimates and approximations based on the best currently available information.
- c. Based on the most current information available, is the estimated funding for the DELCORA Customer Trust anticipated to be (1) approximately \$200 million, (2) approximately \$88.46 million, or (3) some other amount, and if (3) what is that amount and how is it being derived? Explain in detail and include calculations.
- d. What is the amount of the most recent balance in the Escrow Agreement?
- e. What is the anticipated balance in the Escrow Agreement dated December 27, 2019?

f. What is the current best estimate of the amount to be transferred into the DELCORA Customer Trust from the Escrow Agreement dated December 27, 2019?

RESPONSE:

a. Missing in the calculation above is the inclusion of the cash on hand. The estimate of \$200 million includes a cash balance as of 12/31/2019 of \$111,207,911.

The amount of \$17,9007,273 of other outstanding liabilities referenced in the calculation above includes \$6,383,067 which is the current portion of bond debt. In effect, the \$6,383,067 is counted twice in the calculation above since the amount is part of the defeasance. Also omitted from the calculation above are the current non-cash receivables. These receivables may offset many of the other outstanding, non-bond liabilities.

A third factor to explain any differences is the timing of the closing. The timing of closing affects the defeasance amount and the amount that will be put into the trust. However, \$200 million is the best estimate at this time.

b. See response to question OCA-V-1 part a. and OCA-V-1 Attachment 1.

c. See response to question OCA-V-1 part a. and OCA-V-1 Attachment 1.

d. Approximately \$1,000.

e. \$5,000,000.

f. DELCORA does not have an estimate at this time of the amount that will be transferred from the Escrow Agreement to the Trust.

OCA-V-1 Attachment 1

SOURCES	
Purchase Price	\$276,500,000
Add Cash on Hand:	
Operating Cash	\$8,021,777
Debt Service Funds	\$2,639,999
Debt Service Reserve Funds	\$11,501,706
Renewal & Replacement Fund	\$32,114,700
Rate Stabilization Fund	\$9,021,335
LTCP Reserve	\$1,479,706
Revenue Fund	\$34,351,807
Sewer Reserve Fund	\$3,080,462
Sewer Repair and Replacement Fund	\$4,033,571
2016 Construction Fund	\$4,962,847
Total Cash on Hand at 12/31/2019*	\$111,200,000
Est. Additional Cash Generated from Rate Increases*	\$13,000,000
Total Sources	\$400,700,000

USES	
Total Debt Defeasance (January 2021)*	\$168,000,000
2020 Capital Projects*	\$22,000,000
Easement Escrow	\$5,000,000
Fund DELCORA Pension*	\$4,000,000
Fees & Leftover Funds for Trust Admin*	\$1,500,000
Total Uses	\$200,500,000

Deposit to Trust Fund*	\$200,200,000
-------------------------------	----------------------

*Subject to change

Respondent: John Pileggi
Date: August 12, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

THE COUNTY OF DELAWARE, PENNSYLVANIA

SET I INTERROGATORIES

COUNTY-I-2 Reference the above response to 1(d), if not stated therein, describe the purpose of DELCORA's "reasonable reserve" and all activities, obligations, or projects for DELCORA would require use or access to such reserve. What standards and criteria apply to the Trustee's oversight of the Trust funds to ensure the reserve is reasonable? Please explain.

RESPONSE:

After closing, DELCORA anticipates retaining a de minimus amount of money on hand to administer its obligations to oversee the Trust, which are delineated in the trust documents. The precise amount has not yet been determined. There are no anticipated reserves in the Trust, the Trust is to be used in its entirety for the benefit of customers.

Respondent: Robert Willert
Date: August 12, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

THE COUNTY OF DELAWARE, PENNSYLVANIA

SET I INTERROGATORIES

COUNTY-I-3 Reference the response to OCA-1-36(b) that explains the Trustee “is solely responsible for receiving, investing, maintaining, and distributing the funds contributed to the Trust by DELCORA for the benefit of the DELCORA customers.” Is the Trustee subject to any oversight? Please explain. If the Trustee is not capable of performing its duties or if the Trustee ceases to exist, is there a plan in place to facilitate a successor Trustee? If so, please explain the succession plan. If not, why not?.

RESPONSE:

Yes, the Trustee is subject to oversight by the Settlor (as defined under Section 1.1 of the Trust Agreement). Under Trust Agreement, the Settlor oversees the distributions (See Article 4, Section 4.1 of the Trust Agreement) and the investments made by the Trustee with respect to the Trust Fund (See Article 5, Sections 5.7 and 5.12 of the Trust Agreement). In addition, the Settlor has the power to remove and replace the Trustee after the 6th anniversary of the closing date of the sale of the sewer system currently owned and operated by DELCORA (See Article 5, Section 5.1 of the Trust Agreement).

Yes, there is a plan in place to facilitate a successor trustee (See Article 5, Section 5.1 of the Trust Agreement). If the Trustee resigns or the Trustee is removed by the Settlor, the Settlor will appoint a successor Trustee within 30 days after the expiration of a 90-day notice period. If the Settlor fails to appoint a successor trustee, the Trustee may secure the appointment of a successor trustee in any manner permitted by law. The resignation or removal of the Trustee will only become effective upon the appointment and qualification of the successor trustee.

Respondent: John Pileggi
Date: August 12, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

THE COUNTY OF DELAWARE, PENNSYLVANIA

SET I INTERROGATORIES

- COUNTY-I-4** Reference the response to OCA-1-36(c); please confirm the following:
- a. Will the payments due from the Trust be applied to offset DSIC charges?
 - b. If the response to 3(a) is yes, please confirm whether the current DELCORA customers, including wholesale customers and retail customers, would be subject to the DSIC following a transfer of the system to Aqua.
 - c. DELCORA states: "DELCORA will not directly make any payments to Aqua." Will DELCORA make any payments to Aqua that Aqua retains (and does not transfer back to customers in the form of bill credits)? If yes, please explain.

RESPONSE:

- a. Yes, however DSIC will not be applied until Aqua updates its Long-Term Infrastructure Improvement Plan per Section 1329 of the Public Utility Code.
- b. Yes. Please see the response to part a., above.
- c. No. Please also see the response to OCA-I-36(f).

Respondent: Robert Willert
Date: August 12, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

THE COUNTY OF DELAWARE, PENNSYLVANIA

SET I INTERROGATORIES

- COUNTY-I-5** Reference the response to OCA-1-36(d). The question requests confirmation of an agreement between Aqua and DELCORA confirming operation of the Trust, to which DELCORA responds “Yes. The Trust Agreement governs the Trustee and the operation of the Trust... .” Confirm the following:
- a. Is the referenced “Trust Agreement” the DELCORA Rate Stabilization Fund Trust Agreement between the Delaware County Regional Water Quality Control Authority, as Settlor, and Univest Bank and Trust Co. executed on December 27, 2020.
 - b. Does the Trust Agreement include a definition of a “Rate Stabilization Agreement to be entered into by and between the Settlor and Aqua Resources, with Aqua Wastewater as a designated third party Distribution Agent”
 - c. Have Aqua Resources or Aqua Wastewater entered into the “Rate Stabilization Agreement” defined in Article 1 of the Trust Agreement?
 - d. Is the Rate Stabilization Agreement defined in Article 1 of the Trust Agreement the draft Memorandum of Understanding appended to Aqua Statement No. 2?

RESPONSE:

- a. DELCORA notes that there is a typo in the question, as the Trust Agreement was executed on December 27, 2019. The Trust Agreement is the DELCORA Rate Stabilization Fund Trust Agreement Between Delaware County Regional Water Quality Control Authority, as Settlor, and Univest Bank and Trust Co. executed December 27, 2019.
- b. Yes, see Section 1.1, pg. 3 of the DELCORA Rate Stabilization Fund Trust Agreement between the Delaware County Regional Water Quality Control Authority, as Settlor, and Univest Bank and Trust Co.
- c. No, see the response to d., below.
- d. Yes but the Memorandum of Understanding is in draft form.

Respondent: Robert Willert
Date: August 12, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

THE COUNTY OF DELAWARE, PENNSYLVANIA

SET I INTERROGATORIES

- COUNTY-I-6** Reference the response to OCA-I-36(c), representing that “[t]he payment amount due from the Trust is the difference in authorized tariff rates and a 3 percent increase each year starting on the effective date of new rates of Aqua in the first base rate case that includes DELCORA customers following a sale of the system:
- a. Provide any and all documents related to the Trust that explicitly reference, identify, or establish the 3% percent annual increase limit.
 - b. Provide any proposed tariff provision referencing the 3% annual increase limit.
 - c. Provide and explain any other binding obligation requiring the Trust to disburse payments sufficient to preserve the 3% annual increase limit.

RESPONSE:

- a. None. To be clear, the Trust Agreement and the Trust’s sole purpose is to be used for customer assistance payments to be applied to DELCORA customer bills.
- b. None.
- c. To be clear, the Trust Agreement and the Trust’s sole purpose is to be used for customer assistance payments to be applied to DELCORA customer bills. The Memorandum of Understanding, included in Application Exhibit U2, Appendix B, is still in draft form and, if needed, that detail and information can be included in that document.

Respondent: Robert Willert
Date: August 12, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

THE COUNTY OF DELAWARE, PENNSYLVANIA

SET I INTERROGATORIES

- COUNTY-I-7** Reference the response to OCA-I-36(d), representing that the parties can update the MOU to include “checks and balances” of the commitment to the 3% annual increase limit if the Commission approves Aqua’s proposal to include a customer assistance payment on DELCORA customer bills.
- a. What document will govern the “checks and balances” if the Commission does not approve Aqua’s proposal to apply Trust disbursements as customer assistance payments on DELCORA customer bills?
- b. Is the 3% annual increase limit conditioned on approval of Aqua’s proposal to apply Trust disbursements as customer assistance payments on DELCORA customer bills?

RESPONSE:

- a. DELCORA signed an Asset Purchase Agreement with Aqua. DELCORA has decided to use the proceeds of the sale to be applied to DELCORA customer bills for the benefit of DELCORA customers. If the customer assistance payment cannot be included on DELCORA customer bills, DELCORA will explore different options whereby the Trust assets will be distributed directly to customers, consistent with the signed irrevocable Trust Agreement.
- b. No. Payments from the Trust to assist customers with payment toward their bill is designed for a 3% annual increase to customers is not conditioned on the approval of Aqua’s ability to put the customer assistance payment on the bill. However, this is Aqua and DELCORA’s proposal, provided in the Application and testimony. This proposal will benefit customers through the administrative ease of having the Trustee be able to direct the payments through customer bills.

Respondent: William C. Packer
Date: 8/10/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SOUTHWEST DELAWARE COUNTY MUNICIPAL AUTHORITY

SET I INTERROGATORIES

SWDCMA-I-4

For each contract or agreement identified in response to the previous question, please indicate the effect (if any) on the proposed transaction and purchase price if the municipality or municipal authority does not agree to the assignment, or otherwise agree to modify the contract or agreement.

RESPONSE

There will be no change to the purchase price if a municipality or municipal authority does not agree to the assignment of their contract. If the Commission approves the proposed transaction Aqua will be the certificated wastewater provider in the requested service territory. If a municipality does not agree to assign and amend their contract such that charges for service will be in accordance with Aqua's tariff, Aqua will continue to provide service to that entity; however, that entity may not be eligible to receive the benefit of the customer assistance payments from the DELCORA Customer Trust. The Company would operate under the provisions of its tariff.

Respondent: John Pileggi
Date: 8/10/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SOUTHWEST DELAWARE COUNTY MUNICIPAL AUTHORITY

SET I INTERROGATORIES

SWDCMA-I-8

Please state whether the “customer assistance payment” would apply to each of the following types of customers:

- a. Those who were retail customers of DELCORA on the date of the Asset Purchase Agreement
- b. Those who were wholesale customers of DELCORA on the date of the Asset Purchase Agreement where the wholesale customer agrees to the assignment of its contract to Aqua
- c. Those who were wholesale customers of DELCORA on the date of the Asset Purchase Agreement where the wholesale customer does not agree to the assignment of its contract to Aqua
- d. Those who become retail customers of DELCORA between the date of the Asset Purchase Agreement and the date of closing
- e. Those who become wholesale customers of DELCORA between the date of the Asset Purchase Agreement and the date of closing
- f. Those who become retail customers of Aqua in the former DELCORA service area after the date of closing
- g. Those who become wholesale customers of Aqua in the former DELCORA service area after the date of closing

RESPONSE

- a. Yes.
- b. Yes.
- c. Please see the response to SWDCMA-I-4.

d. Yes.

e. Yes.

f. Yes.

g. Yes.

Respondent: William C. Packer
Date: 7/10/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET II INTERROGATORIES

OCA-II-45 If it is allowed to acquire the DELCORA wastewater utility, how will Aqua treat the impact of repairs deductions related to the acquired wastewater utility? Will Aqua be flowing through (i.e., reducing current income tax expense) for the impact of tax deductions for capitalized book repair costs for the DELCORA wastewater utility? If not, explain fully why not, and show how Aqua will account for repairs deductions for the DELCORA wastewater utility.

RESPONSE

The Company expects to utilize flow-through accounting for the impact of repair deductions related to the assets of DELCORA. Prior to doing so however, the Company must complete a full assessment of the property relative to the IRS Tangible property regulations which takes several months to do and would be a post-closing activity. The Company would account for the deductions in a manner similar to that approved in the Company's most recent rate case Docket No. R-2018-3003561.

Respondent: William C. Packer
Date: 7/27/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET II INTERROGATORIES

OCA-II-3 DELCORA wastewater utility accounting details.

- a. What accounting records related to the DELCORA wastewater utility assets has Aqua obtained from DELCORA?
- b. To the extent not already included with the Application, identify and provide the accounting records identified in response to part a.

RESPONSE

Regarding parts a. and b., please refer to the attached depreciable asset listing as of 12/31/2018 provided to Aqua by DELCORA as OCA-II-3 Attachment 1. In addition, please see Exhibits J1 and J2 of the Application. Updated depreciable asset listing and audited financial statements became available after the Company's Application was filed. See OCA-I-2 and OCA-II-7.

Respondent: William C. Packer
Date: 7/10/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET II INTERROGATORIES

-
- OCA-II-7** DELCORA financial resources. Based on Aqua's knowledge of the DELCORA system and Aqua's due diligence investigation of the DELCORA wastewater utility system:
- a. At any time within the 10 year period ending December 31, 2019, has DELCORA been unable to replace wastewater utility infrastructure or make needed upgrades? If "yes" identify and explain each such occurrence.
 - b. At any time within the 10 year period ending December 31, 2019, has DELCORA been unable to obtain financing for the wastewater utility? If "yes" identify and explain each such occurrence.
 - c. At any time within the 10 year period ending December 31, 2019, has DELCORA been unable to obtain financing at reasonable cost for the wastewater utility? If "yes" identify and explain each such occurrence.
 - d. Identify the financings obtained during the 10 year period ending December 31, 2019 that were for or used for the wastewater utility. Show the amount of principal obtained, the applicable interest rate and the repayment schedules associated with each such financing.
 - e. During the 10 year period ending December 31, 2019 was the DELCORA wastewater utility cited for violation or non-compliance with environmental regulations? If so, please identify and describe each such instance of which Aqua is aware.

RESPONSE

- a. Not to the Company's knowledge.
- b. Not to the Company's knowledge.
- c. Not to the Company's knowledge.

- d. Please see Exhibit J1 and J2. After the Application was filed DELCORA's Audited Financial Statements for the year ended 12/31/2019 became available and are attached here as OCA-II-7 Attachment 1.
- e. The Company has provided 5 years of environmental compliance information in Application Exhibits N4 through N7 and O1 through O3.

**DELAWARE COUNTY REGIONAL
WATER QUALITY CONTROL AUTHORITY**

AUDITED FINANCIAL STATEMENTS

DECEMBER 31, 2019



CYNTHIA FREIZER LEITZELL, CPA
STELLA C. ECONOMIDIS, CPA

LEITZELL & ECONOMIDIS, PC
CERTIFIED PUBLIC ACCOUNTANTS

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY**

TABLE OF CONTENTS

	<u>Page</u>
MANAGEMENT'S DISCUSSION AND ANALYSIS.....	1-9
INDEPENDENT AUDITOR'S REPORT.....	10-12
STATEMENTS OF NET POSITION.....	13
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION	14
STATEMENTS OF CASH FLOWS.....	15
NOTES TO FINANCIAL STATEMENTS.....	16-34
 REQUIRED SUPPLEMENTARY INFORMATION	
SCHEDULES OF CHANGES OF NET PENSION LIABILITY AND RELATED RATIOS.....	35-37
 SUPPLEMENTAL INFORMATION	
SCHEDULES OF OPERATING REVENUES BUDGET COMPARISON.....	38
SCHEDULES OF OPERATING EXPENSES.....	39
SCHEDULE OF DEBT SERVICE SEWER REVENUE BONDS, 2007 SERIES.....	40
SCHEDULE OF DEBT SERVICE SEWER REVENUE BONDS, 2015 SERIES.....	41
SCHEDULE OF DEBT SERVICE SEWER REVENUE BONDS, 2016 SERIES.....	42

OCA-II-7 Attachment 1



CYNTHIA FEIZER LEITZELL, CPA
STELLA C. ECONOMIDIS, CPA

LEITZELL & ECONOMIDIS, PC
CERTIFIED PUBLIC ACCOUNTANTS

Page

SCHEDULE OF DEBT SERVICE SEWER REVENUE BONDS, 2017 SERIES.....43

SCHEDULE OF CASH RECEIPTS AND DISBURSEMENTS FUNDS
ESTABLISHED UNDER AN INDENTURE DATED JULY 15, 2001 AND TOTAL
CASH AND INVESTMENTS.....44

INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS
BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN
ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS.....45-46

OCA-II-7 Attachment 1

DELAWARE COUNTY REGIONAL WATER QUALITY CONTROL AUTHORITY

Management's Discussion and Analysis (Unaudited)

December 31, 2019

DELCORA Mission Statement

“Provide Environmentally Responsible and Cost Effective Waste Water Management Services to the Citizens, Businesses and Industries of Southeastern Pennsylvania”

Executive Summary

DELCORA's performance for the year ended December 31, 2019 includes the following key highlights:

- DELCORA is facing significant infrastructure improvements and increased expenses as a result of more stringent and costly environmental regulations. These significant additional costs would have led to large rate increases for all customers. For this reason, DELCORA sought a local partner with experience in large scale capital investment projects, an excellent reputation and close proximity to us. These factors led us to the proposed asset sale to Aqua Pennsylvania Wastewater, Inc. (Aqua)
- On September 17, 2019, DELCORA entered into an Asset Purchase Agreement with Aqua Pennsylvania Wastewater, Inc.
- On March 3, 2020, the Pennsylvania Public Utility Commission (PUC) conditionally accepted for filing the application of Aqua for approval to acquire the DELCORA wastewater system assets.
- On April 1, 2013, a fifteen-year agreement between the City of Philadelphia and DELCORA became effective. Due to the significant anticipated expenses from the increased environmental regulations facing Philadelphia and DELCORA's contractual proportionate share of those costs, it is DELCORA's intention to not renew the agreement when it reaches its term in 2028. Instead, DELCORA has initiated plans to redirect DELCORA's wastewater away from Philadelphia and send it to DELCORA's Western Regional Treatment Plant (W RTP). The design is scheduled to be completed in 2023 with construction completed in 2028. Please refer to Note 9 – Wastewater Treatment Agreement in the Notes to the Financial Statements for further details on the agreement.
- DELCORA entered into a Consent Decree (CD) with the United States Government in August 2015. The CD involves a Combined Sewer Overflow Long-Term Control Plan Update (CSO LT CPU) which evaluates the DELCORA's sewer systems according to United States Environmental Protection Agency (USEPA) requirements and guidance. The updated plan addresses all aspects of the Consent Decree issued to DELCORA by USEPA. Several capital projects are being implemented at significant costs to comply with the CD requirement. Also involved is the implementation of “Early Action Combined Sewer Overflow (CSO) Control Measures”. These measures achieve a reduction in CSO volume.
- Prior to this LT CPU, DELCORA has expended approximately \$150 million in capital improvements to address CSOs as planned in the original 1999 Long Term Control Plan. This update adds over \$120 million in life cycle costs to the prior and ongoing investment within an accelerated 10-year schedule.
- The Combined Sewer Overflow Long-Term Control Plan (CSO LT CP) Update Report and the Nine Minimum Controls Plan were submitted on February 17, 2019. Currently, the LT CP Team is awaiting comments from the USEPA / Pennsylvania Department of Environmental Protection (PA DEP) on the submittal of the LT CP Updated Report and the Updated Nine Minimum Controls.
- In 2019, DELCORA completed the replacement of the Bar Screens (4 pump stations) Project - Bar screens at the pump stations perform coarse debris removal. The bar screens at four major pump stations had seen dramatic increases in the required maintenance requirements. This

OCA-II-7 Attachment 1

project replaced the bar screens at the following pump stations: Central Delaware County Pump Station; Muckinipates Pump Station; Darby Creek Pump Station; and Chester Pump Station.

- DELCORA also initiated the design of several major projects in 2019. The largest is the design of a major program to redirect DELCORA's wastewater away from Philadelphia and send it to DELCORA's WRTP. The design is scheduled to be completed in 2023 with construction completed in 2028. Two other design projects are listed below. These relate to the Long Term Control Plan that has been submitted to EPA for approval.

Major Capital projects completed in 2019 included:

• Solids Handling Upgrade Construction	\$ 11,000,000
• HVAC Energy Upgrades – Phase 1	\$ 4,985,046
• Bar Screen Replacements	\$ 3,070,000
• Rehab 7 Siphons	\$ 2,675,000
• I-95 Combined Sewer Line Repair Work	\$ 1,198,000
• Marcus Hook Pump Station & Chester Ridley Creek Pump Station Electrical Upgrades	\$ 789,127

Major Projects in Progress in 2020

- | | |
|---|---------------|
| • 2018 WRTP Upgrades | \$ 22,220,000 |
| • HVAC Energy Upgrades – Phase 2 | \$ 1,149,670 |
| • WRTP Substation No. 2 Replacement | \$ 1,442,777 |
| • Springhill Farm WWTF Pump Station And Sanitary Force Main Project | \$ 678,847 |
| • Eastern Service Area Program | In-Design |
| • Crum Creek Pump Station Bypass Force Maim | In-Design |
| • CSO #5 Partial Separation | In-Design |
- DELCORA sent an average of 26.04 million gallons per day (MGD) in 2019 to the Philadelphia Water Department's (PWD) Treatment Plant vs. 26.41 MGD in 2018. Flow in 2019 at DELCORA's Western Regional Treatment Plant (WRTP) was 40.23 MGD vs. 39.18 MGD in 2018. Total flow in the East and West did not vary significantly in 2019 from 2018 despite a decrease in rainfall from 61.52 inches in 2018 to 47.33 inches in 2019, as a significant amount of 2018's rainfall occurred in late in 2018, resulting in high flow in the first half on 2019. Flow in the East and West both decreased significantly in the second half of 2019.
 - In 2019, revenue from the trucked waste receiving business reached \$6,414,861 an increase of \$1,664,861 (35.0%) over the 2019 budget and an increase of \$692,862 (12.1%) over the prior year. Part of the increase is associated with an overall average price increase of 3% in August of 2019. Revenue has consistently increased annually from a level of approximately \$300,000 in 2004 to the present level.

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY**

Management's Discussion and Analysis (Unaudited)
December 31, 2019

Summary of Organization and Business

The Delaware County Regional Water Quality Control Authority (DELCORA) is a body, politic and corporate, created October 20, 1971, by a resolution of the Council of the County of Delaware, Pennsylvania, the County, under an Act of General Assembly of the State, approved May 2, 1945, P.L. 382, as amended and supplemented, known as the Municipality Authorities Act of 1945, as amended (the "Act").

The governing body of DELCORA is a Board of Directors consisting of nine members appointed by the Delaware County Council. The Board is authorized to exercise any and all powers conferred by the aforementioned Act necessary for the acquisition, construction, improvement, extension, maintenance and operation of the system facilities. A Board Member's term is for 5 years. The terms of the Board members are staggered.

DELCORA does not have taxing power. Ongoing operations are funded from customer revenues. The acquisition and construction of capital assets are funded by capital borrowing, contributions from developers, Federal and State grants and loans, and customer revenues.

The system is divided into two regions: the Eastern Service Area and the Western Service Area. Each is served by a regional wastewater treatment plant. DELCORA is responsible for building and operating interceptors, force mains and pump stations in both regions, building the regional treatment plant in the Western Service Area and acquiring capacity at the Philadelphia Water Department's Southwest Water Pollution Control Plant (SW WPCP) for wastewater treatment for the Eastern Service Area. DELCORA currently owns and operates sewer collection systems serving eight municipalities: the City of Chester, parts of the Township of Chester, and the Boroughs of Parkside, Upland, Trainer, Marcus Hook, Rose Valley and Edgmont. In addition, DELCORA owns and operates 2 treatment plants in housing developments in Pocopson Township, Chester County.

DELCORA History & Background

- Late 1960's—Delaware County recognized the need for a regional wastewater management plan
- All 49 Municipalities designated the Delaware County Planning Commission to develop the plan
 - First phase (1971)—Identified problems, future needs, alternate solutions
 - Second Phase (1972)—Regional plan divided the county into Eastern and Western services areas
 - Eastern Flows (about 50MGD) conveyed to PWD's Southwest Water Pollution Control Plant
 - Western Flows consisting of mixed Municipal/Industrial Waste (Sun Oil, Scott Paper, FMC) conveyed to a new 44MGD, \$50MM plant in Chester
 - Federal construction grants (~\$100MM) utilized in Delaware County and the City of Philadelphia
- DELCORA was created by the County to implement the plan

OCA-II-7 Attachment 1

DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
Management's Discussion and Analysis (Unaudited)
December 31, 2019

Overview of Annual Financial Report

Management's Discussion and Analysis (MD&A) serves as an introduction to the basic financial statements and supplementary information. The MD&A represents management's analysis of DELCORA's financial condition and performance. Summary financial statement data, key financial and operational indicators from DELCORA's strategic plan, the current year budget, bond resolutions, and other management tools were used for this analysis.

The financial statements report information about DELCORA using full accrual accounting methods as utilized by similar business activities in the private sector.

The financial statements include a statement of net position; a statement of revenues, expenses, and changes in net position; a statement of cash flows; and notes to the financial statements. The statement of net assets presents the financial position of DELCORA on a full accrual historical cost basis. While the statement of net position provides information about the nature and amount of resources and obligations at year-end, the statement of revenues, expenses, and changes in net position presents the results of the business activities over the course of the fiscal year and the amounts by which the net assets changed during the year. All changes in net assets are reported concurrently with the occurrence of the underlying event giving rise to the change, regardless of the timing of the related cash flows. This statement also provides certain information about DELCORA's recovery of its costs.

The statement of cash flows reports changes in cash and cash equivalents resulting from operations, financing, and investing activities. This statement presents cash receipts and cash disbursement information, without consideration of the earnings event, the timing of any arising obligations, or depreciation of capital assets.

The notes to the financial statements provide required disclosures and other information that is essential to a full understanding of the financial data provided in the statements. The notes also present information about DELCORA's accounting policies, significant account balances and activities, material risks, obligations, commitments, contingencies and subsequent events, if any. Supplementary information comparing the budget to actual expenses, as well as statements of operating expenses, is also provided.

The financial statements were prepared by DELCORA's staff from the detailed books and records of DELCORA. The financial statements were audited and adjusted, if the adjustments were material, during the independent external audit process.

DELCORA uses the rate model developed by Municipal & Financial Services Group. Rate setting policies employ different methods of cost recovery not fully provided for by generally accepted accounting principles. The primary objective of a rate model is to improve upon the equitable allocation of costs among customer classes and to ensure that capital costs are allocated on the basis of long-term capacity needs, following the axiom that growth pays for growth.

OCA-II-7 Attachment 1

DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
Management's Discussion and Analysis (Unaudited)
December 31, 2019

Financial Analysis

The following comparative general information and condensed financial statements serve as the key financial data and indicators for management, monitoring and planning. Comments regarding budget-to-actual variances and actual year-to-year variances are included in each section by the name of the statement or account.

	2018	2019	Difference	%
<i>Revenues per thousand gallons billed:</i>				
Residential	\$2.63	\$2.82	.19	7.2
Commercial	\$2.64	\$2.81	.17	6.4
<i>Ratio of Operating Revenue to:</i>				
-Operating Expenses	1.32	1.31	(.01)	(0.8)
-Operating Expenses, net of depreciation	1.54	1.54	.00	0.0
-Total assets (asset turnover)	0.16	0.17	.01	6.2
<i>Ratio of Operating Income to:</i>				
-Operating Revenue	0.24	0.24	.00	0.0
<i>Debt-related ratios:</i>				
Total debt to total assets	0.45	.42	(.03)	(6.7)

Financial Results of System-wide Operations

- Total Liabilities	\$ 188,522,743
Long Term	\$ 172,252,455
Other	\$ 16,270,288
- Total Net Assets	\$ 197,904,415
Invested in capital assets (net of related debt)	\$ 100,754,217
Restricted for Debt Service	\$ 11,116,069
Unrestricted	\$ 86,034,129
- Revenues (By source)	
Commercial Industries	\$ 15,627,770
Residential	50,436,552
Total Operating Revenue	<u>\$ 66,064,322</u>

OCA-II-7 Attachment 1

DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
Management's Discussion and Analysis (Unaudited)
December 31, 2019

2019 Actual Compared to 2019 Budget Results:

	<u>Actual</u>	<u>Budget</u>	<u>Difference</u>	
Total Revenues	\$ 68,670,531	\$ 66,528,097	\$ 2,142,434	Favorable
Operating Expenses (Net of Depreciation and Debt Service)	\$ 42,869,486	\$ 44,189,788	\$ 1,320,302	Favorable

Total revenue is \$68,670,531, 3.2% higher than the budget of \$66,528,097, due to a favorable variance in sludge revenue of \$1,665,000 and a favorable variance of \$1,203,000 in interest income. These two favorable variances were partially offset by small variances in other operating revenue categories to get to the overall favorable variance of \$2,142,000.

Significant variances to budget in operating expenses are as follows:

PWD Treatment Costs – actual treatment costs were less than budget by \$1,296,000. Although flow approximated the budget, BOD and TSS readings were lower than the budget. In addition, DELCORA's share of the PWD Long Term Control Plan for 2019 was lower than anticipated.

Chemicals -- Total Chemicals was over budget by approximately \$425,000 or 42.9%, due to several factors. These include a substantial increase in the use of RAS chlorination due to process issues, a 30% increase in the price of polymer that was not in the budget, and the use of an un-budgeted chemical that was used to address H2S concentrations in the belt filter press room.

Solicitor and Consulting – These expenses were a combined \$570,000 or 78% over budget due to expenses associated with the Aqua merger, Consent Decree and the PWD contract.

OCA-II-7 Attachment 1

DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
Management's Discussion and Analysis (Unaudited)
December 31, 2019

2019 Actual Compared to 2018 Actual Results:

Operating Revenues and Expenses: DELCORA has various classes of wastewater customers depending on assets used in conveying flow to both the Philadelphia and Chester plants. Retail residential sewer rates increased from \$4.93 to \$5.32 per 1,000 gallons (a 7.9% increase) from calendar year 2018 to 2019. Retail Residential customers are Chester City, Chester Township, and the Boroughs of Parkside, Upland, Marcus Hook, Trainer, Rose Valley and Edgmont Township. Total operating revenues increased \$3,906,000 from 2018. This was primarily the result of increased Residential billing of \$500,000, an increase in Western Municipal Authorities of \$950,000, an increase in Eastern Authorities of \$1,540,000 and an increase of \$700,000 in outside hauling.

The following table shows the composition of wastewater operating expenses by major classification of expense for the last two fiscal years.

	2018	% of Total	2019	% of Total	Variance	% Change
PWD Plant Treatment	\$9,625,120	20.5%	\$9,890,358	19.6%	\$265,238	2.8%
Salary and Wages	12,396,648	26.4%	13,039,649	25.9%	643,001	5.2%
Depreciation and Amortization	6,588,896	14.0%	7,526,695	14.9%	937,799	14.2%
Utilities	2,529,871	5.4%	2,719,105	5.4%	189,234	7.5%
Pension	1,944,894	4.1%	2,128,575	4.2%	183,681	9.4%
Employee Benefits	4,648,744	9.9%	4,664,693	9.3%	15,949	0.3%
Solids Disposal	1,329,837	2.8%	1,240,682	2.5%	(89,155)	-6.7%
Repairs and Maintenance	2,778,617	5.9%	2,829,079	5.6%	50,462	1.8%
Engineering and Tech Services	198,361	0.4%	375,692	0.7%	177,331	89.4%
Legal Fees	172,119	0.4%	682,624	1.4%	510,505	296.6%
Minor Equipment and Supplies	2,915,007	6.2%	2,882,190	5.7%	(32,817)	-1.1%
Other Operating Expenses	1,836,288	3.9%	2,417,039	4.8%	580,751	31.6%
Total Operating Expenses	<u>\$46,964,402</u>	100.0%	<u>\$50,396,381</u>	100.0%	<u>\$3,431,979</u>	7.3%

PWD Treatment Costs -- 2019 treatment costs were higher than 2018 by 2.8% (\$265,238). Flow in 2019 to PWD was close to 2018. The increase was due to a price increase instituted by PWD.

Salaries and Wages -- Increased by 5.2% due to normal salary and wage increases of approximately 3.25% along with several positions added in 2019.

OCA-II-7 Attachment 1

Utilities – Increased by almost \$190,000 or 7.5% due primarily to higher natural gas usage. To reduce the chance of RTO short stack openings during the year, we purposely reduced RTO efficiency which resulted in higher natural gas usage.

Depreciation – Increased by \$938,000 or 14.2% from 2018 to 2019 due to a number of significant projects that have been completed and placed in service in both 2018 and 2019.

Cash Flow Activity

The following table shows DELCORA's ability to generate net operating cash. Net cash provided by operating activities is shown both in total dollars and as a percentage of operating revenues.

Net cash flow from operations increased by \$2,851,790 to \$18,764,868 in 2019 from 2018.

	2018	2019	Difference	% Change
Total operating revenues	\$62,157,984	\$66,064,322	\$3,906,338	6.3%
Net cash provided by operations	\$15,913,078	\$18,764,868	\$2,851,790	17.9%
Net operating cash as a % of operating revenue	25.6%	28.4%		

Rate Covenant

In the Bond Resolution, DELCORA covenants and agrees that it will, at all times, prescribe and maintain, and thereafter collect rates and charges for the services and facilities furnished by DELCORA, together with other income, that will yield annual income from operations before depreciation in the calendar year equal to at least one hundred ten percent (110%) of the sum of the annual debt service payments. The rate covenant in the Bond Resolution obligates DELCORA to review rates not less than once a year and to revise such rates and charges as necessary to meet the coverage test.

2019 Operations

WRTP—Water Quality Performance

- Average Suspended Solids - 15 mg/L for the year
- Average cBOD5 - 9 mg/L for the year
- Average cBOD20 % Removal – 96.4% for the year

WRTP—Solids Handling Performance

- Average Dry Tons/Day - 64.3 tons for the year
- Average Cake Solids - 22.3 % for the year
- Average Fuel Oil Usage – 4.87 MCF/Dry Ton for the year

Waste Water Conveyed and Treated

- Western Delaware County To WRTP, including 10.82 MGD from CDCA — ~ 40.23 MGD
- Eastern Delaware County To Philadelphia Southwest Treatment Plant— ~26.04 MGD

Environmental Compliance Issues and Capital Projects

In 2019, DELCORA continued the project called 2018 WRTP Upgrades. This is an expansive overhaul of many of the mechanical and electrical systems at WRTP. Most of the systems included in this project have been in-service since the construction of the WRTP in the mid-1970's. An example is the substations that supply electrical power to the treatment and pumping facilities. A life of 40 years is exceptional service-life for these components. Their decreased reliability indicates that replacement is needed to maintain uninterrupted permit compliance. Another example is the clarifier equipment. It was fabricated from steel. Some minor components were replaced approximately 20 years ago but the main/largest components date back to the original plant construction from 40 years ago. Over the years, minor repairs and recoating has extended the life, but they have now reached a point where repairs are

OCA-II-7 Attachment 1

not effective. The 2018 WRTP Upgrades Project includes replacement of these examples and many other components.

DELCORA's Monitoring and Modeling required by the DELCORA/USEPA/Pennsylvania Department of Environmental Protection Consent Decree has shown that high wet weather flows in the separate serviced areas result in Sanitary Sewer Overflows (SSOs) and contribute to increased CSO discharges. Projects planned under the LTCPU address the impact of CSO discharges as required by the Clean Water Act. However, while SSOs are reduced under the plan, the DELCORA/USEPA consent decree requires the elimination of SSOs. To address the Consent Decree, DELCORA will continue to monitor and model the hydraulically connected system to evaluate SSOs and identify additional areas where remediation is needed. While some of these areas in need of remediation are likely to be in a DELCORA owned system, it is known that there are significant areas in non-DELCORA owned satellite systems that will require investment to address SSOs.

Although monitoring and modeling studies show DELCORA is not causing Water Quality Standards to be exceeded, the plan includes further investment to reduce Combined Sewer Overflow (CSO) discharges and improve water quality. The investments include improvements to the collection system, the treatment plant and the implementation of green infrastructure that will provide multiple benefits to DELCORA customers. These improvements increase the level of system wide annual average wet weather flow capture to at least 90% of the total wet weather flow. This level of capture exceeds the Federal Clean Water Act requirements under USEPA's "Presumptive" approach.

TO CONTACT MANAGEMENT AND REQUESTS FOR INFORMATION

This financial report is designed to provide our clients, taxpayers, customers, investors and creditors with a general overview of the Organization's finances and to demonstrate DELCORA's accountability of its funds. If you have questions regarding this report or would like additional information, contact the Chief Financial Officer at 100 East 5th Street, Chester, Pennsylvania 19013.



CYNTHIA FREIZER LEITZELL, CPA
STELLA C. ECONOMIDIS, CPA

OCA-II-7 Attachment 1

LEITZELL & ECONOMIDIS, PC
CERTIFIED PUBLIC ACCOUNTANTS

INDEPENDENT AUDITOR'S REPORT

Board of Directors
Delaware County Regional Water Quality Control Authority
Chester, Pennsylvania

Report on the Financial Statements

We have audited the accompanying financial statements of the Delaware County Regional Water Quality Control Authority ("DELCORA"), as of and for the years ended December 31, 2019 and 2018, and the related notes to the financial statements, which collectively comprise DELCORA's financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



CYNTHIA FRIZER LEITZELL, CPA
STELLA C. ECONOMIDIS, CPA

OCA-II-7 Attachment 1

LEITZELL & ECONOMIDIS, PC
CERTIFIED PUBLIC ACCOUNTANTS

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Delaware County Regional Water Quality Control Authority as of December 31, 2019 and 2018 and the changes in financial position, and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and net pension liability historical information on pages 1-9 and 35 and 37 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audits were conducted for the purpose of forming an opinion on the Delaware County Regional Water Quality Control Authority's basic financial statements. The schedules of operating revenues-budget comparison, operating expenses, debt service and cash receipts and disbursements-trust funds established under an indenture dated July 15, 2001 and total investments are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The schedules of operating revenues-budget comparison, operating expenses, debt service and cash receipts and disbursements-trust funds established under an indenture dated July 15, 2001 are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedules of operating revenues-budget comparison, operating expenses, debt service and cash receipts and disbursements-trust funds established under an indenture dated July 15, 2001 is fairly stated in all material respects in relation to the basic financial statements as a whole.



CYNTHIA FELZER LEITZELL, CPA
STELLA C. ECONOMIDIS, CPA

OCA-II-7 Attachment 1

LEITZELL & ECONOMIDIS, PC
CERTIFIED PUBLIC ACCOUNTANTS

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated April 15, 2020, on our consideration of the Delaware County Regional Water Quality Control Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Delaware County Regional Water Quality Control Authority's internal control over financial reporting and compliance.

Leitzell & Economidis, PC

Leitzell & Economidis, PC
Media, Pennsylvania

April 15, 2020

OCA-II-7 Attachment 1

DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY
STATEMENTS OF NET POSITION
DECEMBER 31,

	2019	2018
ASSETS		
Current:		
Cash and cash equivalents	\$ 49,554,394	\$ 58,897,690
Investments	50,496,995	54,120,668
Receivables:		
Western Region		
Residential, net of allowance for doubtful accounts of \$110,333 and \$113,776 in 2019 and 2018, respectively	815,092	810,662
Municipal	2,219,787	1,884,022
Major industries	370,023	511,785
Permit industries	114,730	95,505
Notes receivable, current portion	77,814	75,255
Other receivables	1,852,846	1,966,965
Prepaid expenses	450,012	530,461
Total current assets	105,951,693	118,893,003
Non Current:		
Capital assets, net of accumulated depreciation	260,506,518	240,841,951
Notes receivable, net of current portion	1,673,971	1,751,785
Restricted cash and cash equivalents	4,757,706	1,741,419
Restricted investments	6,744,000	9,438,760
Total non current assets	273,682,195	253,773,915
DEFERRED OUTFLOWS OF RESOURCES		
Deferred expense on refunding	3,793,516	4,065,290
Pension plan related deferred outflows	4,598,710	4,172,616
Total assets and deferred outflows of resources	<u>\$ 388,026,114</u>	<u>\$ 380,904,824</u>
LIABILITIES		
Current liabilities:		
Accounts payable and accrued expenses	\$ 5,500,399	\$ 5,910,736
Payable to the City of Philadelphia	1,462,680	1,784,671
Current portion of long-term debt	6,383,067	6,142,895
Accrued bond interest payable	1,116,400	1,154,760
Advances on services		
Central Delaware County Authority	-	-
Muckinipates Authority	259,375	343,216
Darby Creek Joint Authority	652,075	559,963
Municipal	260,684	293,326
Major industries	514,777	482,172
Permit industries	120,831	109,323
Total current liabilities	16,270,288	16,781,062
Noncurrent		
Long term debt, net of current portion	158,332,081	164,715,148
Deferred revenue - Philadelphia rate stabilization	9,021,335	8,825,277
Net pension liability	3,068,684	3,407,987
Deferred compensation plan	350,649	214,870
Deferred revenue - long term control plan	1,479,706	1,440,301
Total non current liabilities	172,252,455	178,603,583
Total liabilities	<u>188,522,743</u>	<u>195,384,645</u>
DEFERRED INFLOWS OF RESOURCES		
Pension plan related deferred inflows	1,598,956	484,843
Total liabilities and deferred inflows of resources	<u>190,121,699</u>	<u>195,869,488</u>
NET POSITION		
Invested in capital assets, net of related debt	100,754,217	94,186,478
Restricted for debt service	11,116,069	11,114,826
Unrestricted	86,034,129	79,734,032
Total net position	<u>197,904,415</u>	<u>185,035,336</u>
TOTAL LIABILITIES AND NET POSITION	<u>\$ 388,026,114</u>	<u>\$ 380,904,824</u>

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION**

FOR THE YEARS ENDED DECEMBER 31,

	<u>2019</u>	<u>2018</u>
Operating revenues		
Western Region:		
Major Industries	\$ 7,056,587	\$ 6,817,336
Residential	8,532,868	8,044,641
Municipal	9,974,845	9,033,912
Contract operation fees	638,548	652,965
Permit Industries	1,517,774	1,498,561
Total Western Region	<u>27,720,622</u>	<u>26,047,415</u>
Eastern Region:		
Darby Creek Joint Authority	18,173,876	17,299,667
Central Delaware County Authority	9,638,024	9,152,096
Muckinipates Authority	4,116,939	3,936,807
Total Eastern Region	<u>31,928,839</u>	<u>30,388,570</u>
Sludge disposal and processing	6,414,861	5,721,999
Total operating revenues	<u>66,064,322</u>	<u>62,157,984</u>
Operating expenses, including depreciation of \$7,526,695 in 2019 and \$6,588,896 in 2018	<u>50,396,381</u>	<u>46,964,402</u>
Operating income	<u>15,667,941</u>	<u>15,193,582</u>
Nonoperating revenues (expense)		
Interest income	2,453,200	2,405,360
Interest expense	(6,808,997)	(6,888,255)
Bond premium amortization	1,322,852	1,341,976
Deferred cost on refunding amortization	(271,774)	(271,774)
Gain on asset disposition	-	7,847
Other income	153,009	151,074
Total non operating revenues (expense)	<u>(3,151,710)</u>	<u>(3,253,772)</u>
Net income before capital contributions	12,516,231	11,939,810
Capital contributions:	352,848	244,281
Net income	<u>12,869,079</u>	<u>12,184,091</u>
Net position - beginning	<u>185,035,336</u>	<u>172,851,245</u>
Net position - ending	<u><u>\$ 197,904,415</u></u>	<u><u>\$ 185,035,336</u></u>

The accompanying notes to the financial statements are an integral part of these statements.

OCA-II-7 Attachment 1

DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY
STATEMENTS OF CASH FLOWS

FOR THE YEARS ENDED DECEMBER 31,

	2019	2018
Cash flows from operating activities:		
Receipts from customers	\$ 65,707,551	\$ 61,823,371
Payments to suppliers	(26,869,325)	(26,911,160)
Payments to employees	(20,073,358)	(18,999,133)
Net cash provided by operating activities	<u>18,764,868</u>	<u>15,913,078</u>
Cash flows from capital and related financing activities:		
Acquisition and construction of capital assets	(27,263,712)	(37,949,513)
Collection of notes receivable	75,255	90,800
Gain on asset disposition	-	7,847
Other income	153,009	151,074
Interest paid	(6,847,097)	(6,926,355)
Repayment of long-term debt	(4,820,044)	(4,594,927)
Net cash used by capital and related financing activities	<u>(38,702,589)</u>	<u>(49,221,074)</u>
Cash flows from investing activities:		
Investments redeemed (purchased)	7,525,023	35,568,749
Investment interest received	2,863,222	2,043,466
Net cash provided by investing activities	<u>10,388,245</u>	<u>37,612,215</u>
Net increase (decrease) in cash and cash equivalents	(9,549,476)	4,304,219
Cash and cash equivalents - beginning	59,103,870	54,799,651
Cash and cash equivalents - ending	<u>\$ 49,554,394</u>	<u>\$ 59,103,870</u>
Reconciliation of operating income to net cash provided by operating activities:		
Net income	\$ 12,869,079	\$ 12,184,091
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	7,526,695	6,588,896
Amortization	(1,051,078)	(1,070,202)
Provision for doubtful accounts	102,494	61,782
Decrease (increase) in:		
Receivables:		
Residential	(4,430)	(24,349)
Municipal	(335,765)	(599,308)
Major industries	141,762	205,260
Permit industries	(19,225)	48,965
Note receivables	75,255	90,800
Other receivables	(295,903)	(571,356)
Prepaid expenses	80,449	(448,452)
Deferred compensation plan		
Deferred outflows/inflows - pension plan	688,019	(484,582)
Increase (decrease) in:		
Accounts payable and accrued expenses	(410,337)	27,200
Net pension liabilities	(339,303)	(170,644)
Payable to the City of Philadelphia	(321,991)	358,139
Deferred revenue - long term control plan	39,405	145,820
Advances on services	19,742	(428,982)
Net cash provided by operating activities	<u>\$ 18,764,868</u>	<u>\$ 15,913,078</u>

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 1 - Summary of Significant Accounting Policies

Nature of Operations - Delaware County Regional Water Quality Control Authority ("DELCORA") was created by the County Council of Delaware County, Pennsylvania, on October 20, 1971, pursuant to the Municipality Authorities Act of 1945. DELCORA has the power to construct, finance, operate and maintain sewer systems throughout Delaware County and adjacent areas included in its drainage basin.

Reporting Entity - The reporting entity has been defined in accordance with the criteria established in Statement 14 issued by the Governmental Accounting Standards Board (GASB) and as amended by GASB Statement 61. The specific criteria used in determining whether DELCORA should be included in another organization's financial reporting entity are financial accountability, fiscal dependency and legal separation.

As defined above, DELCORA should not be included in another organization's financial statements.

Basis of Presentation - DELCORA's financial statements are prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). The Governmental Accounting Standards Board (GASB) is responsible for establishing GAAP for state and local governments through its pronouncements (Statements and Interpretations).

DELCORA's accounts are organized as a governmental enterprise fund, and are used to account for operations (a) that are financed and operated in a manner similar to private business enterprises where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis are financed or recovered primarily through user charges; or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other purposes.

DELCORA distinguishes operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with DELCORA's principal ongoing operations. Operating revenues are charges to customers for services provided. Operating expenses include the cost of services, administrative expenses and depreciation of capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

Basis of Accounting - The financial statements are prepared on the accrual basis of accounting. Revenues are recognized when earned and expenses are recognized when incurred.

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 1 - Summary of Significant Accounting Policies (continued)

Use of Estimates The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reporting amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents - DELCORA considers all highly liquid investments purchased with original maturities of three months or less to be cash equivalents.

Statements of Cash Flows - For the purposes of the statements of cash flows, cash and cash equivalents are defined to be cash on hand, demand deposits, and highly liquid investments with a maturity of three months or less from the date of purchase (as noted above). For financial statement presentation purposes, cash and cash equivalents are shown accordingly. Investments include certificates of deposit with a maturity of over three months from the date of purchase.

Capital Assets - Capital assets have been financed primarily through proceeds from various bond issues, grants from the Environmental Protection Agency and funds generated from ongoing operations. Capital assets are recorded at cost. If actual cost could not be determined from available records, estimated historical cost was used.

Depreciation is computed using the straight-line method over the estimated useful lives of the related assets as follows:

Western Region Treatment	5 - 40	Years
Plant service lines	10 - 60	Years
Force mains pumping	10 - 40	Years
Stations	5 - 10	Years
Machinery and equipment	40	Years

Investments - Investments represent funds established under various trust indentures and secured sewer revenue bonds outstanding. Restricted investments are reserved for liquidation of specific obligations. Investments are stated at fair value.

Advances on Services - Advances on services represents user charges collected in excess of the user's respective share of operating expenses.

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 1 - Summary of Significant Accounting Policies (continued)

Vacation, Sick Leave and Other Compensated Absences - DELCORA employees are entitled to certain compensated absences based on their length of employment. Compensated absences are accrued when earned.

Allowance for Doubtful Accounts - Provisions for doubtful accounts are provided for on the reserve method based on historical experience and management's evaluation of outstanding residential receivables.

Deferred Outflows/Inflows of Resources - DELCORA reports decreases in net assets that relate to future periods as deferred outflows of resources in the statements of net position. DELCORA reports deferred outflows of resources for contributions made to the defined benefit pension plan between the measurement date of the net pension liability and DELCORA's year end. The statement of financial position also reports a section for deferred inflows of resources that represent an acquisition of net position that applies to a future period and so not be recognized as an inflow of resources (revenue) until that time. DELCORA reports deferred inflows of resources related to pension.

New Pronouncements

In 2018, DELCORA early adopted GASB Statement 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. The pronouncement establishes guidance designed to enhance the relevance and comparability of information about capital assets and the cost of borrowing for the reporting period. It also simplifies accounting for interest cost incurred before the end of a construction period. Such interest cost had previously been capitalized as part of the historical cost of a capital asset. Under this pronouncement, which is being applied prospectively, this interest cost should be recognized as an expense in the period in which the cost is incurred.

In 2019, DELCORA adopted GASB Statement 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*. This pronouncement establishes guidance designed to enhance debt-related disclosures in notes to financials statements including those addressing direct borrowings and direct placements. DELCORA does not have direct borrowings or direct placements or unused lines of credit and is in compliance with requisite disclosures pursuant to the pronouncements.

NOTE 2 - Deposits and Investments

Under Section 7.1 of the Pennsylvania Municipality Authorities Act and the Trust Indenture, DELCORA is permitted to invest funds consistent with sound business practices in the following types of investments:

- Obligations of the United States government or its agencies or instrumentalities;
- Obligations of the Commonwealth of Pennsylvania or any of its political subdivisions;
- Deposits in savings accounts or time deposits must be insured by the Federal Deposit Insurance Corporation (FDIC). For amounts above the insured limit, collateral must

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 2 - Deposits and Investments (continued)

- be pledged by the depository.
- Other investments as described in the Trust Indenture Agreement between DELCORA and TD Bank, N.A. dated July 15, 2001.

Deposits - As of December 31, 2019 and 2018, the carrying amount of the entity's deposits was \$9,496,028 and \$6,770,927, respectively.

All funds in the Pennsylvania Local Government Investment Trust ("PLGIT") are invested in accordance with the Pennsylvania Municipality Authorities Act. Each entity owns a prorated share of each investment or deposit which is held in the name of the fund. Other fixed-term investments purchased by the entity through the fund's administrator are purchased in the name of the entity. The balance of the funds as of December 31, 2019 and 2018 was \$48,695 and \$57,039, respectively, included in the deposits noted above.

Custodial Credit Risk - Deposits - Custodial credit risk is the risk that in the event of a bank failure, the entity's deposits may not be returned to it. The entity's investment policy limits the exposure to custodial credit risk by requiring all deposits in excess of federal depository insurance limits to be secured with collateralization pledged by the applicable financial institution. Of the deposits, \$548,695 was covered by federal depository insurance, inclusive. The remaining balance was uninsured and covered by collateral in accordance with the Intergovernmental Cooperation Act of 1972. The entity's certificates of deposit are in excess of three months maturity and are held in a Certificate of Deposit Account Registry program and are covered in their entirety by federal depository insurance.

Investments - The entity's investments are categorized as either (1) insured and registered, or securities held by the entity or its agent in the entity's name, (2) uninsured and unregistered, with securities held by the counterparty's trust department or agent in the entity's name, or (3) uninsured and unregistered with securities held by the counterparty, or by its trust department or agent but not in the entity's name.

All funds held in accordance with the Trust Indenture for the Sewer Revenue Bonds (see page 44) are invested in accordance with the Trust Indenture Agreement between DELCORA and TD Bank, N.A. dated July 15, 2001. The balance as of December 31, 2019 and 2018 was \$103,186,134 (including cash of \$6,164; certificates of deposit of \$16,865,583, PLGIT Term investments of \$72,075,000 PLGIT Arm of \$11,599,388 and repurchase agreements of \$2,639,999) and \$118,210,406 (including cash of \$997,665; certificates of deposit of \$24,792,948, PLGIT Term investments of \$72,681,248, PLGIT Arm of \$18,119,333 and repurchase agreements of \$1,619,212) respectively. Certificates of deposit are held in a PLGIT CD program and are covered in their entirety by federal depository insurance. These funds are included as part of the overall cash and cash equivalent and investments as shown in the chart on page 21.

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 2 - Deposits and Investments (continued)

Investments maturing in less than one year from original purchase are recorded at unamortized cost. Investments maturing beyond one year from original purchase are recorded at fair value.

Custodial Credit Risk - Investments - For an investment, custodial credit risk is the risk that in the event of the failure of the counterparty, the entity will not be able to recover the value of its investments or collateral security that are in the possession of an outside party. The entity has no investments subject to custodial credit risk.

Fair Value Measurement

The Authority's investments are measured and reported at fair value and are classified according to the following hierarchy:

Level 1—Investments reflect prices quoted in active markets

Level 2—Investments reflect prices that are based on a similar observable asset either directly or indirectly, which may include inputs in markets that are not considered to be active.

Level 3—Investments which reflect prices based on unobservable resources

The categorization of investments within the hierarchy is based upon the pricing transparency of the instrument and should not be perceived as the particular investment's risk.

The Authority considers all investments to be Level 1.

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 2 - Deposits and Investments (continued)

	2019	2018
Unrestricted cash and investments:		
Cash and cash equivalents		
Cash	\$ 9,496,028	\$ 6,770,927
PLGIT ARM	11,597,070	18,111,912
PLGIT CD	9,880,330	6,848,069
PLGIT TERM	18,575,000	27,158,092
TD Ameritrade	5,966	8,690
Cash and cash equivalents	<u>\$49,554,394</u>	<u>\$58,897,690</u>
Investments		
Certificates of deposit originally maturing beyond three months	\$ 4,752,312	\$ 15,262,119
PLGIT Term	42,760,000	37,033,156
Repurchase agreements	2,639,999	1,619,213
TD Ameritrade	344,684	206,180
Total investments	<u>\$50,496,995</u>	<u>\$54,120,668</u>
	2019	2018
Restricted cash and investments:		
Cash and cash equivalents		
PLGIT ARM	\$ 2,317	\$ 7,419
PLGIT Term	4,240,000	1,734,000
Certificates of deposit originally maturing less than three months	515,389	-
Cash and cash equivalents	<u>\$ 4,757,706</u>	<u>\$ 1,741,419</u>
Investments		
Certificates of deposit originally maturing beyond three months	\$ 244,000	\$ 1,713,760
PLGIT Term	6,500,000	7,725,000
Total investments	<u>\$ 6,744,000</u>	<u>\$ 9,438,760</u>

NOTE 3 - Capital Assets

As noted above, DELCORA in 2018 adopted GASB Statement 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. Capital assets at December 31, 2019 and 2018 included previously capitalized interest of \$2,595,820 included in the historical costs of the assets. These costs are depreciated over the lives of the projects. Interest incurred is expensed accordingly. During this period, interest expense totaled \$6,808,997.

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 3 - Capital Assets (continued)

Capital assets activity for the year ended December 31, 2019, is as follows:

	Balance 01/01/19	Additions	Deletions	Balance 12/31/19
Capital assets not being depreciated:				
Land and right of way	\$ 5,829,304	\$ -	\$ -	\$ 5,829,304
Construction in progress	57,541,531	25,430,498	(37,009,910)	45,962,119
Total capital assets not being depreciated	63,370,835	25,430,498	(37,009,910)	51,791,423
Capital assets being depreciated:				
Western Region Treatment Plant	138,331,549	30,021,878	-	168,353,427
Service lines and force mains	106,915,341	8,109,174	(72,450)	114,952,065
Pumping stations	40,303,863	118,412	-	40,422,275
Building and improvements	6,511,556	-	-	6,511,556
Machinery and equipment	5,296,974	593,660	(119,192)	5,771,442
Total capital assets being depreciated	297,359,283	38,843,124	(191,642)	336,010,765
Total capital assets	360,730,118	64,273,622	(37,201,552)	387,802,188
Accumulated depreciation				
Western Region Treatment Plant	69,237,711	3,366,399	-	72,604,110
Service lines and force mains	27,327,923	2,335,762	-	29,663,685
Pumping stations	18,588,881	1,024,557	-	19,613,438
Building and improvements	3,147,395	170,726	-	3,318,121
Machinery and equipment	1,586,257	629,251	(119,192)	2,096,316
Total accumulated depreciation	119,888,167	7,526,695	(119,192)	127,295,670
Capital assets, net of depreciation	\$ 240,841,951	\$ 56,746,927	\$ (37,082,360)	\$ 260,506,518

NOTE 4 - Notes Receivable

DELCORA had a note receivable from Folcroft Borough for renovations to a pump station. The note is being repaid over 20 years with installments of \$2,619 per month including interest at 5.25%. The balance of the note receivable was repaid in 2018 in the amount of \$18,018 (the amount remaining at December 31, 2017).

DELCORA has an additional note receivable from Edgmont Township established in 2016 in the amount of \$1,775,838 for payment of debt on its behalf to the Central Delaware County Authority. In 2017, additional debt was incurred bringing the balance of the note receivable to \$1,970,208.

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 4 - Notes Receivable (continued)

The note is being repaid over 20 years at the rate of 3.40% per annum, with anticipated payments of principal and interest of \$137,375 annually. Principal in the amount of \$75,255 was paid leaving a balance of \$1,751,785.

NOTE 5 - User Agreements

In accordance with a County-Wide Sewerage Facilities Plan (the "Plan") developed in 1972 and by orders of the Commonwealth of Pennsylvania Department of Environmental Protection, various municipal authorities and industries in Delaware County were ordered to negotiate with DELCORA for future treatment of sewage in its regional facilities.

The Plan divided the County into two sections: Eastern Service Region and Western Service Region. Eastern Service Region wastewater is treated in the upgraded and expanded Philadelphia Southwest Water Pollution Control Plant ("City Plant"). Western Service Region wastewater is treated at a regional plant constructed on the site of the former City of Chester Plant. The Central Delaware County Authority has the ability to flow to either plant.

In order to execute the Plan, DELCORA entered into service agreements with municipalities and major industries in DELCORA's service area. The agreements are for various terms up to 50 years.

NOTE 6 - Long-Term Debt

DELCORA's long-term debt consists of sewer revenue bonds, a note payable consisting of a Pennsylvania Infrastructure Investment Authority "Pennvest" note payable and deferred issuance premiums.

The long-term indebtedness is as follows:

	Original Indebtedness	Interest rate	Maturity Date	1/1/2019	New indebtedness	Principal/ Amortization	12/31/2019	Due in one year
Revenue Bond 2007	\$ 36,235,000	5.25%	05/01/25	\$ 19,910,000	\$ -	\$ 4,335,000	\$ 15,575,000	\$ 4,570,000
Revenue Bond 2015	36,205,000	.50-5.50%	5/1/2045	36,205,000	-	-	36,205,000	-
Revenue Bond 2016	52,855,000	5.00%	5/1/2046	52,855,000	-	-	52,855,000	-
Pennvest Note	10,038,785	1.06%	9/1/2031	6,586,878	-	485,044	6,101,834	490,216
Revenue Bond 2017	32,275,000	5.00%	5/1/2033	32,275,000	-	-	32,275,000	-
	<u>\$ 167,608,785</u>			<u>147,831,878</u>	<u>-</u>	<u>4,820,044</u>	<u>143,011,834</u>	<u>5,060,216</u>
Deferred issuance Premiums				<u>23,026,165</u>	<u>-</u>	<u>1,322,852</u>	<u>21,703,313</u>	<u>1,322,851</u>
				<u>\$ 170,858,043</u>	<u>\$ -</u>	<u>\$ 6,142,896</u>	<u>\$ 164,715,147</u>	<u>\$ 6,383,067</u>

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 6 - Long-Term Debt (continued)

Sewer Revenue Bond interest is payable on May 1st and November 1st.

Aggregate maturities and required sinking fund payments of long-term debt subsequent to December 31, 2019 are as follows:

Year ending December 31,	Principal	Interest	Principal and Interest	Issuance premiums	Total
2020	\$ 5,060,216	\$ 6,608,430	\$ 11,668,646	\$ 1,322,851	\$ 12,991,497
2021	5,315,442	6,358,716	11,674,158	1,322,851	12,997,009
2022	4,910,725	6,152,939	11,063,664	1,322,851	12,386,515
2023	5,131,063	5,930,001	11,061,064	1,322,851	12,383,915
2024	5,381,459	5,684,868	11,066,327	1,322,851	12,389,178
2025-2029	30,995,261	24,325,181	55,320,442	5,633,096	60,953,538
2030-2034	32,737,668	16,504,844	49,242,512	4,430,540	53,673,052
2035-2039	19,885,000	10,599,325	30,484,325	2,164,725	32,649,050
2040-2044	24,600,000	5,395,225	29,995,225	2,164,726	32,159,951
2045-2046	8,995,000	545,800	9,540,800	695,971	10,236,771
	<u>\$ 143,011,834</u>	<u>\$ 88,105,329</u>	<u>\$ 231,117,163</u>	<u>\$ 21,703,313</u>	<u>\$ 252,820,476</u>

The Sewer Revenue Bonds were issued pursuant to the Trust Indenture Agreement between DELCORA and TD Bank, NA, ("Trustee") dated July 15, 2001. TD Bank replaced Chase Manhattan Trust Company, NA., now known as JP Morgan Chase, who was the trustee under the previous indenture. Under the July 15, 2001 Indenture, DELCORA has pledged certain assets and agreed to covenants and conditions, the most significant of which are:

- Fix rates and rentals sufficient to cover the costs of operating the system;
- Pledge revenues to secure the outstanding bonds;
- Net Revenues at least equal to 100% of annual debt service requirements of all outstanding bonds exclusive of funds deposited into the revenue fund from the renewal and replacement fund;
- Net Revenues at least equal to 1.1 times the annual debt service requirements of all outstanding bonds;
- Establish certain funds to account for DELCORA activity; and,
- Maintain and operate the system in a sound and economical manner.

Management believes it has complied, in all material respects, with all covenants and requirements of the Indenture.

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 6 - Long-Term Debt (continued)

BOND REFUNDING

During 2007, DELCORA issued the Sewer Revenue Bonds, 2007 Series. The 2007 Series bonds were issued to provide funds to advance refund certain maturities of DELCORA's Series 2001 and Series 2004 bonds. Proceeds from the issuance of the 2007 Series bonds were deposited in an irrevocable trust with an escrow agent to provide for the debt service required for advance refunding of the bonds.

During 2017, DELCORA issued the Sewer Revenue Bonds, 2017 series. The proceeds of the 2017 Bonds, along with other available funds, were utilized to advance refund all of the outstanding 2013 Bonds as well as to pay for the costs and expenses of issuing the 2017 Bonds. The proceeds were deposited in an irrevocable trust with an escrow agent to provide for the debt service required for the advance refunding of the bonds.

NOTE 7 - Commitments and Contingencies

Commitments - DELCORA had construction commitments outstanding of \$14,100,877 and \$32,382,192 at December 31, 2019 and December 31, 2018, respectively.

DELCORA also has the following leases:

- A 60-month lease agreement for copiers in the amount of \$1,750 per month expiring May 31, 2022.
- Several cell tower leases at various locations for periods ending from December 31, 2019 through May 31, 2022.

Future operating lease payments as of December 31, 2019 are as follows:

2020	\$	44,145
2021		42,914
2022		30,664
	\$	<u>117,722</u>

Contingencies - DELCORA is involved in various claims and lawsuits, both for and against DELCORA, arising in the normal course of business. Management believes that any financial responsibility that may be incurred in settlement of such claims and lawsuits would not be material to DELCORA's financial position.

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 8 - Employee Retirement Plans

DEFINED BENEFIT PLAN

Plan Policies - For purposes of measuring net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, pension expense, and information about the Plan fiduciary net position have been determined on the same basis as they are reported by the Plan. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value. The change in liability resulting from a change of Plan provisions is recognized immediately in pension expense. The change in liability resulting from a change of assumptions is recognized in pension expense over a closed period equal to the average of the expected remaining service lives of all Plan participants (active and inactive). The change in liability resulting from differences between expected and actual experience is recognized in pension expense over a closed period equal to the average of the expected remaining services lives of all Plan participants (active and inactive). The change in net pension liability resulting from differences between projected and actual earnings on Plan assets is recognized in pension expense over a closed period of five years.

Certain assumption changes were made as of December 31, 2018 as a result of an experience study conducted in 2019 for calendar years 2014 through 2018.

Plan Description - Delaware County Regional Water Quality Control Authority Retirement Plan (the "Plan") is a single-employer defined benefit pension plan administered by DELCORA. The Plan provides early retirement, normal retirement, and disability benefits to plan members. Plan benefits were established under the terms of the plan document. The Plan allows amendments by DELCORA. The operation of the Plan is governed by the provisions of certain public employee laws under the Commonwealth of Pennsylvania Code which are administered by the Public Employee Retirement Commission of the Commonwealth of Pennsylvania.

Pension Benefits - Pension benefits are as follows:

Normal Retirement: A member is eligible upon attainment of age 65.

For salaried employees, the accrued benefit equals the sum of:

- (a) 1.50% of average applicable compensation multiplied by years of service completed on or after January 2, 2006;
- (b) 1.45% of average applicable compensation multiplied by years of service completed on or after January 2, 2004 and before January 2, 2006;
- (c) 1.35% of average applicable compensation multiplied by years of service completed on or after January 2, 2000 and before January 2, 2004; and
- (d) 1.50% of average applicable compensation multiplied by years of service completed prior to January 2, 2000;

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 8 - Employee Retirement Plans (continued)

For non-salaried employees, the accrued benefit equals the sum of:

- (a) 1.65% of average applicable compensation multiplied by years of service completed on or after January 2, 2006;
- (b) 1.60% of average applicable compensation multiplied by years of service completed on or after January 2, 2004 and before January 2, 2006; and
- (c) 1.50% of average applicable compensation multiplied by years of service completed prior to January 2, 2004;

Early Retirement: A member is eligible for a retirement benefit upon attainment of age 55 and the completion of ten years of service equal to the portion of the normal retirement benefit that has been accrued as of the participant's early retirement date, reduced by 5/16% for each month that the benefit commencement date precedes the normal retirement date.

Funding Policy - Pursuant to the plan document, DELCORA is required to contribute to the Plan from time to time amounts necessary to satisfy the applicable requirements of every relevant statute and expected to be sufficient on the basis of actuarial estimates to provide the benefits specified in the Plan. There is no required contribution rate of the employer in dollars or as a percentage of covered payroll. Active plan members are not required to contribute to the Plan. The Plan was amended in 2011 for technical compliance updates.

The annual contribution calculation was determined as part of the January 1, 2017 actuarial valuation. Funding requirements for the plan years 2018 and 2019 was established as part of the January 1, 2017 actuarial valuation. Entry Age Normal Actuarial Cost Method is used as the actuarial valuation method. The actuarial assumptions pursuant to the January 1, 2019 valuation included (a) interest rate of 7.0% compounded annually, (b) lump sum payments are valued based on the 15 year average of IRS section 417e segment rates of 3.0% for the first five years, 4.9% for the next fifteen years, and 5.70% for all years thereafter, (c) mortality rates are based on Pub-2010 General Amount Weighted Mortality Tables projected from 2010 with Mortality Improvement Scale MP-2019; for Lump Sum payments, the IRS section 417e applicable mortality table is used, (d) turnover (withdrawal) are based on Turnover Table T3, (e) salary increases of 4.00% per annum (f) the Level Dollar Open Method over an open period of 30 years is used to amortize the unfunded actuarial liability with a remaining amortization period of 10 years. The Plan amendment and restatement adopted in 2011 was considered in the valuation.

Act 205 requires full funding of the entry age normal cost plus Plan expenses, in addition to amortization of the unfunded liability to ultimately achieve a 100% funded status. The Plan's fiduciary net position is projected to be sufficient to make projected benefit payments for all future years. Hence, there is no "depletion date" and therefore the discount rate is equal to the assumed long-term rate of return of 7.0%.

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 8 - Employee Retirement Plans (continued)

Assets are valued at fair market value.

Pension Liabilities, Pension Expense, Pension Contributions, Plan Assets, Employees
Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

Plan membership as of December 31, 2019 was as follows:

Inactive employees or beneficiaries receiving benefits	16
Inactive employees entitled to but not yet receiving benefits	25
Active employees	133
Total employees covered	<u>174</u>

Custodial credit risk is the risk that in the event of a bank failure, the Plan's deposits may not be returned. At December 31, 2019, the carrying amount and the balance of the Plan's deposits in cash and cash alternatives totaled \$281,305 and was held with Ameritrade, of which \$250,000 was covered by FDIC insurance.

In accordance with Government Accounting Standards Board (GASB) No. 67, investments are reported at fair value. Unrealized gains and/or losses due to fluctuations in market value are recorded in the financial statements. Securities traded on national exchanges are valued at the last reported sales price. Realized gains or losses are recorded at the time of sale. Net appreciation or depreciation in the fair value of plan investments include both realized and unrealized gains and losses and related fees as well as investment. Plan investments at year end are as follows:

Ishares TIPS Bond ETF	\$ 927,431
Vanguard Total Bond Market Index Fund	2,400,996
Vanguard International Bond Index Fund	938,888
Vanguard AllWRLD Ex US	4,464,152
Vanguard Intermediate Term Corp Bond	463,226
Vanguard Mid Cap Index Fund	1,060,884
Vanguard Growth ETF	3,043,150
Vanguard Value ETF	2,996,370
Vanguard Small Cap Index Fund	1,028,624
	<u>17,323,721</u>
Cash and cash equivalents/mutual funds	623,174
	<u>\$ 17,946,895</u>

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 8 - Employee Retirement Plans (continued)

Pension fund investments, pursuant to Government Accounting Standards Board Statement Nos. 3 and 40, are categorized to give an indication of the level of risk assumed by the Plan at December 31, 2019. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the Plan and are held by either counterparty or the counterparty's trust department or agent but not in the Plan's name. Custodial credit risk is the risk that, in the event of the failure of the counterparty, the Plan will not be able to recover the value of its investments or collateral securities in the possession of an outside party.

The securities are registered in the name of the Plan; thus, they are not subject to credit risk. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment or deposit. Generally, the longer the maturity of an investment, the greater sensitivity of its fair value to changes in market interest rates. The Board has no formal policy that limits investment maturities as a means of managing its exposure to interest rate risk. The Board has, however, adopted a long-term investment policy to weigh the chances and duration of investment losses against the long-term potential for appreciation of assets. Investments in mutual funds and certain investment pools are excluded from this requirement.

The Plan's investment policy regarding the allocation of invested assets is established and may be amended by the Plan's Board by a majority vote of its members. The policy of the Board is to pursue an investment strategy that reduces risk through prudent diversification among its asset classes given the Plan's liability structure. Following is the Board's adopted asset allocation policy as of December 31, 2019:

<u>Asset Class</u>	<u>Target Allocation</u>
Equities	70.00%
Fixed Income	27.00%
Cash	3.00%

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 8 - Employee Retirement Plans (continued)

The long-term expected rate of return on pension plan investments was determined using a method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.. The long-term rate of return on assets is expected to be approximately 6.65 percent per year before inflation factor of 2.25%. The net blended rate representing the real rate of return, inclusive of inflation and net of plan expenses was 4.10%. Long term expected real rate of return was as follows:

Asset Class	Long-Term Expected Real Rate of Return
Equities	5.78%
Fixed Income	1.35%
Cash	-0.31%
Total Gross Blended Return	4.40%
Less: Plan Expenses	0.30%
Total Net Blended Return	4.10%

For the year ended December 31, 2019, the annual rate of return on the pension plan investments, net of pension investment expense was 21.41%. The rate of return is calculated net of investment expense, adjusted for the changing amounts actually invested.

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 8 - Employee Retirement Plans (continued)

DELCORA recognized defined benefit pension expense in the amount of \$1,988,715 and \$1,944,894 for the years ended December 31, 2019 and 2018, respectively. At December 31, 2019, DELCORA reported deferred outflows of resources and deferred inflows of resources related to the pension as follows:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 1,294,165	\$ 45,403
Changes in assumptions	3,304,545	374,621.00
Net differences between projected and actual earnings on pension plan investments	<u>-</u>	<u>1,178,932</u>
	<u>\$ 4,598,710</u>	<u>\$ 1,598,956</u>

Future recognition of deferred outflows and inflows in pension expense	<u>Fiscal Year</u>	<u>Amount Recognized</u>
	2020	\$ 521,538
	2021	\$ 555,106
	2022	\$ 844,840
	2023	\$ (57,603)
	2024	\$ 318,006
	Thereafter	\$ 817,867

Sensitivity of Net Pension Liability to Changes in Discount Rate:

	1% Decrease 6.00%	Current Rate 7.00%	1% Increase 8.00%
Net pension liability	<u>\$4,531,804</u>	<u>\$3,068,684</u>	<u>\$1,753,126</u>

Defined Contribution Plan

DELCORA established the Delaware County Regional Water Quality Control Authority Defined Contribution Plan (401a Plan) in 2000 covering all salaried employees. Employer contributions were \$139,860 and \$127,224 for the years ended December 31, 2019 and 2018, respectively. DELCORA matches employee contributions up to 1.5% with an additional year end match of 1.5% of employee's payroll.

Additionally, all employees are eligible to contribute into a 457 Plan.

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 8 - Employee Retirement Plans (continued)

DELCORA also provides a deferred compensation Section 409(a) Plan for certain employees. Compensation for the participants in the Plan is earned in one year, but is paid in a future year. This is considered a nonqualified deferred compensation plan. The funds remain within DELCORA and represents a liability on DELCORA's balance sheet shown on these financial statements as \$350,649 and \$214,870 for 2019 and 2018, respectively.

NOTE 9 - Wastewater Treatment Agreement

In 1974, DELCORA entered into a thirty-year agreement with the Philadelphia Water Department (the City") to pay the City for treatment of wastewater sent to the Southwest Philadelphia plant based on its proportionate share of the City's operating costs. The agreement with the City was extended until 2011.

In July 2011, DELCORA signed an agreement with the City for treatment of the flows. The term was for the longer of either two years or one year after DELCORA received information about the City's Long-Term Control Plan (LTCP). The agreement was considered a bridge toward a long-term agreement.

There remained a need for the determination by the City of DELCORA's proportionate share of the \$4 billion in estimated costs over twenty-five years for the implementation of the City's LTCP. The flow capacity thresholds in the contract had remained the same as the 1974 agreement. The management fee had been increased from 10% to 12%. The contract also included a different method for accounting for DELCORA's share of the City's capital costs, i.e., the depreciation and return on investment method.

On April 1, 2013, a fifteen-year agreement between the City and DELCORA became effective. Many of the terms of the July 2011 agreement remain in effect. DELCORA has received an estimate of its proportionate share of LTCP costs for which in 2015 municipal revenue was deferred and is shown on these statements as deferred revenue - long term control plan. Additional deferred revenue relative to Philadelphia is represented by the deferred revenue - rate stabilization for which a portion of revenues are deferred to protect from unanticipated or precipitous charges from Philadelphia.

NOTE 10 – Delaware County Long-Term Control Plan Update

The Combined Sewer Overflow Long-Term Control Plan (CSO LTCP) Update Report and the Nine Minimum Controls Plan was submitted on February 17, 2019 to meet a Consent Decree and regulatory requirements requiring the implementation of "early action combined sewer overflow" (CSO) measures designed to achieve a reduction in CSO volume. Currently the LTCP Team is awaiting comments from the USEPA / PADEP on the submittal of the LTCP Updated Report and the Updated Nine Minimum Controls.

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 10 – Delaware County Long-Term Control Plan (continued)

This Update (LTCPU) has evaluated the Delaware County Regional Water Quality Control Authority's (DELCORA's) sewer systems according to United States Environmental Protection Agency (USEPA) requirements and guidance. The final plan addresses all aspects of the Consent Decree issued to DELCORA by USEPA. Although monitoring and modeling studies show DELCORA is not causing Water Quality Standards to be exceeded, the plan includes further investment to reduce Combined Sewer Overflow (CSO) discharges and improve water quality. The investments include improvements to the collection system, the treatment plant and the implementation of green infrastructure that will provide multiple benefits to DELCORA customers. These improvements increase the level of system wide annual average wet weather flow capture to over 90% of the total wet weather flow. This level of capture exceeds Federal Clean Water Act requirements under USEPA's "Presumption" approach.

Prior to this LTCPU, DELCORA has expended approximately \$150 million in capital improvements to address CSOs as planned in the original 1999 Long Term Control Plan. This update adds over \$120 million in life cycle costs to the prior and ongoing investment within an accelerated 10-year schedule. This additional investment is affordable if other program costs do not increase significantly.

DELCORA Monitoring and Modeling required by the DELCORA/USEPA/Pennsylvania Department of Environmental Protection Consent Decree has shown that high wet weather flows in the separate serviced areas result in Sanitary Sewer Overflows (SSOs) and contribute to increased CSO discharges. Projects planned under the LTCPU address the impact of CSO discharges as required by the Clean Water Act. However, while SSOs are reduced under the plan, the DELCORA/USEPA consent decree requires the elimination of SSOs. To address the Consent Decree, DELCORA will continue to monitor and model the hydraulically connected system to evaluate SSOs and identify additional areas where remediation is needed. While some of these areas in need of remediation are likely to be in a DELCORA owned system, it is known that there are significant areas in non-DELCORA owned satellite systems that will require investment to address SSOs and remain cost effective.

NOTE 11 - Asset Purchase Agreement

On September 17, 2019, DELCORA entered into an asset purchase agreement with Aqua Pennsylvania Wastewater, Inc ("Aqua"). through which Aqua will acquire all assets and assume all liabilities as specified in the agreements. The purchase price shall be \$276,500,000. The sale proceeds are to be used to pay outstanding debt with the balance to be reinvested by DELCORA in a rate stabilization plan. Such plan intends that the proceeds of the sale will be utilized to offset future customer bill increases. The sale requires and is pending approval by the Pennsylvania Public Utility Commission.

OCA-II-7 Attachment 1

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 12 – Subsequent Events

DELCORA has evaluated subsequent events through April 15, 2020, which represents the date on which the financial statements were available to be issued.

REQUIRED SUPPLEMENTARY INFORMATION

OCA-II-7 Attachment 1

DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES OF NET PENSION LIABILITY AND RELATED RATIOS

	2014	2015	2016	2017	2018	2019
<i>Total Pension Liability</i>						
Service cost	\$ 433,832	\$ 451,185	\$ 647,770	\$ 743,624	\$ 833,107	\$ 928,895
Interest	962,400	982,877	1,321,748	1,345,004	1,236,708	1,350,242
Changes in benefit terms	-	-	-	-	(4,914)	181
Differences between expected and actual experience	183,182	465,714	-	384,396	(59,417)	962,659
Changes in assumptions	-	4,170,435	-	1,012,254	(490,245)	1,158,057
Benefit payments	(664,651)	(1,260,137)	(1,994,115)	(2,079,637)	(3,272,141)	(1,806,164)
Net change in total pension liability	914,763	4,810,074	(24,597)	1,405,641	(1,756,902)	2,593,870
Total pension liability - beginning	13,072,730	13,987,493	18,797,567	18,772,970	20,178,611	18,421,709
Total pension liability - ending	\$ 13,987,493	\$ 18,797,567	\$ 18,772,970	\$ 20,178,611	\$ 18,421,709	\$ 21,015,579
<i>Plan Fiduciary Net Position</i>						
Contributions - Authority	\$ 1,150,000	\$ 4,450,000	\$ 2,168,616	\$ 1,711,040	\$ 2,600,000	\$ 1,640,000
Contributions - Employee	-	-	-	-	-	-
Net investment income	678,120	33,319	1,146,717	2,466,801	(867,963)	3,147,159
Benefit payments	(664,651)	(1,260,137)	(1,994,115)	(2,079,637)	(3,272,141)	(1,806,164)
Other	-	-	-	-	-	-
Administrative expense	(27,963)	(31,155)	(40,406)	(46,438)	(46,154)	(47,822)
Net change in fiduciary net position	1,135,506	3,192,027	1,280,812	2,051,766	(1,586,258)	2,933,173
Plan fiduciary net position - beginning	8,939,869	10,075,375	13,267,402	14,548,214	16,599,980	15,013,722
Plan fiduciary net position - ending	\$ 10,075,375	\$ 13,267,402	\$ 14,548,214	\$ 16,599,980	\$ 15,013,722	\$ 17,946,895
Net pension liability - ending	\$ 3,912,118	\$ 5,530,165	\$ 4,224,756	\$ 3,578,631	\$ 3,407,987	\$ 3,068,684

OCA-II-7 Attachment 1

DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES OF NET PENSION LIABILITY AND RELATED RATIOS (continued)

	2014	2015	2016	2017	2018	2019
Plan fiduciary net position as a percentage of total pension liability	72.03%	70.58%	77.50%	82.27%	81.50%	85.40%
Covered employee payroll	\$ 7,435,831	\$ 7,470,137	\$ 8,516,891	\$ 8,900,803	\$ 9,160,776	\$ 9,686,532
Authority's net pension liability as a percentage of covered payroll	52.61%	74.03%	49.60%	40.21%	37.20%	31.68%
Annual money-weighted rate of return net of investment expense	7.25%	0.79%	8.54%	16.59%	-5.69%	21.41%

SCHEDULE OF INVESTMENT RETURNS

	2014	2015	2016	2017	2018	2019
Annual money-weighted rate of return net of investment expense	7.25%	0.79%	8.54%	16.59%	-5.69%	21.41%

SCHEDULE OF CONTRIBUTIONS

	2013	2014	2015	2016	2017	2018	2019
Actuarial determined contribution	\$ 542,957	\$ 699,671	\$ 830,001	\$ 1,693,616	\$ 1,711,041	\$ 1,593,018	\$ 1,640,000
Actual employer contribution	1,100,000	1,150,000	4,450,000	2,168,616	1,711,040	2,600,000	1,640,000
Contributions deficiency (excess)	\$ (557,043)	\$ (450,329)	\$ (3,619,999)	\$ (475,000)	\$ 1	\$ (1,006,982)	\$ -

OCA-II-7 Attachment 1

DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN NET PENSION LIABILITY

	Total Pension Liability	Plan Fiduciary Net Position	Net Pension
Balances at December 31, 2018	\$ 18,421,709	\$ 15,013,722	\$ 3,407,987
Changes for the year:			
Service cost	928,895	-	928,895
Interest	1,350,242	-	1,350,242
Change in benefit terms	181	-	181
Changes of assumptions	1,158,057	-	1,158,057
Differences between expected and actual	962,659	-	962,659
Contributions - employer	-	1,640,000	(1,640,000)
Net investment income	-	3,147,159	(3,147,159)
Benefit payments	(1,806,164)	(1,806,164)	-
Administrative expense	-	(47,822)	47,822
Net changes	2,593,870	2,933,173	(339,303)
Balances at December 31, 2019	\$ 21,015,579	\$ 17,946,895	\$ 3,068,684

OCA-II-7 Attachment 1

SUPPLEMENTAL INFORMATION

OCA-II-7 Attachment 1

SUPPLEMENTAL INFORMATION

DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY

SCHEDULE OF OPERATING REVENUES
BUDGET COMPARISON

	ACTUAL 2019	BUDGET 2019	FAVORABLE (UNFAVORABLE) VARIANCE
WESTERN REGION			
Residential	\$ 8,532,868	\$ 8,691,163	\$ (158,295)
Major industry:			
Kinberly-Clark	3,793,405	4,024,125	(230,720)
Monroe Energy	435,249	188,754	246,495
Sun Refining and Marketing Co.	2,827,933	3,111,990	(284,057)
Total major industry	7,056,587	7,324,869	(268,282)
Municipal:			
Brookhaven	702,565	723,991	(21,426)
Eddystone	386,209	388,360	(2,151)
Lower Chichester	506,908	485,450	21,458
Middletown Authority	1,976,711	1,939,464	37,247
Nether Providence	1,003,261	1,024,687	(21,426)
South West Delaware County Authority	3,316,047	2,909,196	406,851
Southern Delaware County Authority	2,083,144	2,135,980	(52,836)
Total Municipal	9,974,845	9,607,128	367,717
Permit industries:			
Ace Linen	162,426	102,720	59,706
Boeing	113,621	121,363	(7,742)
Braskem	200,500	223,440	(22,940)
Congoleum	23,141	28,248	(5,107)
Delaware County Linen	26,896	53,607	(26,711)
Florida Power & Light	421,291	342,216	79,075
Harrah's Casino	53,105	55,860	(2,755)
Liberty Electric	238,772	357,210	(118,438)
Exelon	5,702	10,548	(4,846)
The P.Q. Corporation	106,396	128,400	(22,004)
Other	165,924	18,962	146,962
Total permit industries	1,517,774	1,442,574	75,200
Contract operation fees	638,548	410,000	228,548
Total Western Region	27,720,622	27,475,734	244,888
EASTERN REGION			
Authority:			
Central Delaware County Authority	9,638,024	9,619,575	18,449
Darby Creek Joint Authority	18,173,876	18,781,075	(607,199)
Muckinipates Authority	4,116,939	4,351,713	(234,774)
Total Eastern Region	31,928,839	32,752,363	(823,524)
Sludge disposal and processing	6,414,861	4,750,000	1,664,861
Total operating revenues	\$ 66,064,322	\$ 64,978,097	\$ 1,086,225

OCA-II-7 Attachment 1

SUPPLEMENTAL INFORMATION

**DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY
SCHEDULES OF OPERATING EXPENSES**

FOR THE YEARS ENDED DECEMBER 31,

	2019	2018
Advertising	\$ 11,204	\$ 25,799
Consulting	620,166	270,054
Depreciation	7,526,695	6,588,896
Dues and conferences	90,904	73,574
Employee benefits	4,664,693	4,648,744
Engineering and tech services	375,692	198,361
Insurance	872,874	797,348
Minor equipment and supplies	2,882,190	2,915,007
Office	124,791	130,418
Other contracted services	594,606	477,313
Pension	2,128,575	1,944,894
Philadelphia Plant Treatment costs	9,890,358	9,625,120
Provision for doubtful accounts	102,494	61,782
Repairs and maintenance	2,829,079	2,778,617
Salaries and wages	13,039,649	12,396,648
Solicitor	682,624	172,119
Solids disposal	1,240,682	1,329,837
Utilities	2,719,105	2,529,871
Total operating expenses	<u>\$ 50,396,381</u>	<u>\$ 46,964,402</u>

OCA-II-7 Attachment 1

SUPPLEMENTAL INFORMATION

**DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY**

**SCHEDULE OF DEBT SERVICE
SEWER REVENUE BONDS, 2007 SERIES**

<u>Year Ending December 31,</u>	<u>Coupon</u>	<u>Principal Maturity</u>	<u>Interest</u>	<u>Total Debt Service</u>
2020	5.25%	\$ 4,570,000	\$ 697,725	\$ 5,267,725
2021	5.25%	4,820,000	451,237	5,271,237
2022	5.25%	1,425,000	287,306	1,712,306
2023	5.25%	1,505,000	210,394	1,715,394
2024	5.25%	1,585,000	129,281	1,714,281
2025	5.25%	1,670,000	43,838	1,713,838
Total		<u>\$ 15,575,000</u>	<u>\$ 1,819,781</u>	<u>\$ 17,394,781</u>

OCA-II-7 Attachment 1

SUPPLEMENTAL INFORMATION

DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY

SCHEDULE OF DEBT SERVICE
SEWER REVENUE BONDS, 2015 SERIES

Year Ending December 31,	Coupon	Principal Maturity	Interest	Total Debt Service
2020	2.500%	\$ -	\$ 1,637,394	\$ 1,637,394
2021	2.500%	-	1,637,394	1,637,394
2022	2.500%	835,000	1,626,956	2,461,956
2023	5.000%	870,000	1,594,769	2,464,769
2024	5.000%	915,000	1,550,144	2,465,144
2025	5.000%	975,000	1,502,894	2,477,894
2026	5.000%	1,010,000	1,453,269	2,463,269
2027	5.000%	1,060,000	1,401,519	2,461,519
2028	5.000%	1,115,000	1,347,144	2,462,144
2029	5.000%	1,170,000	1,290,019	2,460,019
2030	3.375%	1,220,000	1,240,181	2,460,181
2031	3.375%	1,265,000	1,198,247	2,463,247
2032	5.000%	1,320,000	1,143,900	2,463,900
2033	5.000%	1,385,000	1,076,275	2,461,275
2034	5.000%	1,455,000	1,005,275	2,460,275
2035	5.000%	1,530,000	930,650	2,460,650
2036	5.000%	1,610,000	852,150	2,462,150
2037	5.000%	1,695,000	769,525	2,464,525
2038	5.000%	1,780,000	682,650	2,462,650
2039	5.000%	1,870,000	591,400	2,461,400
2040	5.000%	1,965,000	495,525	2,460,525
2041	4.000%	2,055,000	405,300	2,460,300
2042	4.000%	2,140,000	321,400	2,461,400
2043	4.000%	2,230,000	234,000	2,464,000
2044	4.000%	2,320,000	143,000	2,463,000
2045	4.000%	2,415,000	48,300	2,463,300
Total		<u>\$ 36,205,000</u>	<u>\$ 26,179,280</u>	<u>\$ 62,384,280</u>

OCA-II-7 Attachment 1

SUPPLEMENTAL INFORMATION

DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY

SCHEDULE OF DEBT SERVICE
SEWER REVENUE BONDS, 2016 SERIES

Year Ending December 31,	Coupon	Principal Maturity	Interest	Total Debt Service
2020		\$ -	\$ 2,597,200	\$ 2,597,200
2021		-	2,597,200	2,597,200
2022	5.00%	1,185,000	2,597,200	3,782,200
2023	5.00%	1,245,000	2,537,950	3,782,950
2024	5.00%	1,305,000	2,475,700	3,780,700
2025	5.00%	1,370,000	2,410,450	3,780,450
2026	5.00%	1,440,000	2,341,950	3,781,950
2027	5.00%	1,515,000	2,269,950	3,784,950
2028	5.00%	1,585,000	2,194,200	3,779,200
2029	5.00%	1,670,000	2,114,950	3,784,950
2030	5.00%	1,755,000	2,031,450	3,786,450
2031	5.00%	1,835,000	1,943,700	3,778,700
2032	5.00%	1,930,000	1,851,950	3,781,950
2033	5.00%	2,025,000	1,755,450	3,780,450
2034	5.00%	2,125,000	1,654,200	3,779,200
2035	4.00%	2,230,000	1,547,950	3,777,950
2036	4.00%	2,325,000	1,458,750	3,783,750
2037	5.00%	2,170,000	1,365,750	3,535,750
2038	5.00%	2,280,000	1,257,250	3,537,250
2039	5.00%	2,395,000	1,143,250	3,538,250
2040	5.00%	2,515,000	1,023,500	3,538,500
2041	5.00%	2,640,000	897,750	3,537,750
2042	5.00%	2,770,000	765,750	3,535,750
2043	5.00%	2,910,000	627,250	3,537,250
2044	5.00%	3,055,000	481,750	3,536,750
2045	5.00%	3,210,000	329,000	3,539,000
2046	5.00%	3,370,000	168,500	3,538,500
Total		\$ 52,855,000	\$ 44,439,950	\$ 97,294,950

OCA-II-7 Attachment 1

SUPPLEMENTAL INFORMATION

DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY

SCHEDULE OF DEBT SERVICE
SEWER REVENUE BONDS, 2017 SERIES

Year Ending December 31	Coupon	Principal Maturity	Interest	Total Debt Service
2020	5.00%	\$ -	\$ 1,613,750	\$ 1,613,750
2021	5.00%	-	1,613,750	1,613,750
2022	5.00%	965,000	1,589,625	2,554,625
2023	5.00%	1,005,000	1,540,375	2,545,375
2024	5.00%	1,065,000	1,488,625	2,553,625
2025	5.00%	1,115,000	1,434,125	2,549,125
2026	5.00%	2,935,000	1,332,875	4,267,875
2027	5.00%	3,080,000	1,182,500	4,262,500
2028	5.00%	3,240,000	1,024,500	4,264,500
2029	5.00%	3,405,000	858,375	4,263,375
2030	5.00%	3,580,000	683,750	4,263,750
2031	5.00%	3,765,000	500,125	4,265,125
2032	5.00%	3,960,000	307,000	4,267,000
2033	5.00%	4,160,000	104,000	4,264,000
Total		<u>\$ 32,275,000</u>	<u>\$ 15,273,375</u>	<u>\$ 47,548,375</u>

OCA-II-7 Attachment 1

SUPPLEMENTAL INFORMATION

DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY

SCHEDULE OF CASH RECEIPTS AND DISBURSEMENTS
FUNDS ESTABLISHED UNDER AN INDENTURE DATED JULY 15, 2001
AND TOTAL CASH AND INVESTMENTS
FOR THE YEAR ENDED DECEMBER 31, 2019

	Renewal and Replacement Fund	Rate Stabilization Fund	LTCP East Escrow	Revenue Fund	Sewer Reserve Fund	Debt Service Fund	Sewer Repair and Replacement Fund	Debt Service Reserve Fund	2015 Construction Fund	2016 Construction Fund	Total
Balances - January 1, 2019	\$ 36,772,993	\$ 8,825,277	\$ 1,440,301	\$ 26,495,806	\$ 3,000,558	\$ 2,810,760	\$ 3,681,961	\$ 11,180,180	\$ 3,882,617	\$ 20,399,953	\$ 118,210,408
Receipts:											
Customer revenue	-	-	-	65,071,667	-	-	-	-	-	-	65,071,667
Edgmont escrow reimbursement	-	-	-	-	-	-	-	-	-	-	-
SWCA & MTA payoff decommissioning	-	-	-	-	-	-	-	-	-	-	-
Transfers from Operating account	-	-	-	-	-	-	-	-	-	-	-
Transfers from other trust funds	1,500,000	-	-	-	-	11,079,922	240,000	-	-	-	12,819,922
Loan proceeds	-	-	-	-	-	-	-	-	-	-	-
Investment income	939,565	196,058	39,405	820,426	79,904	64,142	111,609	321,527	16,165	399,524	2,988,325
Total receipts	2,439,565	196,058	39,405	65,892,093	79,904	11,144,064	351,609	321,527	16,165	399,524	80,879,914
Disbursements:											
Requisitions	7,097,857	-	-	44,663,593	-	-	-	-	3,878,782	15,776,631	71,416,863
Transfers to other trust funds	-	-	-	12,819,922	-	-	-	-	-	-	12,819,922
Bond refunding	-	-	-	-	-	-	-	-	-	-	-
Bond refunding expense	-	-	-	-	-	-	-	-	-	-	-
Debt service payments:	-	-	-	-	-	-	-	-	-	-	-
Principal	-	-	-	485,044	-	4,335,000	-	-	-	-	4,820,044
Interest	-	-	-	67,532	-	6,779,825	-	-	-	-	6,847,357
Total disbursements	7,097,857	-	-	58,036,061	-	11,114,825	-	-	3,878,782	15,776,631	95,904,186
Balances - December 31, 2019	\$ 32,114,701	\$ 9,021,335	\$ 1,479,706	\$ 34,351,808	\$ 3,080,462	\$ 2,839,999	\$ 4,033,570	\$ 11,501,707	\$ -	\$ 4,962,846	\$ 103,186,134



CYNTHIA FELZER LEITZELL, CPA
STELLA C. ECONOMIDIS, CPA

OCA-II-7 Attachment 1

LEITZELL & ECONOMIDIS, PC
CERTIFIED PUBLIC ACCOUNTANTS

**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING
AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL
STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

Board of Directors
Delaware County Regional Water Quality Control Authority
Chester, Pennsylvania

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Delaware County Regional Water Quality Control Authority ("DELCORA"), as of and for the year ended December 31, 2019, and the related notes to the financial statements, which collectively comprise the Delaware County Regional Water Quality Control Authority's basic financial statements, and have issued our report thereon dated April 15, 2020.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Delaware County Regional Water Quality Control Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Delaware County Regional Water Quality Control Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Delaware County Regional Water Quality Control Authority's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Delaware County Regional Water Quality Control Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

OCA-II-7 Attachment 1

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

A handwritten signature in black ink that reads "Leitzell & Economidis, PC". The signature is written in a cursive, flowing style.

Leitzell & Economidis, PC
Media, Pennsylvania

April 15, 2020

Respondent: William C. Packer
Date: 7/10/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET II INTERROGATORIES

OCA-II-10 Identify and provide the two most recent depreciation rate studies that were prepared by or for Aqua's Pennsylvania wastewater utility.

RESPONSE

Please see OCA-II-10 Attachments 1 and 2.

OCA-II-10 Attachment 1

Exhibit No. 6-B, Part II
Witness: J. J. Spanos

AQUA PENNSYLVANIA, INC.

BRYN MAWR, PENNSYLVANIA

2019 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF MARCH 31, 2019

Prepared by:



*Excellence Delivered **As Promised***

OCA-II-10 Attachment 1

AQUA PENNSYLVANIA, INC.
WASTEWATER ASSETS

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF MARCH 31, 2019

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF MARCH 31, 2019 (3)	BOOK RESERVE (4)	FUTURE ACCRUALS (5)	ANNUAL ACCRUAL AMOUNT (6)	COMPOSITE REMAINING LIFE (7)	ANNUAL ACCRUAL RATE, PERCENT (8)
INTANGIBLE PLANT							
351.00 ORGANIZATION	NONDEPR.	1,559,913.03					
TOTAL INTANGIBLE PLANT		1,559,913.03					
NONDEPRECIABLE PLANT							
353.20 LAND AND LAND RIGHTS - COLLECTION	NONDEPR.	42,731.40					
353.30 LAND AND LAND RIGHTS - PUMPING	NONDEPR.	573,591.78					
353.40 LAND AND LAND RIGHTS - TREATMENT AND DISPOSAL	NONDEPR.	690,952.37					
TOTAL NONDEPRECIABLE PLANT		1,307,275.55					
DEPRECIABLE PLANT							
354.00 STRUCTURES AND IMPROVEMENTS							
COLLECTION							
60-S1	55-S0.5	5,665,242.62	1,993,739	3,671,504	107,607	34.1	1.90
PUMPING	60-S1	5,684,134.69	1,281,841	4,402,294	108,303	40.6	1.91
TREATMENT AND DISPOSAL	50-R2	26,103,594.50	7,484,624	18,618,971	640,005	29.1	2.45
RECLAIMED WATER TREATMENT	60-R2.5	36,713.07	11,268	25,445	626	40.6	1.71
GENERAL	50-R3	572,259.67	271,252	301,008	10,987	27.4	1.92
TOTAL ACCOUNT 354		38,061,944.55	11,042,723	27,019,222	867,528		
355.00 POWER GENERATING EQUIPMENT							
COLLECTION	25-R2.5	92,159.43	26,306	65,854	4,737	13.9	5.14
PUMPING	25-R2.5	783,235.88	159,727	623,509	40,476	15.4	5.17
TREATMENT AND DISPOSAL	25-R2.5	2,245,376.53	294,271	1,951,106	115,594	16.9	5.15
TOTAL ACCOUNT 355		3,120,771.84	480,303	2,640,469	160,807		
360.00 COLLECTION MAINS - FORCE	75-R2.5	26,067,475.71	5,743,148	20,324,328	413,801	49.1	1.59
COLLECTION MAINS - GRAVITY	75-R2.5	37,378,828.39	5,898,082	31,480,747	608,191	51.8	1.63
SPECIAL COLLECTING STRUCTURES	40-R3	164,902.64	7,343	157,560	4,941	31.9	3.00
SERVICES	70-R4	10,218,687.70	3,482,179	6,736,509	137,883	48.9	1.35
METERS	25-S2.5	426,184.31	83,304	342,881	20,884	16.4	4.90
RECEIVING WELLS	40-S2.5	550,755.12	231,011	319,744	16,291	19.6	2.96
371.00 PUMPING EQUIPMENT							
PUMPING	25-L0.5	12,763,286.15	4,515,600	8,247,686	618,459	13.3	4.85
RECLAIMED WATER TREATMENT	25-L0.5	248,116.59	147,053	101,064	8,710	11.6	3.51
TOTAL ACCOUNT 371		13,011,402.74	4,662,653	8,348,750	627,169		
380.00 TREATMENT AND DISPOSAL EQUIPMENT	40-S0	44,987,831.98	7,793,650	37,194,182	1,572,424	23.7	3.50
381.00 PLANT SEWERS							
TREATMENT AND DISPOSAL	40-R1.5	122,375.79	26,093	96,283	3,955	24.3	3.23
RECLAIMED WATER TREATMENT	40-R1.5	6,264.17	1,099	5,165	206	25.1	3.29
TOTAL ACCOUNT 381		128,639.96	27,192	101,448	4,161		

OCA-II-10 Attachment 1

AQUA PENNSYLVANIA, INC.
WASTEWATER ASSETS

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF MARCH 31, 2019

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF MARCH 31, 2019 (3)	BOOK RESERVE (4)	FUTURE ACCRUALS (5)	ANNUAL ACCRUAL AMOUNT (6)	COMPOSITE REMAINING LIFE (7)	ANNUAL ACCRUAL RATE, PERCENT (8)
382.00	OUTFALL LINES						
	40-R2.5	125,058.17	25,247	99,811	3,940	25.3	3.15
389.00	OTHER PLANT AND MISCELLANEOUS EQUIPMENT						
	COLLECTION						
	20-L3	661,407.77	276,985	384,423	46,384	8.3	7.01
	20-L3	67,370.96	23,842	43,529	4,049	10.8	6.01
	25-S2.5	32,049.19	25,482	6,567	489	13.4	1.53
	TREATMENT AND DISPOSAL						
	TOTAL ACCOUNT 389	760,827.92	326,309	434,519	50,922		
390.00	OFFICE FURNITURE AND EQUIPMENT						
	FURNITURE						
	20-SQ	10,195.46	6,693	3,503	255	13.7	2.50
	10-SQ	733,602.12	147,826	585,777	86,578	6.8	11.80
	5-SQ	786,443.06	443,253	343,190	125,719	2.7	15.99
	10-SQ	60,129.40	30,059	30,070	3,535	8.5	5.88
	TOTAL ACCOUNT 390	1,590,370.04	627,831	962,540	216,087		
391.00	TRANSPORTATION EQUIPMENT						
	15-L3	474,460.25	242,132	232,328	20,836	11.2	4.39
	20-SQ	10,955.41	7,215	3,740	422	8.9	3.85
	20-SQ	300,323.29	46,284	254,039	25,585	9.9	8.52
	25-SQ	682,153.55	227,819	454,334	24,033	18.9	3.52
	20-L2.5	184,201.17	121,284	62,918	7,756	8.1	4.21
396.00	COMMUNICATION EQUIPMENT						
	15-SQ	896,213.09	111,341	784,872	63,340	12.4	7.07
	10-SQ	421,104.11	36,866	384,238	44,875	8.6	10.66
	SCADA						
	TOTAL ACCOUNT 396	1,317,317.20	148,208	1,169,110	108,215		
397.00	MISCELLANEOUS EQUIPMENT						
	25-SQ	39,059.93	11,722	27,338	1,391	19.7	3.56
	25-SQ	71,100.00	0	71,100	2,910	24.4	4.09
	TOTAL DEPRECIABLE PLANT	179,673,251.87	41,235,639	138,437,617	4,896,177		
	TOTAL WASTEWATER PLANT IN SERVICE	182,540,440.45	41,235,639	138,437,617	4,896,177		
CUSTOMERS' ADVANCES FOR CONSTRUCTION							
361.00	COLLECTION MAINS - GRAVITY	126,000.00	2,419	123,581	2,401	51.5	1.91
	TOTAL CUSTOMERS' ADVANCES FOR CONSTRUCTION	126,000.00	2,419	123,581	2,401		

Exhibit No. 6-B, Part III
Witness: J. J. Spanos

AQUA PENNSYLVANIA, INC.

BRYN MAWR, PENNSYLVANIA

2020 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF MARCH 31, 2020

Prepared by:



Excellence Delivered **As Promised**

OCA-II-10 Attachment 2

AQUA PENNSYLVANIA, INC.
WASTEWATER ASSETS

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF MARCH 31, 2020

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF MARCH 31, 2020 (3)	BOOK RESERVE (4)	FUTURE ACCRUALS (5)	ANNUAL ACCRUAL AMOUNT (6)	COMPOSITE REMAINING LIFE (7)	ANNUAL ACCRUAL RATE, PERCENT (8)
INTANGIBLE PLANT							
351.00 ORGANIZATION	NONDEPR.	1,559,913.03					
TOTAL INTANGIBLE PLANT		1,559,913.03					
NONDEPRECIABLE PLANT							
353.20 LAND AND LAND RIGHTS - COLLECTION	NONDEPR.	42,731.40					
353.30 LAND AND LAND RIGHTS - PUMPING	NONDEPR.	573,591.78					
353.40 LAND AND LAND RIGHTS - TREATMENT AND DISPOSAL	NONDEPR.	690,952.37					
TOTAL NONDEPRECIABLE PLANT		1,307,275.55					
DEPRECIABLE PLANT							
354.00 STRUCTURES AND IMPROVEMENTS							
COLLECTION	55-S0.5	6,560,313.37	2,074,082	4,486,231	130,477	34.4	1.99
PUMPING	60-S1	6,582,190.25	1,363,080	5,219,111	127,783	40.8	1.94
TREATMENT AND DISPOSAL	50-R2	30,227,789.22	8,013,188	22,214,601	745,415	29.8	2.47
RECLAIMED WATER TREATMENT	60-R2.5	36,713.07	11,896	24,817	620	40.0	1.69
GENERAL	50-R3	572,259.67	282,239	290,021	10,876	26.7	1.90
TOTAL ACCOUNT 354		43,979,265.58	11,744,485	32,234,781	1,015,171		
355.00 POWER GENERATING EQUIPMENT							
COLLECTION	25-R2.5	92,159.43	31,043	61,117	4,600	13.3	4.99
PUMPING	25-R2.5	882,555.33	203,430	679,126	43,545	15.6	4.93
TREATMENT AND DISPOSAL	25-R2.5	2,530,105.01	419,072	2,111,033	125,417	16.8	4.96
TOTAL ACCOUNT 355		3,504,819.77	653,544	2,851,276	173,562		
360.00 COLLECTION MAINS - FORCE	75-R2.5	26,142,344.69	6,179,651	19,962,693	408,900	48.8	1.56
361.00 COLLECTION MAINS - GRAVITY	75-R2.5	40,839,043.72	6,380,860	34,458,184	661,284	52.1	1.62
362.00 SPECIAL COLLECTING STRUCTURES	40-R3	170,155.95	12,389	157,767	5,019	31.4	2.95
363.00 SERVICES	70-R4	10,365,846.76	3,620,713	6,745,134	139,912	48.2	1.35
364.00 METERS	25-S2.5	440,359.03	104,530	335,829	21,091	15.9	4.79
370.00 RECEIVING WELLS	40-S2.5	550,755.12	247,313	303,442	16,054	18.9	2.91
371.00 PUMPING EQUIPMENT							
PUMPING	25-L0.5	14,369,031.32	5,115,504	9,253,528	690,420	13.4	4.80
RECLAIMED WATER TREATMENT	25-L0.5	248,116.59	155,762	92,355	8,087	11.4	3.26
TOTAL ACCOUNT 371		14,617,147.91	5,271,265	9,345,883	698,507		
380.00 TREATMENT AND DISPOSAL EQUIPMENT	40-S0	60,102,275.68	9,021,489	51,080,787	2,143,469	23.8	3.57
381.00 PLANT SEWERS							
TREATMENT AND DISPOSAL	40-R1.5	122,375.79	30,046	92,330	3,833	24.1	3.13
RECLAIMED WATER TREATMENT	40-R1.5	6,264.17	1,305	4,959	201	24.7	3.21
TOTAL ACCOUNT 381		128,639.96	31,351	97,289	4,034		

OCA-II-10 Attachment 2

AQUA PENNSYLVANIA, INC.
WASTEWATER ASSETS

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF MARCH 31, 2020

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF MARCH 31, 2020 (3)	BOOK RESERVE (4)	FUTURE ACCRUALS (5)	ANNUAL ACCRUAL AMOUNT (6)	COMPOSITE REMAINING LIFE (7)	ANNUAL ACCRUAL RATE, PERCENT (8)
382.00	OUTFALL LINES						
	40-R2.5	153,708.17	28,626	125,082	4,728	26.5	3.08
389.00	OTHER PLANT AND MISCELLANEOUS EQUIPMENT						
	COLLECTION	661,407.77	323,350	338,058	43,770	7.7	6.62
	PUMPING	67,370.96	27,891	39,480	3,937	10.0	5.84
	20-L3			6,077	480	12.7	1.50
	25-S2.5	32,049.19	25,972				
	TREATMENT AND DISPOSAL						
	TOTAL ACCOUNT 389	760,827.92	377,213	383,615	48,187		
390.00	OFFICE FURNITURE AND EQUIPMENT						
	FURNITURE	10,195.46	6,948	3,248	256	12.7	2.51
	10-SQ	887,950.04	246,155	641,795	102,454	6.3	11.54
	COMPUTER HARDWARE	951,908.59	586,104	365,804	133,720	2.7	14.05
	5-SQ						
	10-SQ	60,129.40	33,595	26,534	3,541	7.5	5.89
	TOTAL ACCOUNT 390	1,910,183.49	872,802	1,037,381	239,971		
391.00	TRANSPORTATION EQUIPMENT						
	15-L3	540,016.22	265,290	274,726	26,546	10.3	4.92
392.00	STORES EQUIPMENT						
	20-SQ	10,955.41	7,637	3,318	421	7.9	3.84
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT						
	20-SQ	351,573.29	74,805	276,768	20,312	13.6	5.78
394.00	LABORATORY EQUIPMENT						
	25-SQ	710,926.96	251,514	459,413	25,314	18.1	3.56
395.00	POWER OPERATED EQUIPMENT						
	20-L2.5	184,201.17	129,039	55,163	7,146	7.7	3.88
	COMMUNICATION EQUIPMENT						
	GENERAL	1,124,404.72	185,278	939,127	79,008	11.9	7.03
396.00	SCADA						
	10-SQ	528,324.63	89,248	439,077	56,118	7.8	10.62
	TOTAL ACCOUNT 396	1,652,729.35	274,525	1,378,204	135,126		
397.00	MISCELLANEOUS EQUIPMENT						
	25-SQ	39,059.93	13,113	25,947	1,392	18.6	3.56
398.00	OTHER TANGIBLE PLANT						
	25-SQ	231,100.00	7,236	223,864	9,428	23.7	4.08
	TOTAL DEPRECIABLE PLANT	207,385,936.08	45,569,391	161,816,546	5,805,574		
	TOTAL WASTEWATER PLANT IN SERVICE	210,253,124.66	45,569,391	161,816,546	5,805,574		
CUSTOMERS' ADVANCES FOR CONSTRUCTION							
361.00	COLLECTION MAINS - GRAVITY						
	75-R2.5	126,000.00	4,826	121,174	2,380	50.9	1.89
	TOTAL CUSTOMERS' ADVANCES FOR CONSTRUCTION	126,000.00	4,826	121,174	2,380		

Respondent: William C. Packer
Date: 7/10/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET II INTERROGATORIES

OCA-II-52 If Aqua is allowed to acquire the DELCORA wastewater utility assets:

- a. What depreciation rates will Aqua be applying to each wastewater utility plant account?
- b. What is the basis for the depreciation rates identified in response to part a? If something other than simple application of Aqua's current Pennsylvania wastewater utility depreciation rates, explain fully and provide the documentation showing how the depreciation rates that Aqua would be applying to acquired DELCORA wastewater utility plant assets were developed.

RESPONSE

- a. The Company will use the depreciation rates set forth in the response to OCA-II-10.
- b. The depreciation rates are those approved in the Company's most recent base rate case.

Respondent: Mark J. Bubel, Sr.
Date: 7/10/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET II INTERROGATORIES

OCA-II-56 Refer to Exhibit V, the testimony of Mark Bubel at page 5.

- a. What is the cost of keeping the DELCORA office and operations centers in the City of Chester open for a period of 25 years?
- b. How many DELCORA employees are there currently at the DELCORA office and operations centers in the City of Chester?
- c. Will all of the DELCORA employees identified in the response to part b be transferred to Aqua? If not, explain fully why not and identify the transferred and not to be transferred job positions.
- d. Is the building currently fully occupied by DELCORA employees? If not, what else is it being used for? What portions are currently vacant or unoccupied?
- e. Is any portion of the building leased? If so, how much and under what leases?
- f. Is Aqua going to be expanding their use of this building, such as, but not limited to, moving Aqua employees into the DELCORA building as their work location? If so, what are the plans?
- g. Does Aqua plan to lease out any portions of the building?
- h. Will Aqua be selling the building after 25 years?
- i. Will a 25 year life of the building be used for depreciation purposes? If not, what service life will be used for depreciation purposes?
- j. When was the building constructed and at what cost?
- k. What leaseholder improvements have been made to the building and at what cost?

RESPONSE

- a. DELCORA's existing operations cost for the DELCORA office in the City of Chester is approximately \$250,000 per year.
- b. There are currently 20 DELCORA employees at the DELCORA office in Chester City. All other DELCORA employees work out of, or report to, the offices at the Western Regional Treatment Plant in the City of Chester.
- c. Yes.
- d. Yes.
- e. No.
- f. Aqua does not have plans to move Aqua employees to the DELCORA office at this time.
- g. Aqua does not have any plans to lease out portions of the DELCORA office at this time.
- h. Aqua does not have any plans to sell the DELCORA office after 25 years at this time.
- i. The Company will depreciate the building over approximately 50 years in accordance with the Company's existing depreciation rates for structures approved by the Commission in its last base rate case proceeding.
- j. The DELCORA office was constructed in 1998 at a cost of \$1.459 million.
- k. None.

Respondent: Robert Willert
Date: August 24, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET VI INTERROGATORIES

OCA-VI-1

Concerning how the proposed transaction would function (1) with and (2) without the DELCORA Customer Trust (the "Trust" formed on December 27, 2019) as a mechanism to hold a portion of the sales proceeds and make payments to the benefit of DELCORA ratepayers to offset rate increases above 3% per year under Aqua ownership, please respond to the following:

- a. Explain fully and in detail how the proceeds from the sale will be utilized for the benefit of DELCORA system ratepayers without the Trust.
- b. Explain fully and in detail how the proceeds from the sale will be utilized for the benefit of DELCORA system ratepayers with the Trust.
- c. What rate increases will DELCORA system ratepayers be subject to without the Trust?
- d. What rate increases will DELCORA be subject to with the Trust?
- e. How will the rate increases to DELCORA system customers under Aqua ownership be offset without the Trust?
- f. Explain how the provisions of the DELCORA-proposed Trust would be enforced and by whom.
- g. How can DELCORA's ratepayers be assured that the portion of the sales proceeds will be used for their benefit to offset rate increases under Aqua ownership above 3% per year?

RESPONSE:

a. After considerable time and effort, we believe the Trust is the best way to ensure our ratepayers benefit from the proceeds of this transaction. However, in the unlikely event the Trust is invalidated, DELCORA is still committed to use the proceeds from the transaction to benefit its ratepayers and the money paid to DELCORA will still be available for its ratepayers' benefit, and will still be used for that purpose in another way. This may include individual payments to customers on a quarterly or annual basis. However, this is not the preferred method from an administrative perspective as stated in Application Exhibit W1 (Testimony of Robert Willert).

- b. See Application Exhibit W1 (Testimony of Robert Willert), Application Exhibit U2 (Testimony of William Packer) and the response to OCA-I-36.
- c. As we understand it, the Commission sets rates for our ratepayers after Closing. See Application Exhibit U2, Appendix A.
- d. See response to c., above. The Commission will set rates for DELCORA customers. Customer Assistance Payments from the Trust will be used for payments applied to the DELCORA Customer bills as described in OCA-I-36..
- e. See response to a., above.
- f. See response to b., and c., above. See the response to OCA-I-36.
- g. See response to b., and c., above. See the response to OCA-I-36.

Respondent: Robert Willert
Date: August 24, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET VI INTERROGATORIES

OCA-VI-2 Is it DELCORA's position that the Commission has no jurisdiction over the use of the proceeds for the benefit of DELCORA's ratepayers? If so, explain the basis for that position.

RESPONSE:

Yes.

Respondent: Robert Willert
Date: August 24, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET VI INTERROGATORIES

OCA-VI-3

Concerning the proposed transaction and the functioning of the Trust, or an alternative to the Trust, to provide DELCORA ratepayer benefits if the Trust cannot be operated, please respond to the following regarding how the money paid to DELCORA will still be available for its ratepayers' benefit, and will still be used for that purpose in another way:

a. If the establishment and use of the DELCORA-proposed Trust is not permitted by the Court resulting in no offset to the rate increases under Aqua ownership, is it DELCORA's position that the proposed transaction would still be in the public interest?

b. Please reconcile your answer to part (a) with the following testimony that was submitted by Aqua in Statement No. 5 at page 11:

"Q. Please further describe the benefits of the Proposed Transaction.

A. The impact on bills for DELCORA's customers was one of the driving forces behind this transaction and is the primary benefit. The majority of the sale proceeds will be placed in an irrevocable trust for the benefit of DELCORA's customers. It is my understanding that this is a relatively unique feature for a transaction of this nature and provides a substantial benefit to our customers."

c. Without the proposed Trust, how will that primary and substantial benefit to DELCORA's customers be achieved? Explain fully and identify and provide the documents that will assure such a benefit.

RESPONSE:

a. Yes. See OCA-III-9.

b. See the response to a., above. The establishment of the Trust is one of several benefits to this transaction.

c. The Trust is a mere vehicle designed to ensure that the sale proceeds from this transaction will be used for the benefit of DELCORA's ratepayers in the form of customer assistance payments applied to offset future wastewater rate increases. Trust will hold the transaction proceeds (and

any of DELCORA's cash on hand at closing), and will make customer assistance payments using that money to benefit ratepayers. Payments will be made to the extent that ratepayers are subject to any rate increases in excess of 3% per year to offset any such increases. In order to reduce administrative expenses, the payments will be placed on the bills for the benefit of the ratepayers. Aqua and DELCORA's proposal is an efficient method to achieve DELCORA's goals. If the customer assistance payments were not allowed on the DELCORA customer bills, an alternative method would need to be used to provide the proceeds to DELCORA customers. See the response to OCA-VI-1, part a.

Respondent: Robert Willert
Date: August 24, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET VI INTERROGATORIES

OCA-VI-4

Please respond to the following as to the proposed transaction in the event that the Court of Common Pleas determines that the creation of the Trust was not a valid exercise of DELCORA's authority:

- a. If the Trust is ruled invalid as a result of the pending civil litigation in the Court of Common Pleas of Delaware County that the County initiated against DELCORA, what will happen to the approximately \$200 million of sales proceeds that DELCORA has proposed to go into the Trust for the benefit of DELCORA's ratepayers? Explain fully.
- b. If the DELCORA proposed Trust is ruled invalid, what documents will govern how the sales proceeds from the sale of DELCORA's wastewater utility assets to Aqua will be utilized? Explain fully and identify the related documents.
- c. If the DELCORA proposed Trust is ruled invalid, what documents will govern how the sales proceeds from the sale of DELCORA's wastewater utility assets to Aqua that are in excess of the payment of DELCORA's outstanding debt and transaction costs will be utilized, and which will govern how that portion of the sales proceeds will be applied for the benefit of DELCORA system ratepayers?
- d. If the DELCORA proposed Trust is ruled invalid, how will proceeds from the sale be used to offset rate increases to DELCORA ratepayers in excess of 3% per year? Explain fully.

RESPONSE:

a. DELCORA is committed to use the proceeds from the transaction to benefit its ratepayers. The Trust is a mechanism to handle the proceeds of the transaction, not something inherent to the transaction itself. DELCORA's desire to save its ratepayers money is inherent to the transaction. See the response to OCA-VI-1, part a.

b. If the Trust is ruled invalid, DELCORA will provide the money to ratepayers directly in a way of its choosing consistent with its commitment made in the Trust and its commitment at multiple public venues.

c. See the response to b., above.

d. See response to a., above.

Respondent: Robert Willert
Date: August 24, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET VI INTERROGATORIES

OCA-VI-5

Please respond to the following:

- a. Does the transaction proposed in Aqua's Application contemplate having a DELCORA-proposed Trust funded in an amount of approximately \$200 million to be used for the purpose of offsetting rate increases under Aqua ownership in excess of 3% per year? If not, explain fully why not. If so, explain the benefit of this and why it was included in the Application.
- b. Is it DELCORA's position that the creation and operation of the Trust for the purpose of offsetting rate increases under Aqua ownership in excess of 3% per year is a primary benefit concerning whether the transaction contemplated by Aqua's application is in the public interest? If not, explain fully why not.
- c. Is it DELCORA's position that the creation and operation of the Trust for the purpose of offsetting rate increases under Aqua ownership in excess of 3% per year does not have anything to do with the issue of whether the transaction contemplated by Aqua's application is in the public interest? If so, explain fully.

RESPONSE:

a. Yes. See Exhibit W1 (Testimony of Robert Willert).

b. For DELCORA, saving our ratepayers money is central to us. The Trust is a mere vehicle designed to ensure that the sale proceeds from this transaction will be used for the benefit of DELCORA's ratepayers in the form of customer assistance payments applied to offset future wastewater rate increases. The Trust and the customer assistance payments are just one of the benefits of the transaction, among other significant benefits as set forth in the response to OCA-VI-3.

c. Trust or no Trust, we will be providing the proceeds back to our customers. DELCORA committed itself to use the proceeds from the transaction to benefit its ratepayers. The Trust and the customer assistance payments are just one of the benefits of the transaction, among other significant benefits as set forth in the response to OCA-VI-3.

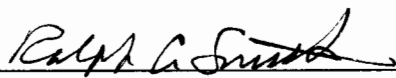
BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application of Aqua Pennsylvania Wastewater	:	
Inc. pursuant to Sections 507, 1102 and 1329	:	
of the Public Utility Code for Approval of its	:	Docket No. A-2019-3015173
Acquisition of the Wastewater System Assets	:	
of the Delaware County Regional Water Quality	:	
Control Authority	:	

VERIFICATION

I, Ralph C. Smith, hereby state that the facts set forth in my Direct Testimony, OCA Statement 1, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: September 29, 2020
*295051

Signature: 
Ralph C. Smith

Consultant Address: Larkin & Associates, PLLC
15728 Farmington Road
Livonia, MI 48154

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania Wastewater Inc. :
Pursuant to Sections 507, 1102 and 1329 of the Public :
Utility Code For Approval of its Acquisition of the : Docket No. A-2019-3015173
Wastewater System Assets of the Delaware County :
Regional Water Quality Control Authority :

SURREBUTTAL TESTIMONY

OF

RALPH C. SMITH

**REGARDING UTILITY VALUATION APPRAISALS,
ACQUISITION POLICY AND BENEFITS**

**ON BEHALF OF THE
PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE**

November 2, 2020

SURREBUTTAL TESTIMONY OF RALPH C. SMITH
TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
Response to I&E Witness Gumby Concerning DELCORA Customer Trust	2
Response to Delaware County Witness Faryniarz Concerning Adjusted ScottMadden Valuation Results Weighting	7
Response to Aqua Witness D'Ascendis Concerning ScottMadden Valuation Results	10
Response to Aqua Witness Walker Concerning Gannett Fleming Valuation Results	15
Response to Aqua Witnesses Packer and Willert Concerning My Recommendations	22
Summary of Testimony and Conclusions	27

1 **I. INTRODUCTION**

2
3 **Q. Please state your name, position and business address.**

4 A. Ralph C. Smith. I am a Senior Regulatory Consultant at Larkin & Associates,
5 PLLC, 15728 Farmington Road, Livonia, Michigan 48154.

6 **Q. Are you the same Ralph C. Smith who previously submitted testimony in this**
7 **proceeding?**

8 A. Yes. I filed direct testimony in this proceeding on September 29, 2020.

9 **Q. What is the purpose of your surrebuttal testimony?**

10 A. My surrebuttal testimony responds to the rebuttal testimony of I&E witness Lisa
11 Gumby and County of Delaware witness Stan Faryniarz. My surrebuttal testimony
12 also responds to the rebuttal testimony of Aqua witnesses William Packer, Robert
13 Willert, Harold Walker, III, and Dylan D'Ascendis.

14 **Q. Have you prepared any exhibits to be filed with your surrebuttal testimony?**

15 A. Exhibit RCS-9 contains a copy of the OCA's supplemental response to Aqua VI-13.

16 **Q. How is your surrebuttal testimony organized?**

17 A. I first address the rebuttal testimony of I&E witness Gumby concerning the
18 DELCORA Customer Trust.

19 I next address the rebuttal testimony of County of Delaware witness Stan
20 Faryniarz which recommends a different weighting of the ScottMadden valuation
21 results. I disagree with Mr. Faryniarz's proposed reallocation of the ScottMadden
22 valuation results for a number of reasons.

1 I also briefly address the rebuttal testimony of the Harold Walker, III, and
2 Dylan D'Ascendis concerning their respective valuations. Because the proposed
3 purchase price in the Application of \$276.5 million is below the originally submitted
4 Gannett Fleming (Walker) and ScottMadden (D'Ascendis) valuation results and is
5 also below my adjusted valuation results, the conclusion from my direct testimony
6 that the acquisition price of \$276.5 million should be used, remains unchanged. Put
7 differently, if the Commission approves the transaction, the ratemaking rate base
8 would continue to be the \$276.5 million amount based on that being the lower of the
9 purchase price versus the adjusted appraised value.

10 I then address the rebuttal testimony of Applicant witnesses Packer and
11 Willert concerning my recommended conditions for approval of the proposed
12 transaction.

13 I conclude by summarizing my recommendations.
14

15 **Response to I&E Witness Gumby Concerning DELCORA Customer Trust**

16 **Q. I&E witness Gumby's rebuttal testimony expresses concerns about the**
17 **payments that would be made from the DELCORA Customer Trust. Is the**
18 **DELCORA Customer Trust a key customer benefit of the proposed**
19 **transaction?**

20 **A.** Yes. The establishment of the DELCORA Customer Trust is the primary benefit of
21 the proposed transaction, as described in my direct testimony. DELCORA has
22 estimated funding of approximately \$200 million going into the Trust, to be utilized
23 to provide \$200 million of rate relief for DELCORA customers. A transaction with

1 the DELCORA Customer Trust and funding of approximately \$200 million to be
2 applied for rate relief for DELCORA customers is better for the acquired
3 DELCORA customers than a transaction without that \$200 million.

4 **Q. At page 2 of her rebuttal, I&E witness Gumby states that applying DELCORA**
5 **customer assistance payments to the DELCORA customer bills is at odds with**
6 **Section 1303 of the Public Utility Code. Are you expressing a legal opinion**
7 **about that?**

8 A. No. My point was that the rate relief being applied from the DELCORA Customer
9 Trust for DELCORA customers should be accounted for and presented to customers
10 in a manner that is transparent. Showing the amounts of the rate relief from the
11 DELCORA Customer Trust on those customer bills would be one way of
12 accomplishing this, and would be transparent. The customers would see the tariff
13 amount of billing from Aqua and they would see the amount of relief they are getting
14 from the functioning of the DELCORA Customer Trust. There could be other ways
15 to reflect that credit that are not reliant on Aqua but that was not something that I
16 analyzed.

17 **Q. At pages 2-3 of her rebuttal testimony, I&E witness Gumby states that counsel**
18 **has advised “that Section 1303 prohibits Aqua from charging any customers**
19 **rates that deviate from tariffed rates approved by the Commission.” Do you**
20 **have a position on this?**

21 A. No. If there is some legal prohibition from showing the application of the
22 DELCORA Customer Trust amounts on the Aqua bills, then DELCORA and Aqua
23 have to address that issue.

1 **Q. At pages 3-4 of her rebuttal testimony, I&E witness Gumby claims that you**
2 **have characterized the DELCORA Customer Trust as a “Rate Stabilization**
3 **Plan” pursuant to Section 1329(g). Has she properly characterized your**
4 **testimony?**

5 A. No. My testimony describes how the DELCORA Customer Trust has been proposed
6 by the Applicant to mitigate future rate increases to DELCORA customers under
7 Aqua ownership, if the DELCORA wastewater utility system is allowed to be sold to
8 Aqua in the proposed transaction. The trust is referred to as a “Rate Stabilization
9 Fund” in the Authority’s Resolution 2019-11 authorizing the Asset Purchase
10 Agreement.

11 **Q. Should the proposed transaction be approved if the Commission rejects the**
12 **proposal to mitigate future rate increases to DELCORA customers under Aqua**
13 **ownership?**

14 A. No. As I stated above and in my direct testimony, the establishment of the
15 DELCORA Customer Trust – or another mechanism to mitigate future rate increases
16 to DELCORA customers under Aqua ownership – is the primary benefit of the
17 proposed transaction. Without it, the transaction should not be approved.

18 **Q. Mitigation aside, if the proposed transaction were to be approved, does the**
19 **Application show the anticipated rate increase to existing Aqua customers and**
20 **to the DELCORA wastewater customers that would be acquired by Aqua?**

21 A. Yes. One result of proposed transaction will be to cause rate increases for existing
22 Aqua water and wastewater customers and DELCORA’s wastewater customers. As
23 described in my direct testimony, Aqua has estimated increases of 14.32 percent to

1 Aqua's existing wastewater utility customers, and increases of 4.58 percent to
2 Aqua's existing water utility customers, as shown in Application Exhibit I1.
3 Additionally, Aqua estimates 12.55 percent increases to DELCORA wastewater
4 utility customers, as shown in the Application in Exhibits I2 through I12. These
5 increases relate in part to the \$276.5 million acquisition price, which, if the
6 transaction is approved, would be included in Aqua's rate base. These estimated
7 increases are before the application of any of the approximately \$200 million
8 estimated funding of the DELCORA Customer Trust.

9 **Q. At page 6 of her rebuttal testimony, I&E witness Gumby states that the**
10 **DELCORA Customer Trust is not a benefit to Aqua's existing customers who**
11 **will not receive any Trust proceeds. Do you agree?**

12 A. Generally, yes. I agree that the DELCORA Customer Trust is not a direct benefit to
13 Aqua's existing customers who will not receive any Trust proceeds, but note that it
14 could provide an indirect benefit to existing Aqua water and wastewater utility
15 customers by minimizing cost shifting. The Applicant estimates that the transaction
16 will result in rate increases to Aqua's existing water and wastewater customers, and
17 no DELCORA Customer Trust proceeds will be applied to directly mitigate those
18 increases. My understanding, however, and what I recommend is that the
19 DELCORA revenue requirement should be calculated on its own and that the
20 DELCORA Customer Trust be used to fund the difference between the full revenue
21 requirement and the cap from the Asset Purchase Agreement applicable to the
22 DELCORA customers being acquired by Aqua. Also, Act 11 permits a utility to
23 shift a portion of revenue requirement increases for wastewater utility customers

1 onto the utility's existing water utility customers, but as a condition of approval, no
2 such shifting should be allowed to occur during the period in which the DELCORA
3 Customer Trust is providing rate relief for the DELCORA customers that are
4 acquired by Aqua. Thus, by avoiding the shift of the increased revenue requirements
5 for Aqua's acquired DELCORA wastewater customers onto Aqua's existing water
6 utility customers pursuant to Act 11, there could be an indirect temporary benefit to
7 Aqua's existing water utility customers. Conditioning approval of the transaction
8 on the requirement that no revenue shall be shifted to Aqua's existing water and
9 wastewater customers would indirectly benefit Aqua's existing water and wastewater
10 utility customers by avoiding an increase to their rates to subsidize the costs of the
11 revenue requirement associated with the DELCORA customers while the
12 DELCORA Customer Trust is operating to mitigate the rate increases under Aqua
13 ownership to the acquired DELCORA customers.

14 **Q. At page 6 of her rebuttal testimony, I&E witness Gumby also states that the**
15 **DELCORA Customer Trust would not be a benefit to Aqua's acquired**
16 **DELCORA customers. Do you agree?**

17 A. No. Having approximately \$200 million of rate relief (based on the anticipated
18 stated funding amount for the DELCORA Customer Trust) clearly would be a
19 benefit to Aqua's acquired DELCORA customers. Paying approximately \$200
20 million less to Aqua for wastewater utility service while the DELCORA Customer
21 Trust is operational is clearly more beneficial to Aqua's acquired DELCORA
22 customers than paying \$200 million more.

1 **Q. I&E witness Gumby states at page 6 of her rebuttal testimony that Aqua’s**
2 **acquired DELCORA customers would “initially have artificial rates while the**
3 **trust provides rate relief, but then experience rate shock when it is no longer**
4 **funded.” Are those legitimate concerns?**

5 A. Yes. OCA has similar concerns about the potential rate shock impact when the
6 DELCORA Customer Trust-provided rate increase mitigation funds expire, which
7 were described in my direct testimony at page 32.
8

9 **Response to Delaware County Witness Faryniarz Concerning Adjusted ScottMadden**
10 **Valuation Results Weighting**

11 **Q. Does Delaware County Witness Faryniarz contest any of your recommended**
12 **valuation adjustments?**

13 A. No. At page 3 of his rebuttal testimony, Mr. Faryniarz states that he is neither
14 contesting nor supporting my valuation adjustments.

15 **Q. What does Mr. Faryniarz recommend in his rebuttal testimony?**

16 A. Rather than the allocation of 45% Cost Approach, 50% Income Approach and 5%
17 Market Approach that Mr. D’Ascendis and I both used for the ScottMadden
18 valuation results, Mr. Faryniarz recommends a 33%, 33% and 34% weighting for the
19 adjusted ScottMadden valuation results, which he presents on page 5 of his rebuttal
20 testimony, using my adjusted values.

21 **Q. Why does Mr. Faryniarz recommend a different weighting for the adjusted**
22 **ScottMadden valuation results?**

1 A. At page 4 of his rebuttal, he states that the adjusted Market Approach result of
2 \$415,589,365 “is much less of an outlier when compared to the two other
3 approaches.” At page 3, he states that if equal weighting is not used, then it should
4 be supported with sufficient reasoning.

5 **Q. Please address Mr. Faryniarz’s first reason – that the adjusted Market**
6 **Approach result of \$415,589,365 “is much less of an outlier when compared to**
7 **the two other approaches.”**

8 A. The adjusted Market Approach result of \$415,589,365 significantly exceeds both the
9 adjusted Cost Approach result of \$257,394,266 and is more than 2.5 times larger
10 than the adjusted Income Approach result of \$163,125,306.

11 **Q. Have the ScottMadden Market Approach results consistently been above the**
12 **resultant weighted valuation results?**

13 A. Yes. The ScottMadden valuation results for the current Aqua-DELCORA
14 transaction and for previous valuations are summarized in the following table (before
15 adjustment):

ScottMadden Valuation Weighting Comparisons			
Valuation Approach	Approach Value	Weight	Weighted Value
Aqua-DELCORA:			
Cost	\$ 292,413,993	45%	\$ 131,586,297
Market	\$ 613,520,480	5%	\$ 30,676,024
Income	\$ 291,863,370	50%	\$ 145,931,685
Indicated Value			<u>\$ 308,194,006</u>
PAWC-Steelton:			
Cost	\$ 22,243,034	33%	\$ 7,340,201
Market	\$ 29,388,354	34%	\$ 9,992,040
Income	\$ 12,507,119	33%	\$ 4,127,349
Indicated Value			<u>\$ 21,459,590</u>

ScottMadden Valuation Weighting Comparisons (continued)			
Valuation Approach	Approach Value	Weight	Weighted Value
SUEZ-Mahoning (Water):			
Cost	\$ 6,308,598	20%	\$ 1,261,720
Market	\$ 7,124,315	40%	\$ 2,849,726
Income	\$ 3,183,583	40%	\$ 1,273,433
Indicated Value			<u>\$ 5,384,879</u>
SUEZ-Mahoning (Wastewater):			
Cost	\$ 6,221,550	20%	\$ 1,244,310
Market	\$ 8,077,922	40%	\$ 3,231,169
Income	\$ 3,139,655	40%	\$ 1,255,862
Indicated Value			<u>\$ 5,731,341</u>

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In each of these ScottMadden valuations, the Market Approach has produced the extreme high end of the valuation results. Moreover, the weighting applied by ScottMadden to its Market Value results has decreased. Minimizing the impact of the ScottMadden Market Value results, which uses a questionable analysis, continues to be appropriate in applying the weighting.

Q. Does the ScottMadden appraiser, Mr. D’Ascendis change his proposed weighting in his rebuttal testimony?

A. No. To the contrary, Mr. D’Ascendis continues to advocate for a 5% weighting for his Market Results.¹

Q. Are you changing your recommended weighting of the adjusted ScottMadden valuation results as a result of the rebuttal testimony of Mr. Faryniarz?

A. No.

¹ See, Aqua St. No. 9-R at page 9: “in my appraisal I have taken into account the results of the market approach by applying a 5% weighting.”

1 **Q. Please explain why you continue to recommend that 5% weighting of the**
2 **adjusted ScottMadden Market Approach valuation results.**

3 A. The weighting of valuation results is one indication of the confidence in the
4 reliability and reasonableness of those results. I have used the same 5% weighting
5 for the Market Approach results used by the ScottMadden appraiser Mr. D'Ascendis.
6 A 5% weighting of the ScottMadden Market Approach results is appropriate because
7 that method, as applied by ScottMadden for the DELCORA appraisal and as I have
8 adjusted, has significantly lower confidence of being a reasonable approach to
9 valuing the DELCORA wastewater utility. As noted in my direct testimony,
10 attempting to apply a value per connection from one utility onto another utility or
11 from water utilities onto a wastewater utility or from a combination of
12 water/wastewater utilities onto a wastewater utility or from a group of utilities that
13 serves primarily end-use customers onto a utility that has a substantial wholesale
14 customer base is not conceptually sound and is almost assured to produce valuation
15 results that are highly abnormal and unreliable, as is the case here.

16
17 **Response to Aqua Witness D'Ascendis Concerning ScottMadden Valuation Results**

18 **Q. Has Aqua Witness D'Ascendis disputed your recommended adjustments to the**
19 **ScottMadden valuation results?**

20 A. Yes. At page 2-3 of his rebuttal testimony, Aqua Witness D'Ascendis notes that my
21 adjustments to the ScottMadden valuation results produced an adjusted value of
22 \$218.170 million, but my ultimate conclusion was that the \$276.5 million purchase
23 price, which is Aqua's proposed value in this proceeding, is appropriate because that

1 amount is below the averaged adjusted result of the ScottMadden and Gannett
2 Fleming valuations, as shown on OCA Exhibit RCS-1, filed with my direct
3 testimony. I should note that the remaining disputes concerning the adjustments to
4 the ScottMadden valuation results would not change my conclusion that the \$276.5
5 million purchase price, which is Aqua's proposed value in this proceeding, is the fair
6 market value under Section 1329.

7 **Q. The ScottMadden Cost Approach used depreciation useful lives published by**
8 **the Public Utility Commission of Texas. Do you agree with using that source**
9 **for depreciation lives to be applied to a Pennsylvania wastewater utility?**

10 A. No. Better information is available and should be used. Aqua has Pennsylvania
11 wastewater utility assets and depreciation lives have been established for those. That
12 is a better source of information than a Texas PUC study. I therefore continue to
13 recommend that Pennsylvania wastewater utility information be used in determining
14 the valuation of DELCORA under the cost approach. The useful lives of Account
15 362.2 from 75 years to 40 years, and for Accounts 380.3 and 380.4 from 50 years to
16 40 years should be adjusted as described in my direct testimony. The useful lives in
17 these accounts were based on the information shown on page V-4 of the Aqua
18 Pennsylvania Wastewater Depreciation Study that was provided in response to data
19 request OCA-II-10, Attachment 1.

20 **Q. At pages 4-6 of his rebuttal testimony, Mr. D'Ascendis disagrees with your**
21 **adjustment to the Income Approach for the terminal value. Please respond.**

22 A. Rate regulated public utilities have traditionally been distinguishable and
23 distinguished from business enterprises that operate in competitive markets and

1 without price regulation. Two attributes of a public utility business are important
2 distinguishing factors. The first is the special public importance or necessity of the
3 types of services supplied by the utility. The second is the possession of utility
4 plants having technical characteristics leading to monopoly or at least to ineffective
5 forms of competition.² As put simply by Clemens: “Necessity and monopoly are
6 almost prerequisites of public utility status.”³ Because of the monopoly nature and
7 cost regulation, the approach to determining a terminal value for a rate regulated
8 public utility is therefore different than for a business that is not a monopoly and is
9 not subject to cost-based rate regulation.

10 For a rate regulated public utility, a valuation method, is “any method used to
11 place a value on an asset.”⁴ The valuation under the income approach is “based on
12 the present value of net income expected to be derived from the asset.”⁵ It is
13 therefore crucial for a rate regulated public utility that the value under the income
14 approach is based on the net income expected to be derived from the asset. Thus, the
15 utility valuation must consider the present value of the net income derived from the
16 utility asset. The utility asset at the end of the valuation period is represented by its
17 remaining net book value (plant less accumulated depreciation), which would
18 generally be recoverable unless there were some type of disallowance for
19 imprudence, unreasonableness, etc. For an investor-owned public utility that is
20 subject to federal income taxes, the rate base would also typically include a
21 deduction for accumulated deferred income taxes. The recovery of the remaining

² See, e.g., Bonbright, Principles of Public Utility Rates, Columbia University Press, 1969 edition at 8.

³ See, Eli W. Clemens, Economics and Public Utilities (New York, 1950) at 25.

⁴ See, e.g., Edison Electric Institute, Glossary of Electric Utility Terms.

⁵ Id.

1 undepreciated net book value of the prudently incurred utility plant, possibly less the
2 related Accumulated Deferred Income Taxes (“ADIT”), would therefore constitute
3 the terminal value, that would need to be discounted.

4 For a rate regulated public utility, it has long been recognized that amounts
5 representing capitalized earnings should not be included in a rate base.⁶ The value of
6 plant for a rate regulated public utility cannot be determined by capitalization of
7 prospective earnings, in the manner of commercial property used in a competitive
8 enterprise free from regulation.⁷ Similarly, it has been observed that a utility
9 regulatory commission should not arrive at a fair value rate base by capitalizing
10 earnings under the utility’s existing rates.⁸ These traditional concepts of cost-based
11 utility regulation indicate that an approach to terminal value for a rate regulated
12 public utility should focus on the remaining amount of net plant, not on a perpetual
13 capitalization of prospective earnings.

14 If a firm is expected to earn a return on its investment at its cost of capital
15 and also recover its depreciation expense, the present value of that future cash flow
16 is exactly equal to the present value of its investment. Therefore, it is reasonable to
17 base the terminal value for a rate-regulated monopoly utility on the remaining
18 amount of net plant.

19 As a matter of arithmetic, as well as financial theory, if a firm is expected to
20 earn a return on its investment at its cost of capital and also recover its depreciation
21 expense, the present value of that future cash flow is exactly equal to the present

⁶ See, e.g., 32 Public Utility Reports 3rd p.43 and PUR 3rd Valuation §31.

⁷ Id. Also see, Re: New York Teleph. Co. (1954) 5 PUR 3rd 33.

⁸ Id., Also see, Re: Western Carolina Teleph. Co. (1962) 45 PUR 3rd120.

1 value of its investment. Therefore, a more appropriate terminal value (before
2 discounting) in the twentieth year is the net plant in service (and net of ADIT if
3 available) at that point in time. This net investment amount is then discounted back
4 to the present value to determine the ultimate terminal value in present value terms.

5 **Q. At pages 6-7 of his rebuttal testimony, Mr. D'Ascendis disagrees with your**
6 **adjustment to the Market Approach. Please respond.**

7 A. My primary concern is that the Comparable Sales Method used by Mr. D'Ascendis
8 lacks demonstrated reliability and use in actual transactions, especially when applied
9 to valuing a wastewater utility system that has unique characteristics and which is
10 subject to cost-based utility regulation. As noted in the direct testimony, attempting
11 to apply a value per connection from one utility onto another utility or from water
12 utilities onto a wastewater utility or from combination water/wastewater utilities
13 onto a wastewater utility or from a group of utilities that serves primarily end-use
14 customers onto a utility that has a substantial wholesale customer base is not
15 conceptually sound and is almost assured to produce valuation results that are highly
16 abnormal and unreliable, as is the case here. It is noted that the method used by Mr.
17 D'Ascendis which I removed provided a valuation of \$1.276 billion for a transaction
18 having a purchase price of \$276.5 million, i.e., 4.6 times the actual transaction value.

19 **Q. Are your conclusions changed concerning the valuation of the DELCORA**
20 **wastewater utility system as a result of Mr. D'Ascendis' rebuttal testimony?**

21 A. No. My conclusion that that the \$276.5 million purchase price, which is Aqua's
22 proposed value in this proceeding, should be used for the value of the DELCORA
23 wastewater utility assets is not altered.

1

2 **Response to Aqua Witness Walker Concerning Gannett Fleming Valuation Results**

3 **Q. Are your conclusions changed concerning the rate base amount to be used for**
4 **the DELCORA wastewater utility system as a result of Mr. Walker's rebuttal**
5 **testimony?**

6 A. No. My conclusion continues to be that the \$276.5 million purchase price, which is
7 Aqua's proposed value in this proceeding, should be used for the rate base value of
8 the DELCORA wastewater utility assets because that amount is below the averaged
9 adjusted result of the ScottMadden and Gannett Fleming valuations, as shown on
10 OCA Exhibit RCS-1, filed with my direct testimony. This conclusion is not altered
11 by any of the arguments presented in the rebuttal testimony of Aqua witness Walker.

12 **Q. At page 3 of his rebuttal testimony, Mr. Walker claims that "DELCORA's net**
13 **book value on original cost did not decrease as claimed by Mr. Smith." Please**
14 **respond.**

15 A. First, in addressing the Gannett Fleming Cost Approach, I did not state that
16 DELCORA's net book value on original cost decreased. On pages 47 of my direct
17 testimony, I clearly stated that: "The cost of the DELCORA wastewater utility
18 system that was reported on DELCORA's audited financial statements as of
19 December 31, 2018 is \$240,841,951 for capital assets net of accumulated
20 depreciation (Application Exhibit J2 at page 21, Delaware County Regional Water
21 Quality Control Authority Statement of Net Position at December 31, 2018." Pages
22 47-48 of my direct testimony, state that, per the DELCORA audited financial
23 statements for December 31, 2019, which were provided in response to OCA-II-7

1 and included with my direct testimony in Exhibit RCS-8, “DELCORA’s capital
2 assets, net of accumulated depreciation as of December 31, 2019 are \$260,506,518.”
3 Clearly, the \$260,506,518 net plant at December 31, 2019 is higher than the
4 comparable amount of \$240,841,951 at December 31, 2018. Both amounts are from
5 DELCORA’s audited financial statements, and thus were presumed to be reliable.

6 **Q. At page 3 of his rebuttal testimony, Mr. Walker states that: “Lower or shorter**
7 **service lives produce lower appraised value under the Cost Approach.” Do you**
8 **agree with that observation?**

9 A. Yes.

10 **Q. What depreciable lives has Aqua stated that it would use for the acquired**
11 **DELCORA wastewater utility assets, if the acquisition were to be approved?**

12 A. Aqua’s response to OCA-II-52 indicates that Aqua will use the depreciation rates
13 approved in Aqua’s last base rate case, which have been set forth in Aqua’s response
14 to OCA-II-10.

15 **Q. If the acquisition were to be approved and Aqua were to use those depreciable**
16 **lives from Aqua’s last base rate case that Aqua stated that it would use for the**
17 **acquired DELCORA wastewater utility assets, what impact would that have on**
18 **Mr. Walker’s valuation results under the Cost Approach?**

19 A. Using the depreciable lives from Aqua’s last base rate case that Aqua stated it would
20 use for the acquired DELCORA wastewater utility assets, if applied to all of the
21 sewer utility asset accounts would result in Replacement Cost Accumulated
22 Depreciation of \$415,305,664 rather than the \$392,724,620 Replacement Cost
23 Accumulated Depreciation used in the Gannett Fleming valuation study. Mr.

1 Walker's Cost Approach valuation would be reduced by the difference of
2 \$21,581,044.

3 **Q. Mr. Walker's valuation study cost approach and his rebuttal Exhibits 1 and 2**
4 **apply Iowa curve-based calculations to derive estimated amounts of**
5 **Replacement Cost Accumulated Depreciation. Is it required to use that method**
6 **to derive the estimate of Replacement Cost Accumulated Depreciation?**

7 A. No. For example, the ScottMadden valuation study in the current case uses
8 estimated useful life information, without Iowa curve-based calculations, to derive
9 estimates of Replacement Cost Accumulated Depreciation. A brief review of prior
10 ScottMadden valuation studies for Pennsylvania Section 1329 acquisitions also
11 suggests that Iowa curve-based calculations were not used by ScottMadden in those
12 evaluation studies to derive estimates of Replacement Cost Accumulated
13 Depreciation. Rather, the calculations were based on estimated useful life
14 information, without Iowa curve-based calculations, to derive estimates of
15 Replacement Cost Accumulated Depreciation. This history of current and prior
16 ScottMadden valuation studies without Iowa curve-based calculations to derive
17 estimates of Replacement Cost Accumulated Depreciation suggests that technique is
18 not required or mandatory, and that an alternative approach can and has been
19 acceptable.

20 **Q. Did Mr. Walker rely upon his subjective experience in selecting the Iowa curves**
21 **to be applied in his valuation of DELCORA?**

22 A. Yes. The Applicant stated in response to OCA-II-52 indicates that Aqua will use the
23 depreciation rates approved in Aqua's last base rate case, which have been set forth

1 in Aqua's response to OCA-II-10. Those rates were available and could have been
2 applied by Mr. Walker. However, rather than using the depreciation rates and Iowa
3 curves that Aqua has stated that it would apply if it is allowed to acquire, Mr. Walker
4 used different depreciation rates and Iowa curves, based on his subjective
5 experience, which resulted in a higher valuation under his Cost Approach.

6 **Q. At pages 9-15, Mr. Walker disagrees with your approach to calculating the**
7 **terminal value under the Income Approach. Why is the derivation of a**
8 **terminal value different for a rate-regulated public utility than for a different**
9 **type of business?**

10 A. As I explained above, rate regulated public utilities have traditionally been
11 distinguishable and distinguished from business enterprises that operate in
12 competitive markets and without price regulation. Because of the monopoly nature
13 and cost regulation, the approach to determining a terminal value for a rate regulated
14 public utility is therefore different than for a business that is not a monopoly and is
15 not subject to cost-based rate regulation. The utility valuation must consider the
16 present value of the net income derived from the utility asset. The utility asset at the
17 end of the valuation period is represented by its remaining net book value (plant less
18 accumulated depreciation), which would generally be recoverable unless there were
19 some type of disallowance for imprudence, unreasonableness, etc. As I explained
20 above, applying traditional concepts of cost-based utility regulation indicate that an
21 approach to terminal value for a rate regulated public utility should focus on the
22 remaining amount of net plant, not on a perpetual capitalization of prospective
23 earnings.

1 **Q. At page 14, lines 20-22, Mr. Walker claims that the PA PUC rejected OCA’s**
2 **proposed use of net plant as the terminal value used in the income approach in**
3 **the Cheltenham 1329 proceeding (Docket No. A-2019-3008491). Please**
4 **respond.**

5 A. There have been limited Commission decisions on valuation issues in Section 1329
6 cases. The valuation results for each proposed transaction should be evaluated based
7 on the specific information in each case. Moreover, as explained above, the
8 traditional concepts of cost-based utility regulation indicate that an approach to
9 terminal value for a rate regulated public utility should focus on the remaining
10 amount of net plant, not on a perpetual capitalization of prospective earnings.

11 **Q. At pages 16-20 of his rebuttal testimony, Mr. Walker argues for using “ex-ante”**
12 **information in the selected transactions method. Please respond.**

13 A. Mr. Walker at page 16 states that “ex ante” information is the only information
14 known at the time of the bid. However, for completed transactions, the actual results
15 are known. Thus, continuing to rely upon pre-bid estimates, particularly where the
16 actual results are known and have shown in a number of instances that the pre-bid
17 estimates were off-mark and thus mis-estimated the final approved results, usually
18 on the high side, seems likely to only result in perpetuating higher valuation
19 estimates. Where actual information is known, that should be used in place of
20 inaccurate pre-bid estimates from historical transactions. In this context, the
21 purchase price reflected in an Asset Purchase Agreement may not be the ratemaking
22 rate base approved by the Commission. My recommendation is that for completed

1 transactions, the Commission-approved ratemaking rate base should be used, if
2 lower than the purchase price, as set forth in Section 1329.

3 **Q. At page 20, Mr. Walker states that he does not know the basis for adjustments**
4 **that you presented on OCA Exhibit RCS-4, page 3. He attached as Exhibit 5 of**
5 **his Exhibit HW-1R your response to Aqua VI-13. Please respond.**

6 A. A supplemental response to Aqua VI-13 has been provided. A copy of the
7 supplemental response is attached to my surrebuttal testimony as Exhibit RCS-9. All
8 of the information shown on OCA Exhibit RCS-4, page 3, where different from the
9 amounts used by Mr. Walker, is from prior Section 1329 transactions, and was
10 compiled by me, or under my supervision, from the sources listed in that
11 supplemental response.

12 **Q. At pages 20-21 of his rebuttal, Mr. Walker claims that you did not justify the**
13 **weightings applied to the valuation results. Please explain why you continued**
14 **to use the same one-third, one-third, one-third weightings applied to the**
15 **adjusted Gannett Fleming valuation study results in the current case.**

16 A. Mr. Walker claims that the weightings to be applied to each of the valuation
17 approaches was not justified. He suggests that different weightings should be used if
18 adjustments are made, but fails to recommend any specific alternative weightings.
19 The equal weightings I applied to the Gannett Fleming results are the same
20 weightings used by Mr. Walker in the current case. Mr. Walker deviated from his
21 predominant equal weightings the Aqua-East Norriton case, where he used
22 weightings of 37.5% each for the Cost and Market Approaches and only 25% for the
23 Income Approach. In the Aqua-East Norriton case, Mr. Walker's underweighting of

1 the Income Approach and over-weighting of the Cost and Market approach results
2 had the impact of underweighting his lowest appraisal and overweighting his two
3 higher appraisals, thus producing a higher combined valuation, as summarized
4 below:

EXHIBIT 18

East Norriton Township Wastewater System Assets
Summary of Approach Results and
Fair Market Value Conclusion at Appraisal Date

<u>Valuation Approach</u>	<u>Indicated Value</u>	<u>Conclusion</u>	<u>Consideration</u>
Cost Approach	\$33,467,936		37.5%
Income Approach	10,383,787		25.0%
Market Approach	24,368,094		37.5%
		Conclusion \$24,284,000	

6
7
8 Applying the equal weightings to the adjusted Gannett Fleming valuation
9 results in the current case is reasonable in my opinion and is consistent with the
10 weightings used in the vast majority of the previous Gannett Fleming valuation
11 studies. In addition to the current case, Mr. Walker also used similar equal

1 weightings in each of the following Section 1329 Fair Market Value appraisals:
2 Kane, Exeter, Mahoning (water and sewer), East Bradford, and Limerick.

3

4 **Response to Aqua Witnesses Packer and Willert Concerning My Recommendations**

5 **Q. Aqua witness Packer addresses my recommendations at pages 21-25 of his**
6 **rebuttal testimony. What does Mr. Packer state concerning the first**
7 **recommended condition, concerning rate increases to acquired DELCORA**
8 **customers and the application of the DELCORA Customer Trust (or an**
9 **acceptable alternative)?**

10 A. At page 21 of his rebuttal testimony, Mr. Packer states that: “Aqua agrees with Mr.
11 Smith that the Trust should be used to provide customer bill assistance payments to
12 DELCORA customers, the effect of which will provide for 3% annual increases to
13 DELCORA customers until the approximately \$200 million projected Trust funding
14 has been fully applied.”

15 **Q. Does Aqua agree with having a separate cost of service study (COSS) for**
16 **DELCORA customers?**

17 A. Yes. At page 22 of his rebuttal testimony, Mr. Packer agrees with the separate COSS
18 for DELCORA customers and that the separate COSS will remain an obligation at
19 least as long as the DELCORA Customer Trust is operational to provide DELCORA
20 customer bill assistance. Mr. Packer also agrees that Aqua would provide a separate
21 COSS for the DELCORA system and for the City of Chester.

22 **Q. Does Aqua agree with having a separate rate zone for DELCORA customers?**

1 A. No. Mr. Packer states at page 22 of his rebuttal testimony that, in his view, it would
2 not be appropriate to establish a separate rate zone in this proceeding. He indicates
3 that the issue of a separate rate zone for the acquired DELCORA customers could be
4 addressed in a future Aqua base rate proceeding.

5 **Q. Why should a separate rate zone for the acquired DELCORA customers be a**
6 **condition to the proposed transaction?**

7 A. The development of the rates to be established for the acquired DELCORA
8 customers would presumably be informed by the results of the separate COSS. Also,
9 during the operation of the DELCORA Customer Trust, there will be a need for
10 tracking how those funds are being used. Having a separate rate zone for the
11 acquired DELCORA customers would therefore facilitate the development of the
12 rates based on the separate COSS and would also facilitate transparency with the
13 application of the funds from the DELCORA Customer Trust. The
14 acknowledgement that a separate rate zone for acquired DELCORA customers is
15 needed for the above-stated reasons would not pre-determine the specific rate design
16 for that rate zone. The details of rate development for that separate DELCORA rate
17 zone would then subsequently be addressed in the future Aqua base rate proceedings
18 that included the acquired DELCORA wastewater customers. Consequently, I
19 continue to recommend that establishing a separate rate zone for acquired
20 DELCORA customers be included as a condition to approving the proposed
21 transaction.

22 **Q. Does Aqua agree with the your LTIP recommendation?**

1 A. Yes. At pages 22-23 of his rebuttal testimony, Mr. Packer states that: “When Aqua
2 modifies its Long-Term Infrastructure Improvement Plan (“LTIIIP”) to include the
3 DELCORA wastewater system, any DELCORA-related projects reflected in the
4 revised LTIIIP will be in addition to, and not a reprioritization of, any capital
5 improvements that Aqua was already committed to undertake for existing
6 customers.”

7 **Q. Has Aqua provided an updated Memorandum of Understanding (“MOU”)**
8 **regarding how the DELCORA Customer Trust proceeds will be properly**
9 **credited to the former DELCORA customers?**

10 A. Yes. Mr. Packer included an updated MOU as WCP-2R Exhibit E to his rebuttal
11 testimony.

12 **Q. Do you have any comments regarding that updated MOU?**

13 A. Yes. The fourth “WHEREAS” paragraph in the updated MOU states that
14 “DELCORA has agreed to devote a majority of the proceeds that it receives from the
15 Sewer System Sale (the “Net Sale Proceeds”) to mitigate those rate increase to
16 DELCORA Customers for a specified period following the closing date of the Sewer
17 System Sale Agreement (the “Closing Date”);” (Emphasis supplied.) Reference to
18 “a majority of the proceeds” is vague and should be replaced with a more specific
19 reference to reflect DELCORA’s commitment which has been estimated at
20 approximately \$200 million of the net sales proceeds and cash balance as described
21 in the responses to OCA-V-1 and OCA-VI-5(a).”

22

1 **Q. Does Aqua agree that the payments from the DELCORA Customer Trust**
2 **should be separately shown on Aqua’s billings to DELCORA wastewater utility**
3 **customers to help make this part of the public benefit transparent to**
4 **DELCORA wastewater utility customers who are receiving the bill assistance?**

5 A. Yes, as stated on pages 23-23 of Mr. Packer’s rebuttal testimony.

6 **Q. Does Aqua agree with the recommended reporting requirements?**

7 A. In part, yes. As stated on page 24 of Mr. Packer’s rebuttal testimony, Aqua agrees
8 with filing annual reports showing how customer bill assistance payments are being
9 applied to Aqua’s bills to DELCORA customers. The recommendation in my direct
10 testimony provided for quarterly reports. To assure that the payments are being
11 properly applied from the inception, I recommend that quarterly reports be required
12 at least for the first full year of DELCORA Customer Trust operation. If it is
13 determined at the end of the first full year of such operation that the Trust is
14 operating as intended without any concerns, problems or issues, the reporting after
15 that point could revert to annual reporting.

16 Additionally, as described in my direct testimony, the reports should also
17 show how the DELCORA Customer Trust amounts are being applied to reduce the
18 Aqua rate increases to DELCORA wastewater utility customers that would be
19 occurring under Aqua ownership. I recommend that this rate impact information be
20 provided annually to facilitate the transparency of how the DELCORA Customer
21 Trust amounts are being applied.

22 **Q. Your direct testimony had a recommendation concerning Aqua reporting on**
23 **the impact on income tax expense from repairs deductions claimed by Aqua on**

1 **DELCORA wastewater utility system assets, including recording those amounts**
2 **into a regulatory liability account to be addressed in Aqua’s next base rate case**
3 **in which rates for the acquired DELCORA wastewater utility customers are**
4 **addressed. Has Aqua agreed with that recommendation?**

5 A. Yes. Mr. Packer’s rebuttal testimony at pages 24-25 addresses this. After quoting
6 the recommendation, his rebuttal testimony at page 24 states that: “Aqua agrees with
7 Mr. Smith’s recommendation for this transaction.”

8 **Q. How have Aqua witnesses Willert and Packer addressed the condition that**
9 **DELCORA must demonstrate that it has the legal authority to transfer its**
10 **assets?**

11 A. At pages 4-5 of his rebuttal testimony, Mr. Willert cites a provision in the
12 Pennsylvania Municipal Authorities Act (“MAA”), 53 Pa. C.S. 5607(d)(4), which he
13 asserts makes it clear that DELCORA has the legal authority to transfer its assets.
14 At page 23 of his rebuttal testimony, Aqua witness Packer states that this condition
15 will be addressed more fully in briefing.

16 **Q. Since DELCORA’s legal authority is a legal issue, do you have any changes to**
17 **your recommended condition that DELCORA must demonstrate that it has the**
18 **legal authority to transfer its assets?**

19 A. No. DELCORA’s legal authority to transfer its wastewater utility assets and the
20 resale customer concerns involving contract assignments, etc., which are discussed
21 briefly at pages 5-6 of Mr. Willert’s rebuttal testimony, continue to be legal issues
22 that will need to be resolved to the satisfaction of the Commission prior to approving
23 the proposed transaction.

1

2 **Summary of Testimony and Conclusions**

3 **Q. Please summarize your testimony and conclusions.**

4 A. The transaction proposed by the Applicant would create significant additional costs
5 and presents significant risks to Pennsylvania ratepayers. In order to avoid harm to
6 existing Aqua customers, the rates for DELCORA customers should be conditioned
7 on Aqua setting the DELORA rate zone rates at their cost of service in Aqua's base
8 rate proceedings so long as the Trust provides rate mitigation to the DELCORA
9 customers that are being acquired by Aqua.

10 The estimated impact of the proposed transaction would be an approximately
11 12.55% average rate increase in the rates for current DELCORA wastewater
12 customers due to the change in ownership of this utility, which Aqua has indicated
13 could occur in its next wastewater utility rate case. DELCORA proposes to use
14 approximately \$200 million of its proceeds from the sale to Aqua to establish a
15 DELCORA Customer Trust, which would be utilized to minimize the rate
16 increase(s) to DELCORA wastewater customers under Aqua ownership to 3 percent
17 per year while the funds last.

18 If the Commission approves the acquisition, I recommend a ratemaking rate
19 base in accordance with Section 1329 of \$276.5 million based on the lower amount
20 of the purchase price versus the adjusted appraised value.

21 I recommend a specific accounting treatment for the income tax impact of
22 repairs deductions that will be claimed by Aqua related to the DELCORA assets.

1 **Q. Please summarize the conditions you recommend should be imposed on the**
2 **proposed transaction.**

3 **A. If the Commission approves the acquisition, the following conditions and mitigation**
4 **measures are recommended to protect DELCORA customers and existing Aqua**
5 **wastewater and water customers from the risks associated with the acquisition:**

- 6 • The 12.55% average rate increase for DELCORA ratepayers that
7 Aqua has estimated could occur in the next Aqua wastewater rate case
8 should be mitigated to avoid rate shock associated with the change in
9 ownership. The DELCORA Customer Trust (or some acceptable
10 alternative) should be used to limit the annual rate increases to
11 DELCORA wastewater utility customers under Aqua ownership to no
12 more than 3 percent annually, until the approximated \$200 million
13 projected for funding the DELCORA Customer Trust has been fully
14 applied for such rate increase mitigation purposes.
- 15 • No revenue requirement shall be shifted to Aqua's existing water and
16 wastewater customers while the DELCORA Customer Trust is
17 operating to mitigate the rate increases under Aqua ownership to the
18 acquired DELCORA customers.
- 19 • While the DELCORA Customer Trust is functioning to limit
20 increases to DELCORA customers, Aqua should prepare and present
21 a separate cost of service study for the acquired DELCORA
22 wastewater customers and the acquired DELCORA wastewater
23 customers should be a separate rate zone. The separate rate zone and
24 its separate cost of service study should remain an obligation at least
25 as long as the Trust provides the rate mitigation.
- 26 • At the time of filing its next base rate case, Aqua should submit a cost
27 of service study that removes all costs and revenues associated with
28 the operations of the DELCORA wastewater system and should also
29 provide a separate cost of service study for the DELCORA system.
- 30 • While the Trust (or some acceptable alternative) is in place and
31 providing rate mitigation for former DELCORA customers, the
32 DELCORA rate zone will reflect the full cost of service and related
33 revenue requirement for that rate zone and no costs will be shifted
34 outside of that rate zone.
- 35 • When Aqua modifies its LTIP to include the DELCORA wastewater
36 system, any DELCORA-related projects reflected in the revised
37 LTIP should be in addition to, and not reprioritize, any capital

1 improvements that Aqua was already committed to undertake for
2 existing customers.

- 3 • DELCORA must address convincingly whether it has the legal
4 authority to transfer the wastewater utility assets and related contracts
5 to Aqua.
- 6 • The revised MOU provided in WCP-2R Schedule E contains an
7 additional description of how the DELCORA Customer Trust
8 payments will be applied and the administrative mechanics to apply
9 bill assistance payments from the Trust to the acquired DELCORA
10 customer bills. The term “a majority of the proceeds” in the fourth
11 “WHEREAS” is overly vague and should be replaced with the
12 following: approximately \$200 million of the net sales proceeds and
13 cash balance as described in the responses to OCA-V-1 and OCA-VI-
14 5(a).
- 15 • The customer assistance payments from the DELCORA Customer
16 Trust on Aqua's billings to DELCORA wastewater utility customers
17 should be separately shown on or provided with the bills to help make
18 this part of the public benefit transparent to the DELCORA
19 wastewater utility customers who are receiving the bill assistance.
- 20 • For the first year of operation, the operation of the DELCORA
21 Customer Trust, i.e., the DELCORA Rate Stabilization Fund should
22 be reviewed and monitored in quarterly reports from Aqua which
23 show how amounts are being applied to reduce the Aqua rate
24 increases to DELCORA wastewater utility customers that would be
25 occurring under Aqua ownership. If there are no significant issues or
26 problems, after the first year, such reporting could be continued on an
27 annual (rather than quarterly) basis.
- 28 • In the period from the date when the acquisition is consummated
29 through the effective date of new rates for the acquired DELCORA
30 wastewater utility customers in Aqua's next base rate case, the impact
31 on income tax expense from repairs deductions claimed by Aqua on
32 DELCORA wastewater utility system assets should be recorded in a
33 regulatory liability account and addressed in Aqua's next base rate
34 case in which rates for the acquired DELCORA wastewater utility
35 customers are addressed.
- 36 • The issues being raised by some of the resale customers’ resale
37 transfer of the agreements should be resolved before the transaction
38 can close. Those agreements are tied to expected revenues. The
39 Commission could attach conditions that require the resolution of
40 these legal issues before closing occurs.

**Application of Aqua Pennsylvania Wastewater, Inc.
for Approval of its Acquisition of Delaware County Regional Water Control Authority's
Wastewater Assets, inter alia, Pursuant to Sections 507, 1102, and 1329 of the Public Utility Code
Docket No. A-2019-3015173**

**Response of the Office of Consumer Advocate to
Interrogatories of Aqua Pennsylvania Wastewater
Set VI**

Aqua-VI-13 Please provide a copy of the source for the purchase price, Gross PP&E, Net PP&E, population and number of customers for each comparable acquisition used in OCA Exhibit RCS-4 if that value differs from the value used in the Gannett Fleming appraisal.

RESPONSE:
Not applicable.

Respondent: Ralph C. Smith

SUPPLEMENTAL RESPONSE (10/30/2020):

The sources for that information in Exhibit RCS-4, page 3 where different than the Gannett Fleming appraisal was a combination of OCA and Larkin research of acquired system statistics as indicated in the "Column D Reference" on Attachment A to this response. The referenced page from OCA Exhibit AEE-3 in Docket No. A-2019-3008491 is included as Attachment B to this response. A copy of the Excel file that was provided by the OCA to Larkin is also included with this supplemental response as Attachment C.

Respondent: Ralph C. Smith

OCA Supplemental Response to Aqua-VI-13
Attachment A

Aqua Pennsylvania Wastewater, Inc.
Acquisition of Delaware County Regional Water Quality Control Authority Assets
OCA Adjustments to Gannett Fleming Market Approach

OCA Exhibit RCS-4
Docket No. A-2019-3015173
Page 3 of 3

		Per Gannett Fleming			Per OCA			
Line No.	Acquired System/Purchase Price	Acquired System Statistic (A)	Ratio of Purchase Price to Acquired System (B)	Ratio Times DELCORA Statistic (C)	Acquired System Statistic (D)	Ratio of Purchase Price to Acquired System (E)	Ratio Times DELCORA Statistic (F)	Column D Reference
Ex-Post								
	McKeesport	\$ 156,000,000			\$ 158,000,000			Docket No. A-2019-3008491, Direct Testimony of OCA Witness Ashley E. Everett, OCA Exhibit AEE-3
1	Gross PP&E	\$ 108,231,570	1.4414	\$ 380,059,978	\$ 108,231,570	1.4598	\$ 384,932,542	
2	Net PP&E	\$ 80,085,602	1.9479	\$ 373,560,529	\$ 80,085,602	1.9729	\$ 378,349,766	
4	Customers	12,780	12,206.5728	\$ 201,078,873	20,320	7,775.5906	\$ 128,087,303	Docket No. A-2019-3008491, Direct Testimony of OCA Witness Ashley E. Everett, OCA Exhibit AEE-3
5	Population	50,570	3,084.8329	\$ 1,897,928,021	61,752	2,558.6216	\$1,574,179,136	Docket No. A-2019-3008491, Direct Testimony of OCA Witness Ashley E. Everett, OCA Exhibit AEE-3
6	New Garden	\$ 29,500,000			\$ 29,500,000			
7	Gross PP&E	\$ 27,146,852	1.0867	\$ 286,539,196	\$ 27,267,123	1.0819	\$ 285,275,318	Docket No. A-2019-3008491, Direct Testimony of OCA Witness Ashley E. Everett, OCA Exhibit AEE-3
8	Net PP&E	\$ 18,567,728	1.5888	\$ 304,687,107	\$ 18,590,089	1.5869	\$ 304,320,616	Docket No. A-2019-3008491, Direct Testimony of OCA Witness Ashley E. Everett, OCA Exhibit AEE-3
9	Customers	1,796	16,425.3898	\$ 270,575,445	2,100	14,047.6190	\$ 231,406,429	Docket No. A-2019-3008491, Direct Testimony of OCA Witness Ashley E. Everett, OCA Exhibit AEE-3
10	Population	12,085	2,441.0426	\$ 1,501,839,264	12,085	2,441.0426	\$1,501,839,264	
11	Limerick	\$ 75,100,000			\$ 64,373,378			Docket No. A-2019-3008491, Direct Testimony of OCA Witness Ashley E. Everett, OCA Exhibit AEE-3
12	Gross PP&E	\$ 63,480,402	1.1830	\$ 311,947,685	\$ 63,480,402	1.0141	\$ 267,391,827	
13	Net PP&E	\$ 46,153,867	1.6272	\$ 312,048,909	\$ 46,153,867	1.3948	\$ 267,478,594	
14	Customers	5,416	13,866.3220	\$ 228,419,922	5,434	11,846.4074	\$ 195,145,870	Docket No. A-2019-3008491, Direct Testimony of OCA Witness Ashley E. Everett, OCA Exhibit AEE-3
15	Population	18,798	3,995.1059	\$ 2,457,968,906	18,798	3,424.4802	\$2,106,894,294	
16	Steelton	\$ 22,500,000			\$ 20,500,000			OCA Response to Aqua-VI-13 Purchase Prices and Final Rate Base Excel File
17	Gross PP&E	\$ 19,739,906	1.1398	\$ 300,551,525	\$ 19,739,906	1.0385	\$ 273,835,834	
18	Net PP&E	\$ 14,433,435	1.5589	\$ 298,953,507	\$ 14,433,435	1.4203	\$ 272,379,862	
19	Customers	2,472	9,101.9417	\$ 149,936,286	2,472	8,292.8803	\$ 136,608,617	
20	Population	5,932	3,792.9872	\$ 2,333,616,403	5,932	3,455.8328	\$2,126,183,833	
21	Exeter	\$ 96,000,000			\$ 92,000,000			OCA Response to Aqua-VI-13 Purchase Prices and Final Rate Base Excel File
22	Gross PP&E	\$ 68,404,345	1.4034	\$ 370,057,357	\$ 68,404,345	1.3449	\$ 354,638,300	
23	Net PP&E	\$ 42,678,351	2.2494	\$ 431,374,460	\$ 40,057,634	2.2967	\$ 440,446,700	Docket No. A-2018-3004933, AUS Appraisal Cost Approach Workpapers
24	Customers	8,984	10,685.6634	\$ 176,024,933	8,984	10,240.4274	\$ 168,690,561	
25	Population	27,609	3,477.1270	\$ 2,139,285,016	27,609	3,332.2467	\$2,050,148,140	
26	Sadsbury	\$ 9,250,000			\$ 8,300,000			OCA Response to Aqua-VI-13 Purchase Prices and Final Rate Base Excel File
27	Gross PP&E	\$ 7,480,601	1.2365	\$ 326,051,904	\$ 6,916,575	1.2000	\$ 316,423,333	Docket No. A-2018-3002437, Direct Testimony of Jerome C. Weinert, page 20
28	Net PP&E	\$ 6,128,876	1.5092	\$ 289,435,452	\$ 6,128,876	1.3542	\$ 259,709,649	
29	Customers	998	9,268.5371	\$ 152,680,611	998	8,316.6333	\$ 136,999,900	
30	Population	3,850	2,402.5974	\$ 1,478,186,039	3,850	2,155.8442	\$1,326,372,338	
31	East Bradford	\$ 5,000,000			\$ 5,000,000			
32	Gross PP&E	\$ 8,294,931	0.6028	\$ 158,942,015	\$ 8,294,931	0.6028	\$ 158,942,015	
33	Net PP&E	\$ 5,473,948	0.9134	\$ 175,170,169	\$ 5,473,948	0.9134	\$ 175,170,169	
34	Customers	1,248	4,006.4103	\$ 65,997,596	1,248	4,006.4103	\$ 65,997,596	
35	Population	9,942	502.9169	\$ 309,417,119	9,942	502.9169	\$ 309,417,119	
36	Mahoning Water	\$ 4,734,800			\$ 4,734,800			
37	Gross PP&E	\$ 5,294,272	0.8943	\$ 235,817,965	\$ 5,294,272	0.8943	\$ 235,817,965	
38	Net PP&E	\$ 3,507,138	1.3500	\$ 258,904,507	\$ 3,507,138	1.3500	\$ 258,904,507	
39	Customers	1,186	3,992.2428	\$ 65,764,216	1,186	3,992.2428	\$ 65,764,216	
40	Population	4,218	1,122.5225	\$ 690,626,369	4,218	1,122.5225	\$ 690,626,369	
41	Mahoning Sewer	\$ 4,765,200			\$ 4,765,200			
42	Gross PP&E	\$ 4,931,649	0.9662	\$ 254,783,015	\$ 4,931,649	0.9662	\$ 254,783,015	
43	Net PP&E	\$ 3,234,859	1.4731	\$ 282,498,798	\$ 3,234,859	1.4731	\$ 282,498,798	
44	Customers	1,451	3,284.0799	\$ 54,098,649	1,451	3,284.0799	\$ 54,098,649	
45	Population	4,218	1,129.7297	\$ 695,060,568	4,218	1,129.7297	\$ 695,060,568	
46	Cheltenham	\$ 50,250,000			\$ 44,558,258			Docket No. A-2019-3008491, Final Order
47	Gross PP&E	\$ 19,818,216	2.5355	\$ 668,579,421	\$ 19,818,216	2.2483	\$ 592,850,435	
48	Net PP&E	\$ 15,408,458	3.2612	\$ 625,414,163	\$ 15,408,458	2.8918	\$ 554,574,440	
49	Customers	10,219	4,917.3109	\$ 81,002,862	10,219	4,360.3345	\$ 71,827,790	
50	Population	37,841	1,327.9247	\$ 816,999,055	37,841	1,177.5127	\$ 724,458,800	
51	East Norriton	\$ 21,000,000			\$ 20,750,000			Docket No. A-2019-3009052, Final Order
52	Gross PP&E	\$ 16,916,212	1.2414	\$ 327,338,942	\$ 16,916,212	1.2266	\$ 323,442,050	
53	Net PP&E	\$ 9,251,450	2.2699	\$ 435,311,676	\$ 9,251,450	2.2429	\$ 430,129,394	
54	Customers	4,966	4,228.7555	\$ 69,660,290	4,966	4,178.4132	\$ 68,831,001	
55	Population	14,296	1,468.9424	\$ 903,759,443	14,296	1,451.4550	\$ 893,000,402	
All Selected Transactions Companies								
56	Ex-Post (Median) - Asset Items			\$ 308,317,396			\$ 283,887,058	
57	Ex-Post (Midpoint) - Asset Items			\$ 413,760,718			\$ 375,896,225	
58	Ex-Post (Median) - Demographic Items			\$ 289,996,282			\$ 270,411,774	
59	Ex-Post (Midpoint) - Demographic Items			\$ 1,256,033,778			\$1,090,141,241	
Fully Integrated Selected Transactions Companies								
60	Ex-Post (Median) - Asset Items			\$ 311,998,297			\$ 294,797,967	
61	Ex-Post (Midpoint) - Asset Items			\$ 358,956,828			\$ 353,919,264	
62	Ex-Post (Median) - Demographic Items			\$ 886,207,354			\$ 866,622,846	
63	Ex-Post (Midpoint) - Demographic Items			\$ 1,303,952,596			\$1,127,135,568	

Notes and Source:

Cols. A-C: Exhibit Q Gannett Fleming Fair Market Value Appraisal Report, Exhibit 18, page 3

DELCORA's OCNLD as determined by Gannett Fleming (Appraisal page 28) - Gross PP&E

\$263,682,616

DELCORA's OCNLD as determined by Gannett Fleming (Appraisal page 28) - Net PP&E

\$191,774,486

DELCORA's Customers

16,473

DELCORA's Population

615,245

OCA Supplemental Response to Aqua-VI-13
Attachment B

OCA Exhibit AEE-3

Aqua Pennsylvania Wastewater, Inc.
Acquisition of Cheltenham Township Wastewater Assets
Docket No. A-2019-3008491
Gannett Fleming Market Approach - Selected Transactions

Gannett Fleming Results (corrected for formula error)					OCA Adjusted Results		
Acquired System/ Purchase Price	Acquired System Statistic	Ratio of Purchase Price to Acquired System Statistic	Ratio Times Exeter Statistic	Acquired System Statistic	Ratio of Purchase Price to Acquired System Statistic	Ratio Times Exeter Statistic	
1 Capital Items: Data							
2 McKeesport	156,000,000			158,000,000			
3 Gross PP&E	91,435,797	1.7061	33,812,159	108,231,570	1.4598	28,931,282	
4 Net PP&E	73,813,794	2.1134	32,564,638	80,085,602	1.9729	30,399,177	
5 New Garden	29,500,000			29,500,000			
6 Gross PP&E	25,988,330	1.1351	22,496,150	27,267,123	1.0819	21,441,110	
7 Net PP&E	17,967,319	1.6419	25,298,683	18,590,089	1.5869	24,451,175	
8 Limerick	75,100,000			64,373,378			
9 Gross PP&E	60,847,250	1.2342	24,460,399	63,480,402	1.0141	20,096,998	
10 Net PP&E	36,113,701	2.0795	32,042,553	46,153,867	1.3948	21,491,038	
11 East Bradford	5,000,000			5,000,000			
12 Gross PP&E	n/a	n/a	n/a	8,294,930	0.6028	11,945,981	
13 Net PP&E	n/a	n/a	n/a	5,473,947	0.9134	14,074,358	
14 Mahoning	9,500,000			9,500,000			
15 Gross PP&E	5,460,043	1.7399	34,481,972	10,225,921	0.9290	18,411,354	
16 Net PP&E	2,815,114	3.3746	51,998,019	6,741,997	1.4091	21,711,720	
17 Minimum (All Acquisitions)			22,496,150			11,945,981	
18 Maximum (All Acquisitions)			51,998,019			30,399,177	
19 Minimum (Collection/Distribution-Only Acquisitions)			34,481,972			11,945,981	
20 Maximum (Collection/Distribution-Only Acquisitions)			51,998,019			21,711,720	
21 Demographics Items: Data							
22 McKeesport	156,000,000			158,000,000			
23 Customers	20,320	7.677	78,452,953	20,320	7.776	79,458,760	
24 Population	61,752	2.526	95,595,220	61,752	2.559	96,820,799	
25 New Garden	29,500,000			29,500,000			
26 Customers	1,796	16,425	167,851,058	2,100	14,048	143,552,619	
27 Population	12,085	2,441	92,371,494	12,085	2,441	92,371,494	
28 Limerick	75,100,000			64,373,378			
29 Customers	5,416	13,866	141,699,945	5,434	11,846	121,058,438	
30 Population	18,798	3,995	151,178,801	18,798	3,424	129,585,754	
31 East Bradford	5,000,000			5,000,000			
32 Customers	1,248	4,006	40,941,506	1,248	4,006	40,941,506	
33 Population	9,942	503	19,030,879	9,942	503	19,030,879	
34 Mahoning	9,500,000			9,500,000			
35 Customers	2,403	3,953	40,399,709	2,806	3,386	34,597,470	
36 Population	8,472	1,121	42,432,661	8,472	1,121	42,432,661	
37 Minimum (All Acquisitions)			19,030,879			19,030,879	
38 Maximum (All Acquisitions)			167,851,058			143,552,619	
39 Minimum (Collection/Distribution-Only Acquisitions)			19,030,879			19,030,879	
40 Maximum (Collection/Distribution-Only Acquisitions)			42,432,661			42,432,661	
41 Result (Average of Minimums and Maximums)			51,164,955			37,506,237	

Attachment C
OCA Supplemental Response to Aqua-VI-13 Purchase Prices and Final Rate Base

Buyer	Seller	Utility Type	Type of System	County	Docket No.	Buyer's UVE	Seller's UVE	As-Filed Purchase Price	Number of Customers	As-Filed Price per Customer	Net Book Value
PAWC	McKeesport	Wastewater	Integrated	Allegheny	A-2017-2606103	AUS Consultants	HRG	162,000,000	12,780	12,676	80,085,602
PAWC	Sadsbury	Wastewater	Collection	Chester	A-2018-3002437	AUS Consultants	HRG	9,250,000	998	9,269	7,480,573
PAWC	Exeter	Wastewater	Integrated	Berks	A-2018-3004933	AUS Consultants	Gannett Fleming	96,000,000	9,015	10,649	40,057,634
PAWC	Steelton	Water	Distribution	Dauphin	A-2019-3006880	AUS Consultants	ScottMadden	22,500,000	2,415	9,317	14,433,435
		Amount Over (Under) Net Book Value	% Over (Under) Net Book Value	Buyer's Appraisal	Seller's Appraisal	OCA Adjusted Buyer's Appraisal	OCA Adjusted Seller's Appraisal	Ratemaking rate base: Adjusted by Commission	Ratemaking rate base: Adjusted by Settlement	Final Rate Base	Purchase Price: Adjusted by Settlement
PAWC	McKeesport	81,914,398	102%	161,343,000	207,010,000	150,105,207	145,973,192		158,000,000	158,000,000	159,000,000
PAWC	Sadsbury	1,769,427	24%	8,910,000	9,590,000	7,191,780	7,041,011		8,300,000	8,300,000	8,600,000
PAWC	Exeter	55,942,366	140%	101,817,204	104,120,000	72,291,843	77,386,086		92,000,000	92,000,000	93,500,000
PAWC	Steelton	8,066,565	56%	23,221,800	21,459,591	17,936,781	16,067,175		20,500,000	20,500,000	21,750,000
		Final Rate Base per Customer	Amount of RMRB over (under) NBV	Estimated UVE fees and Transaction Costs	Estimated Annual Revenue Requirement	Notes	Updated Estimate of R.R. - Internal Use Only	Notes	Estimated Year 1 Revenues	Notes	
PAWC	McKeesport	12,363	77,914,398	1,310,000	31,097,000	[1]	29,937,759	[5]	13,200,000		
PAWC	Sadsbury	8,317	819,427	450,000	1,278,995	[1]	1,186,319	[6]	1,092,257		
PAWC	Exeter	10,205	51,942,366	1,300,000	14,125,000	[3]	13,770,000	[6]	8,392,000		
PAWC	Steelton	8,489	6,066,565	255,000	4,112,000	[3]	3,911,000	[6]	2,794,000		

References

- [1] Estimate provided by AE in OCA testimony
 [2] Estimate not provided in either Company or OCA testimony. See spreadsheet # 263449 for calculation.
 [3] Estimate provided by Company in discovery (PAWC) or Appendix A (Aqua)
 [4] lowered tax rate
 [5] lowered tax rate and reduced purchase price to ratemaking rate base approved by Commission
 [6] reduced purchase price to ratemaking rate base approved by Commission
 [7] updated revenue estimate received in notice calculation (rate increases since the rate case)

Attachment C
OCA Supplemental Response to Aqua-VI-13 Purchase Prices and Final Rate Base

Buyer	Seller	Utility Type	Type of System	County	Docket No.	Buyer's UVE	Seller's UVE	As-Filed Purchase Price	Number of Customers	As-Filed Price per Customer	Net Book Value
Aqua	New Garden	Wastewater	Integrated	Chester	A-2016-2580061	Gannett Fleming	AUS Consultants	29,500,000	2,106	14,008	18,567,728
Aqua	Limerick	Wastewater	Integrated	Montgomery	A-2017-2605434	Gannett Fleming	HRG	75,100,000	5,434	13,820	46,153,867
Aqua	East Bradford	Wastewater	Collection	Chester	A-2018-3001582	Gannett Fleming	AUS Consultants	5,000,000	1,248	4,006	5,473,948
Aqua	Cheltenham	Wastewater	Collection	Montgomery	A-2019-3008491	Gannett Fleming	AUS Consultants	50,250,000	10,219	4,917	15,408,458
Aqua	East Norriton	Wastewater	Collection	Montgomery	A-2019-3009052	Gannett Fleming	AUS Consultants	21,000,000	4,966	4,229	

	Amount Over (Under) Net Book Value	% Over (Under) Net Book Value	Buyer's Appraisal	Seller's Appraisal	OCA Adjusted Buyer's Appraisal	OCA Adjusted Seller's Appraisal	Rate-making rate base: Adjusted by Commission	Rate-making rate base: Adjusted by Settlement	Final Rate Base	Purchase Price: Adjusted by Settlement
Aqua	10,932,272	59%	33,666,000	30,615,410	27,149,805	30,615,410			29,500,000	
Aqua	28,946,133	63%	80,098,000	76,890,000	73,275,485	45,966,875	64,373,378		64,373,378	
Aqua	(473,948)	-9%	8,050,000	9,236,581	6,762,563	9,181,726			5,000,000	
Aqua	34,841,542	226%	51,730,000	50,301,760	35,694,707	27,981,496				
Aqua										

	Final Rate Base per Customer	Amount of RMRB over (under) NBV	Estimated UVE fees and Transaction Costs	Estimated Annual Revenue Requirement	Notes	Updated Estimate of R.R. - Internal Use Only	Notes	Estimated Year 1 Revenues	Notes
Aqua	14,008	10,932,272	55,000	4,522,485	[1]	4,313,035	[4]	2,860,343	[7]
Aqua	11,846	18,219,511	250,000	12,549,000	[1]	10,726,000	[5]	4,771,000	
Aqua	4,006	(473,948)	60,000	n/a	[1]	n/a			
Aqua	-		260,000	10,093,878	[3]				
Aqua	-		220,000	4,470,000	[3]				

References

- [1] Estimate provided by AE in OCA testimony
- [2] Estimate not provided in either Company or OCA testimony. See spreadsheet # 263449 for calculation.
- [3] Estimate provided by Company in discovery (PAWC) or Appendix A (Aqua)
- [4] lowered tax rate
- [5] lowered tax rate and reduced purchase price to ratemaking rate base approved by Commission
- [6] reduced purchase price to ratemaking rate base approved by Commission
- [7] updated revenue estimate received in notice calculation (rate increases since the rate case)

Attachment C
OCA Supplemental Response to Aqua-VI-13 Purchase Prices and Final Rate Base

Buyer	Seller	Utility Type	Type of System	County	Docket No.	Buyer's UVE	Seller's UVE	As-Filed Purchase Price	Number of Customers	As-Filed Price per Customer	Net Book Value
SUEZ	Mahoning	Water	Distribution	Carbon	A-2018-3003519	Gannett Fleming	ScottMadden	4,734,800	1,186	3,992	3,507,138
SUEZ	Mahoning	Wastewater	Collection	Carbon	A-2018-3003517	Gannett Fleming	ScottMadden	4,765,200	1,620	2,941	3,234,859
SUEZ	Mahoning	Amount Over (Under) Net Book Value	% Over (Under) Net Book Value	Buyer's Appraisal	Seller's Appraisal	OCA Adjusted Buyer's Appraisal	OCA Adjusted Seller's Appraisal	Ratemaking rate base: Adjusted by Commission	Ratemaking rate base: Adjusted by Settlement	Final Rate Base	Purchase Price: Adjusted by Settlement
SUEZ	Mahoning	1,227,662	35%	5,688,000	5,384,879	5,123,766	5,346,942			4,734,800	
SUEZ	Mahoning	1,530,341	47%	5,414,261	5,731,341	4,616,304	5,745,961			4,765,200	
SUEZ	Mahoning	Final Rate Base per Customer	Amount of RMRB over (under) NBV	Estimated UVE fees and Transaction Costs	Estimated Annual Revenue Requirement	Notes	Updated Estimate of R.R. - Internal Use Only	Notes	Estimated Year 1 Revenues	Notes	
SUEZ	Mahoning	3,992	1,227,662	498,400	1,092,666 [2]				600,000		
SUEZ	Mahoning	2,941	1,530,341	501,600	1,514,651 [2]				1,400,000		

References

- [1] Estimate provided by AE in OCA testimony
- [2] Estimate not provided in either Company or OCA testimony. See spreadsheet # 263449 for calculation.
- [3] Estimate provided by Company in discovery (PAWC) or Appendix A (Aqua)
- [4] lowered tax rate
- [5] lowered tax rate and reduced purchase price to ratemaking rate base approved by Commission
- [6] reduced purchase price to ratemaking rate base approved by Commission
- [7] updated revenue estimate received in notice calculation (rate increases since the rate case)

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application of Aqua Pennsylvania Wastewater	:	
Inc. pursuant to Sections 507, 1102 and 1329	:	
of the Public Utility Code for Approval of its	:	Docket No. A-2019-3015173
Acquisition of the Wastewater System Assets	:	
of the Delaware County Regional Water Quality	:	
Control Authority	:	

VERIFICATION

I, Ralph C. Smith, hereby state that the facts set forth in my Surrebuttal Testimony, OCA Statement 1SR, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: November 2, 2020
*298579

Signature: 
Ralph C. Smith

Consultant Address: Larkin & Associates, PLLC
15728 Farmington Road
Livonia, MI 48154



COMMONWEALTH OF PENNSYLVANIA

September 29, 2020

The Honorable Angela T. Jones
Commonwealth of Pennsylvania
Pennsylvania Public Utility Commission
Office of Administrative Law Judge
801 Market Street, Suite 4063
Philadelphia, PA 19107

Re: Aqua Pennsylvania Wastewater, Inc.'s Acquisition of Delaware County Regional Water Quality Control Authority, Delaware and Chester Counties Sanitary Wastewater Collection and Treatment System / Docket No. A-2019-3015173

Dear Judge Jones:

Enclosed please find the Direct Testimony and Exhibit of Brian Kalcic, labeled OSBA Statement No. 1, on behalf of the Office of Small Business Advocate ("OSBA"), in the above-captioned proceeding.

As evidenced by the enclosed Certificate of Service, all known parties will be served, as indicated.

If you have any questions, please do not hesitate to contact me.

Sincerely,

/s/ Steven C. Gray

Steven C. Gray
Senior Supervising
Assistant Small Business Advocate
Attorney ID No. 77538

Enclosures

cc: PA PUC Secretary Rosemary Chiavetta (Cover Letter & Certificate of Service only)
Brian Kalcic
Parties of Record

OSBA STATEMENT NO. 1

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Application of Aqua Pennsylvania Wastewater, Inc. Pursuant :
to Sections 1102, 1329 and 507 of the Public Utility Code for : Dk. No. A-2019-3015173
Approval of its Acquisition of the Wastewater System Assets of:
Delaware County Regional Water Quality Control Authority :**

Direct Testimony and Exhibit of

BRIAN KALCIC

On Behalf of the

Pennsylvania Office of Small Business Advocate

Date Served: September 29, 2020

Date Submitted for the Record: _____

Direct Testimony of Brian Kalcic

1 **Q. Please state your name and business address.**

2 A. Brian Kalcic, 225 S. Meramec Avenue, St. Louis, Missouri 63105.

3

4 **Q. What is your occupation?**

5 A. I am an economist and consultant in the field of public utility regulation, and
6 principal of Excel Consulting. My qualifications are described in the Appendix to
7 this testimony.

8

9 **Q. On whose behalf are you testifying in this case?**

10 A. I am testifying on behalf of the Office of Small Business Advocate ("OSBA"),
11 which is representing the small business customers served by Aqua Pennsylvania
12 Wastewater, Inc. ("Aqua" or the "Company").

13

14 **Q. What is the subject of your testimony?**

15 A. I will (1) review the rate provisions contained in Section 7.04 of the proposed Asset
16 Purchase Agreement ("APA") by and between the Delaware County Regional
17 Water Quality Control Authority ("DELCORA") and Aqua, and (2) critique Aqua's
18 proposal to move DELCORA customers to their full cost of service based on the
19 rate base addition determined in this proceeding in the Company's first base rate
20 case following closing that includes DELCORA customers.

21

22 **Q. Please summarize your recommendations.**

1 A. As a condition for approval of the Proposed Transaction, I recommend that the
2 Commission require Aqua to begin to consolidate DELCORA's rates with the
3 Company's system-wide average rates for wastewater service in its next rate
4 proceeding.

5
6 **Section 7.04 of the APA**

7
8 **Q. Mr. Kalcic, what does Section 7.04 of the APA address?**

9 A. Section 7.04 addresses the current wastewater rates applicable to DELCORA
10 customers under the terms of the APA.

11
12 **Q. What are the key provisions of Section 7.04?**

13 A. The key provisions of Section 7.04 are as follows: 1) Aqua shall implement the
14 currently effective rates paid by DELCORA customers upon the close of the
15 proposed transaction ("Closing"); 2) Aqua shall not implement a base rate increase
16 for DELCORA's customers until the Company's first base rate case following the
17 Closing date; 3) Aqua may apply PaPUC permitted or required surcharges or pass-
18 through costs to DELCORA's customers after Closing; and 4) the above rate
19 provisions "shall be part of Buyer's requested PaPUC Governmental Approval."

20
21 **Q. How do the current rates paid by DELCORA customers compare to those paid**
22 **by Aqua's existing wastewater system customers?**

23 A. DELCORA's retail rates are very much lower. The current average monthly bill of
24 a Western Retail (non-industrial) customer in DELCORA, using 6,660 gallons per

month, is \$41.26.¹ As shown in Table A below, the monthly bill paid by a residential customer in the Company's Rate Zone 1 (i.e., Main Division), using the same 6,660 gallons per month, is \$82.68 inclusive of the DSIC. As such, the average monthly bill paid by a Western Retail customer in DELCORA is presently \$41.42 or 50.1% less than the equivalent bill paid by an Aqua residential customer taking service under the Company's Rate Zone 1 rate schedule.

Table A

Computation of Monthly Wastewater Bill of Residential Customer
in Aqua's Rate Zone 1, using 6,660 gallons

Description	Monthly Tariff Charge
Customer Charge	\$31.00
Consumption @ \$7.60 Per 1,000 G.	<u>50.62</u>
Subtotal	\$81.62
DSIC @ 1.30%	<u>1.06</u>
Total Bill	\$82.68

Source: Aqua's current tariff; DSIC effective 10/1/20.

- Q. Does the proposed APA address the level of rates that would be applicable to DELCORA customers upon completion of Aqua's next base rate proceeding?**
- A.** No. However, Mr. Packer testifies that the Company will "propose to move DELCORA customers to their full cost of service based on the rate base addition

¹ See the Direct Testimony of William C. Packer at page 10.

1 determined in this proceeding in Aqua's first base rate case following closing that
2 includes DELCORA customers."²

3

4 **Q. By full cost of service, does Mr. Packer suggest that the Company will propose**
5 **to move DELCORA customers to the Company's system-wide average**
6 **wastewater rate in Aqua's next rate case?**

7 A. No. Mr. Packer's statement indicates that Aqua will propose to set DELCORA's
8 overall rates at the level necessary to recover the Company's total claimed revenue
9 requirement associated with its investment in, and operation of, DELCORA's
10 former wastewater assets.³ Stated differently, in its next base rate case, Aqua will
11 propose to set DELCORA's rates so as to recover the Company's full cost of
12 owning and operating DELCORA's system *on a stand-alone basis*.

13

14 **Q. In that context, has the Company estimated the incremental rate impact of the**
15 **Proposed Transaction on DELCORA existing customers?**

16 A. Yes. As shown in Appendix A to Mr. Packer's direct testimony, Aqua estimates
17 that the revenue deficiency associated with the Proposed Transaction is, at this time,
18 approximately \$8.9 million. If Aqua were to recover 100% of its claimed \$8.9
19 million revenue deficiency from DELCORA's existing customers, the overall
20 incremental rate impact would be 12.55%.

21

² See the Direct Testimony of William C. Packer at page 5.

³ See Aqua's response to KCC-II-10.

1 **Q. Does the estimated 12.55% incremental rate impact of the Proposed**
2 **Transaction on DELCORA existing customers include the rate mitigation**
3 **effects to be provided by DELCORA’s proposed Customer Trust Fund**
4 **(“Trust”)?**

5 A. No. DELCORA’s proposed Trust is intended to provide for customer assistance
6 payments to be applied to DELCORA customer bills so as to limit the net increase
7 to DELCORA customers from the Proposed Transaction to 3% per year.⁴

8
9 **Q. Is Aqua’s proposal to set DELCORA’s overall rates at full cost of service on a**
10 **standalone basis in the Company’s next rate case consistent with the**
11 **Commission’s long-standing practice of implementing single tariff pricing?**

12 A. No, it is not.

13
14 **Q. Why not?**

15 A. The fundamental premise of single tariff pricing is that customers receiving “like
16 service” should pay the same rates for that service, regardless of their particular
17 location within a utility’s service territory. To achieve that end, class revenue
18 targets are based on a *system-wide* class cost-of-service study, with individual
19 utility rate zones consolidated over time so as to recover system-wide revenue
20 targets. When rate consolidation is complete, all of a utility’s customers *in a given*

⁴ See the Direct Testimony of Robert Willert in Aqua Statement No. 5 for a discussion of DELCORA’s proposed Customer Trust Fund.

1 *customer class* will take service on a single rate schedule that reflects the system-
2 wide average cost of serving the class.

3 In short, if utility rates are determined on a stand-alone basis within
4 individual rate zones, it will not be possible to achieve single tariff pricing.

5
6 **Q. What are the perceived benefits of single tariff pricing?**

7 A. Under single tariff pricing, a utility is permitted to recover the costs associated with
8 system investment/upgrades in a particular rate area over a larger customer base,
9 thereby mitigating the rate impacts that would otherwise occur if such cost recovery
10 were to be restricted to a given rate zone(s).

11
12 **Q. Would Aqua's proposal to set DELCORA's overall rates at full cost of service**
13 **on a standalone basis in its next rate case permit the Company to begin the**
14 **process of consolidating DELCORA's rates with its existing wastewater rates**
15 **at the conclusion of that proceeding?**

16 A. No, setting DELCORA's rates in that fashion is unlikely to provide for any degree
17 of rate consolidation. For example, if DELCORA's rate increase in Aqua's next
18 case were to be limited to 12.55%, the average monthly bill of a Western Retail
19 (non-industrial) customer in DELCORA, using 6,660 gallons per month, would
20 increase from \$41.26 to \$46.44. As previously discussed, this DELCORA
21 customer is presently paying \$41.42 less than a similar customer taking service
22 under Aqua's Rate Zone 1 rate schedule.

1 To make any progress toward rate consolidation in its next case, Aqua
2 would need to reduce the difference in the monthly bills paid by (equivalent)
3 DELCORA and Rate Zone 1 customers. More specifically, Aqua would need to
4 limit the new monthly bill paid by the representative Rate Zone 1 customer to
5 something *less* than the new DELCORA bill of \$46.44 plus the old bill difference
6 of \$41.42, or \$87.86. However, such an outcome would necessitate that the
7 Company limit its proposed Rate Zone 1 increase in the next case to something *less*
8 than (\$87.86 divided by \$82.68 or) 6.3%.

9
10 **Q. Would it be appropriate to set DELCORA's overall rates at full cost of service**
11 **on a standalone basis in Aqua's next rate case if the resulting increase to**
12 **DELCORA customers was not sufficient to move DELCORA's rates toward**
13 **the Company's system-wide average rates for wastewater service at the**
14 **conclusion of that case?**

15 **A.** No. To the extent that the average rate paid in a given rate area, such as
16 DELCORA, is less than the Company's system average rate for wastewater service,
17 wastewater rates in that rate area should be subject to an increase in a base rate
18 proceeding sufficient to provide for movement toward to the system average
19 wastewater rate in that rate case (i.e., toward system-wide cost of service),
20 consistent with the Commission's long-standing policy of implementing single
21 tariff pricing

1 **Q. In the context of Aqua's next base rate proceeding, what would be the**
2 **consequence of not moving DELCORA's rates toward the Company's system-**
3 **wide average rates for wastewater service at the conclusion of that case?**

4 A. In that instance, DELCORA customers would not only continue to receive a
5 subsidy from Aqua's remaining wastewater service customers, based on the
6 Company's system-wide cost of service, the annual subsidy received by
7 DELCORA customers from general ratepayers would *increase* at the conclusion of
8 the Company's next rate case.

9

10 **Q. Should the Commission approve Aqua's proposal to set DELCORA's overall**
11 **rates at full cost of service on a standalone basis in its next rate case?**

12 A. No. As a condition for approval of the Proposed Transaction, the Commission
13 should require Aqua to begin to consolidate DELCORA's rates with the Company's
14 system-wide average rates for wastewater service in its next rate proceeding.

15

16 **Q. Does this conclude your direct testimony?**

17 A. Yes.

EXHIBIT BK-1

REFERENCED INTERROGATORY RESPONSES

(Questions to Aqua)

KCC-II-10

Respondent: William C. Packer

Date: 9/22/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

KIMBERLY CLARK CORPORATION

SET II INTERROGATORIES TO AQUA

KCC-II-10 When Aqua initiates its first base rate proceeding, will Aqua propose cost-based rates?

RESPONSE

The Company's rates going into its first base rate case will be those rates in effect at closing of the DELCORA system. The Company's proposed rates will be reflective of the cost of service for the entire DELCORA system and the rates that are charged by class will be supported by a requisite cost of service study pursuant to regulation. Major changes in rate structure and/or consolidation are not expected to occur in any one rate proceeding and are done so over many years as needed to appropriately reflect the cost of service of the system, while at the same time, applying the concepts of gradualism to the eventual final rate design.

APPENDIX

APPENDIX

Qualifications of Brian Kalcic

Mr. Kalcic graduated from Benedictine University with a Bachelor of Arts degree in Economics in December 1974. In May 1977 he received a Master of Arts degree in Economics from Washington University, St. Louis. In addition, he has completed all course requirements at Washington University for a Ph.D. in Economics.

From 1977 to 1982, Mr. Kalcic taught courses in economics at both Washington University and Webster University, including Microeconomic and Macroeconomic Theory, Labor Economics and Public Finance.

During 1980 and 1981, Mr. Kalcic was a consultant to the Equal Employment Opportunity Commission, St. Louis District Office. His responsibilities included data collection and organization, statistical analysis and trial testimony.

From 1982 to 1996, Mr. Kalcic was employed by the firm of Cook, Eisdorfer & Associates, Inc. During that time, he participated in the analysis of electric, gas and water utility rate case filings. His primary responsibilities included cost-of-service and economic analysis, model building, and statistical analysis.

In March 1996, Mr. Kalcic founded Excel Consulting, a consulting practice that offers business and regulatory analysis.

Mr. Kalcic has previously testified before the state regulatory commissions of Delaware, Indiana, Kansas, Kentucky, Maine, Massachusetts, Minnesota, Missouri, New Jersey, New York, Ohio, Oregon, Pennsylvania, and Texas, and also before the Bonneville Power Administration.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission

v.

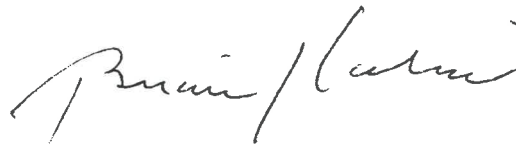
Aqua Pennsylvania Wastewater, Inc.

:
:
: **Docket No. A-2019-3015173**
:
:

VERIFICATION

I, Brian Kalcic, hereby state that the facts set forth in my Direct Testimony labeled OSBA Statement No. 1 are true and correct to the best of my knowledge, information and belief, and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. §4904 (relating to unsworn falsification to authorities).

Date: September 28, 2020



(Signature)

Brian Kalcic

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Aqua Pennsylvania Wastewater, Inc.'s :
Acquisition of Delaware County Regional :
Water Quality Control Authority, : Docket No. A-2019-3015173
Delaware and Chester Counties Sanitary :
Wastewater Collection and Treatment :
System :**

CERTIFICATE OF SERVICE

I hereby certify that true and correct copies of the foregoing have been served via email (*unless other noted below*) upon the following persons, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

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DATE: September 29, 2020

/s/ Steven C. Gray

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Senior Supervising
Assistant Small Business Advocate
Attorney ID No. 77538



COMMONWEALTH OF PENNSYLVANIA

November 2, 2020

The Honorable Angela T. Jones
Commonwealth of Pennsylvania
Pennsylvania Public Utility Commission
Office of Administrative Law Judge
801 Market Street, Suite 4063
Philadelphia, PA 19107

**Re: Aqua Pennsylvania Wastewater, Inc.'s Acquisition of Delaware County Regional
Water Quality Control Authority, Delaware and Chester Counties Sanitary
Wastewater Collection and Treatment System / Docket No. A-2019-3015173**

Dear Judge Jones:

Enclosed please find the Surrebuttal Testimony of Brian Kalcic, labeled OSBA Statement No. 1-S, on behalf of the Office of Small Business Advocate ("OSBA"), in the above-captioned proceeding.

As evidenced by the enclosed Certificate of Service, all known parties will be served, as indicated.

If you have any questions, please do not hesitate to contact me.

Sincerely,

/s/ Steven C. Gray

Steven C. Gray
Senior Supervising
Assistant Small Business Advocate
Attorney ID No. 77538

Enclosures

cc: PA PUC Secretary Rosemary Chiavetta (Cover Letter & Certificate of Service only)
Brian Kalcic
Parties of Record

OSBA STATEMENT NO. 1-S

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Aqua Pennsylvania Wastewater, Inc.'s :
Acquisition of Delaware County Regional :
Water Quality Control Authority, : Docket No. A-2019-3015173
Delaware and Chester Counties Sanitary :
Wastewater Collection and Treatment :
System :**

Surrebuttal Testimony of

BRIAN KALCIC

On Behalf of the

Pennsylvania Office of Small Business Advocate

Date Served: November 2, 2020

Date Submitted for the Record: _____

Surrebuttal Testimony of Brian Kalcic

1 **Q. Please state your name and business address.**

2 A. Brian Kalcic, 225 S. Meramec Avenue, St. Louis, Missouri 63105.

3

4 **Q. Have you previously submitted testimony in this proceeding?**

5 A. Yes.

6

7 **Q. What is the subject of your surrebuttal testimony?**

8 A. I will respond to the rebuttal testimony of Aqua witness William C. Packer.

9

10 **Company Witness Packer**

11

12 **Q. On pages 25-26 of Aqua Statement No. 2-R, Mr. Packer discusses your**
13 **recommendation that, as a condition for approval of the Proposed**
14 **Transaction, the Commission require Aqua to begin to consolidate**
15 **DELCORA's rates with the Company's system-wide average rates for**
16 **wastewater service in its next rate proceeding. Does Mr. Packer agree with the**
17 **OSBA's recommendation?**

18 A. No. In Mr. Packer's view, the Company's proposal, which is to move DELCORA
19 customers to full cost of service on a standalone basis in Aqua's next rate case, is
20 reasonable, and the Commission should not "establish a cost allocation
21 methodology for DELCORA's rates in this proceeding."

22

23 **Q. Is the OSBA recommending that the Commission establish the level of**
24 **DELCORA's rates in Aqua's next rate case *in this proceeding*?**

1 A. No. The OSBA's recommendation is that the Commission should require Aqua to
2 begin the process of consolidating DELCORA's rates with the Company's system-
3 wide average rates for wastewater service in its next rate proceeding. The degree of
4 consolidation, i.e., the actual level of DELCORA's rates, would be determined in
5 Aqua's next rate case.

6

7 **Q. Mr. Kalcic, why does the OSBA oppose Aqua's proposal to move DELCORA's**
8 **rates to full cost of service on a standalone basis in Aqua's next rate case?**

9 A. As I discussed in my direct testimony, the OSBA opposes the Company's proposal
10 because it is inconsistent with the Commission's long-standing policy of single
11 tariff pricing.¹

12

13 **Q. Does Mr. Packer suggest that single tariff pricing should not apply to**
14 **DELCORA's customers?**

15 A. No. On page 67 of his rebuttal testimony, Mr. Packer testifies that the Company's
16 "long-term objective is for all former DELCORA customers to be served by Aqua
17 under cost-of-service rates based on traditional cost-of-service principles and
18 accepted ratemaking methodologies applicable to Aqua system wide."

19 At the same time, however, Mr. Packer states that "this Application presents
20 some unique considerations that may or may not impact the timing and utilization
21 of many long-standing rate setting principles."² In other words, Mr. Packer appears

¹ See OSBA Statement No. 1 at pages 5-8.

² See Aqua Statement No. 2-R at page 26.

1 to be holding out the possibility that single tariff pricing need not be applied to
2 DELCORA's customers for some indefinite period of time.

3
4 **Q. Do you agree that an indefinite delay in the application of single tariff pricing**
5 **principles to DELCORA's customers would be appropriate?**

6 A. I do not. It is the OSBA's position that single tariff pricing should apply to all
7 customers, and that its implementation should begin with the first rate proceeding
8 following an acquisition. To delay the implementation of single tariff pricing until
9 such time as, say, DELCORA's standalone revenue requirement results in rates that
10 rise to the level of the Company's system average wastewater rate would be neither
11 fair nor reasonable, as it would require general wastewater customers to subsidize
12 former DELCORA customers for an extended period of time.³

13 In addition, I would argue that it would be disingenuous to propose (or
14 assign) artificially low increases to customers of acquired wastewater systems in
15 early post-acquisition rate cases. Doing so would only mislead such customers
16 regarding the rates they should expect to pay, post-acquisition, under the
17 Commission's policy of single tariff pricing.

18
19 **Q. Does this conclude your surrebuttal testimony?**

20 A. Yes.

³ See OSBA Statement No. 1 at page 8, lines 1-8.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. A-2019-3015173
	:	
Aqua Pennsylvania Wastewater, Inc.	:	

VERIFICATION

I, Brian Kalcic, hereby state that the facts set forth in my Surrebuttal Testimony labeled OSBA Statement No. 1-S are true and correct to the best of my knowledge, information and belief, and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. §4904 (relating to unsworn falsification to authorities).

Date: November 1, 2020



(Signature)

Brian Kalcic

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Aqua Pennsylvania Wastewater, Inc.'s :
Acquisition of Delaware County Regional :
Water Quality Control Authority, : Docket No. A-2019-3015173
Delaware and Chester Counties Sanitary :
Wastewater Collection and Treatment :
System :**

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DATE: November 2, 2020

/s/ Steven C. Gray

Steven C. Gray
Senior Supervising
Assistant Small Business Advocate
Attorney ID No. 77538

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania	:	
Wastewater, Inc. pursuant to Sections 507,	:	
1102 and 1329 of the Public Utility Code	:	
For, inter alia, approval of the acquisition of	:	Docket No. A-2019-3015173
The wastewater system assets of the	:	
Delaware County Regional Water Quality	:	
Control Authority	:	

DIRECT TESTIMONY

OF

STAN FARYNIARZ

OF DAYMARK ENERGY ADVISORS

ON BEHALF OF

THE COUNTY OF DELAWARE, PENNSYLVANIA

SEPTEMBER 29, 2020

Table of Contents

	Page
I. INTRODUCTION	3
II. PURPOSE OF TESTIMONY AND SUMMARY OF FINDINGS.....	3
III. OVERVIEW OF THE PROPOSED TRANSACTION.....	7
IV. DESCRIPTION OF THE TRUST AGREEMENT	12
V. DISCUSSION OF FINDINGS	17
A. FINDING 1).....	18
B. FINDING 2).....	21
C. FINDING 3).....	23
D. FINDING 4).....	29
E. FINDING 5).....	38
VI. CONCLUSIONS AND RECOMMENDATIONS	44

Exhibits

COUNTY Exhibit No. SCF-1, Resume of Stan Faryniarz

COUNTY Exhibit No. SCF-2, Compilation of Discovery Responses

Figures

Figure 1	Aqua PA and DELCORA Service Territory Map
Figure 2	Aqua PA Growth Strategy
Figure 3	Revenue Requirements Aqua vs DELCORA

Tables

Table 1	Fluctuating Trust Payments
Table 2	Revenue Requirements Comparison for DELCORA vs. Aqua w/ Trust
Table 3	Rate Shock
Table 4	Revenue Requirements Comparison for DELCORA vs. Aqua
Table 5	Revenue Requirements Comparison for DELCORA vs. Aqua w/ Trust
Table 6	Rate Shock w/ Higher Sale
Table 7	Revenue Requirements Comparison - Negotiated Sale Price w/ Trust vs. Higher Sale Price w/ Trust
Table 8	Revenue Requirements Comparison - Negotiated Sale Price w/ Trust vs. Lower Sale Price

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application of Aqua Pennsylvania :
Wastewater, Inc. pursuant to Sections 507, :
1102 and 1329 of the Public Utility Code :
For, inter alia, approval of the acquisition of : Docket No. A-2019-3015173
The wastewater system assets of the :
Delaware County Regional Water Quality :
Control Authority :

DIRECT TESTIMONY OF STAN FARYNIARZ
OF DAYMARK ENERGY ADVISORS
ON BEHALF OF
THE COUNTY OF DELAWARE, PENNSYLVANIA

1 I. INTRODUCTION

2 Q. Please state your name and business address.

3 A. My name is Stan Faryniarz. My business address is 370 Main Street, Suite 325,
4 Worcester, MA 01608.

5 Q. On whose behalf do you appear before this Pennsylvania Public Utility
6 Commission ("PUC" or "Commission")?

7 A. I am appearing here on behalf of the County of Delaware, Pennsylvania ("the
8 County" or "Delaware County").

9 Q. Mr. Faryniarz, what is your professional and educational background?

10 A. I am a Principal Consultant at Daymark Energy Advisors. I serve as an energy
11 economist and power supply planning and management specialist with 34 years of
12 experience in areas including electric and water utility cost of service and rates,
13 power supply procurement and management, wholesale and retail power

1 transactions, power project financial analysis and due diligence, asset and utility
2 valuations, and integrated resource planning and analysis.

3 In addition to being a load forecasting specialist, directing Integrated Resource
4 Planning studies, and advising large commercial and industrial customers as well
5 as small utilities on electric power and natural gas portfolio management, my
6 experience includes the preparation or review of dozens of electric and water
7 utility allocated cost of service and rate design studies, rate unbundling studies,
8 and rate path projection studies, for or involving utilities in Georgia, Maine, New
9 Hampshire, Pennsylvania, Rhode Island, Utah, and Vermont.

10 **Q. Have you previously testified before this Commission?**

11 A. Yes. I sponsored testimony on behalf of the National Railroad Passenger
12 Corporation ("Amtrak") in several cases over the last dozen years. I also testified
13 on behalf of the Office of Consumer Advocate ("OCA") on a water utility case
14 many years ago.

15 My resume, with selected allocated cost of service, rate design and other
16 ratemaking experience, is provided in County Exhibit No. SCF-1.

17 In addition to my prior testimony before this Commission, I have testified as a
18 ratemaking expert before regulatory authorities in Georgia, Maine, Maryland,
19 New Hampshire, Pennsylvania, Rhode Island, Utah, and Vermont, and, in several
20 of those cases, on behalf of the Staff of the regulatory agency. A list of selected
21 expert witness appearances is also provided in County Exhibit No. SCF-1.

1 **Q. Please describe your firm.**

2 A. Daymark Energy Advisors (formerly La Capra Associates¹) is a consulting firm
3 specializing in energy planning and market analysis, regulatory and ratemaking
4 economics, and regulatory policy in the electricity, natural gas, and
5 water/wastewater utility industries. For forty years, our firm has served a broad
6 range of organizations involved with energy markets -- regulatory agencies,
7 consumer advocates, large end-use industrial consumers, public authorities (such
8 as the County), public and private utilities, energy producers and traders, financial
9 institutions and investors, and public policy and research organizations. Much of
10 this work has been done in Pennsylvania on behalf of various clients, including
11 the Pennsylvania OCA.

12 **II. PURPOSE OF TESTIMONY AND SUMMARY OF FINDINGS**

13 **Q. Please describe the purpose of your testimony.**

14 A. I am sponsoring testimony on behalf of the County, which is objecting to the
15 application filed by Aqua Pennsylvania Wastewater ("Aqua PA ") on March 3,
16 2020 ("Application") seeking approval to acquire the wastewater system assets of
17 the Delaware County Regional Water Quality Control Authority ("DELCORA").
18 This Application has been docketed by the Commission as Docket No. A-2019-
19 3015173.

20 As I will show herein, Aqua PA has generically asserted, but has failed to
21 quantify or otherwise demonstrate, benefits to DELCORA ratepayers. My

¹ In 2015, the firm name changed to Daymark Energy Advisors, Inc. from La Capra Associates, Inc.

1 testimony will detail how this transaction falls short from the perspective of
2 DELCORA customers.

3 Specifically, while Aqua PA asserts that "[t]he proposed transaction will not have
4 any immediate impact on the rates of either the acquired DELCORA customers or
5 the existing customers of Aqua,"² I will demonstrate the acquisition would lead to
6 substantially higher rates for DELCORA customers within approximately eight
7 (8) years following the merger if it is approved by the Commission. As I will
8 show, *inter alia*, DELCORA ratepayers would be more economically served over
9 the longer-term by continuing as customers of a stand-alone public authority.

10 **Q. What evidence did you review in this docket?**

11 A. I have reviewed the Application and appraisals prepared by Gannett Fleming and
12 Scott Madden & Associates. I also rely on responses of Aqua and DELCORA to
13 the following discovery available to me at this time, including:

14 COUNTY II-7
15 COUNTY II-8
16 COUNTY II-11
17 COUNTY III
18 COUNTY IV-1
19 COUNTY V-1
20 COUNTY VIII-6
21 COUNTY VIII-7
22 I&E Set 1 Nos. 1 thru 7
23 OCA-I
24 OCA-II
25 OCA-III, 3, 5, 9, 22, 29 thru 33 and 55
26 OCA-IV
27 SWDCMA Set 1, Nos. 1 thru 10
28 SWDCMA Set 2, Nos. 1 thru 4

² Aqua Statement No. 2 (Direct Testimony of William C. Packer) at 11:18-20.

1 **Q. Do you sponsor any exhibits with your testimony?**

2 A. Yes, I sponsor Exhibit No. SCF-1, presenting my resume and testimony
3 experience, which has been filed as a separate attachment to my testimony. I am
4 also sponsoring Exhibit No. SCF-2, which is a compilation of discovery responses
5 that I rely on and refer to in this testimony.

6 **Q. Please summarize your findings.**

7 A. Based on my review of the Application and evidence described above, I make the
8 following findings:

- 9 1) I find that this application does not offer substantial benefits to
10 DELCORA customers, according to the PUC's Standard of Review, as
11 discussed herein.
- 12 2) Further, I find that payments from the proposed Trust (described further
13 below) to limit increases in revenue requirements to 3% annually is a
14 short-lived rate mitigation mechanism (at most 8 years), and results in a
15 huge step increase (also known as "rate shock") in rates for DELCORA
16 customers immediately upon expiration of the Trust.
- 17 3) Also, I find that DELCORA's marginal cost of debt to fund its long-term
18 capital plan appears to be lower than Aqua PA's cost of debt. However,
19 even if the cost to borrow for Aqua PA is no higher than that at which
20 DELCORA could borrow, the requirement to recover a return on rate base
21 for Aqua PA's equity shareholders automatically results in a higher
22 necessary revenue requirement than if DELCORA were to borrow at its

1 lower cost of capital consisting exclusively of publicly-backed municipal
2 debt.

3 4) In addition, I will describe how the available Trust funds are directly
4 dependent on the sale price of the DELCORA assets, and this sale price,
5 however it was negotiated, is far below the average of the commissioned
6 appraisals of the DELCORA system assets. As described in the Direct
7 Testimony of County witness Brian Zidek, DELCORA's no-bid agreement
8 to be acquired at a price well below appraised value indicates the
9 transaction was not negotiated at arm's length and not the product of a
10 competitive marketplace.³

11 5) Finally, I discuss how the presentation by Aqua PA suggests that this
12 would be an economic merger for Aqua PA because the DELCORA
13 customers are being acquired today at a lower purchase price (rate base
14 amount) per retail customer, equal to about a third of Aqua PA's existing
15 rate base per customer. Aqua PA fails to note that by definition then,
16 existing DELCORA customers will ultimately be subject to combined
17 Aqua PA system rates and revenue requirements that support a higher
18 blended rate base per customer going forward. This problem is
19 exacerbated by the cost of capital disadvantage discussed in my previous
20 finding and later in this testimony. These advantages of municipal
21 operations can be overcome by demonstrated efficiencies of IOU

³ Consistent with my observation, the Corporate Finance Institute defines an arm's length transaction as one where the negotiation is expected to result in a transaction price that "closely matches the fair market value of the consideration." <https://corporatefinanceinstitute.com/resources/knowledge/deals/arms-length-transaction/>

1 operations, but Aqua PA has made no such showing that it can offer
2 incremental efficiencies above and beyond DELCORA's current
3 operations. This is not surprising as DELCORA already operates as a large
4 and sophisticated utility system.

5 6) In summary, I find that the primary objective of this transaction and this
6 application is to transfer an economic wastewater system from DELCORA
7 customers to Aqua PA's shareholders, providing Aqua PA the means to
8 grow market share at a cost-effective price per customer. This comes at a
9 cost that ultimately would be borne by DELCORA customers. My review
10 of the Application and discovery responses described above show that the
11 DELCORA customers will not benefit from the Proposed Transaction.

12 **III. OVERVIEW OF THE PROPOSED TRANSACTION**

13 **Q. What is the purpose of this proceeding?**

14 A. The purpose of this proceeding is to review and obtain approval for the Asset
15 Purchase Agreement ("APA") governing the sale of the sanitary wastewater
16 collection and treatment system owned by DELCORA ("Acquired Assets") to
17 Aqua PA (the "Proposed Transaction") under terms acceptable to the
18 Commission.⁴

⁴ See Docket No. A-2019-3015173, Application Exhibit B1, Asset Purchase Agreement dated September 17, 2019, Recitals at 2.

1 **Q. What is the proposed price for the purchase of the Acquired Assets?**

2 A. The purchase price agreed upon by both parties and set forth in the Application
3 will be \$276,500,000 ("Purchase Price")⁵, following negotiations and after review
4 of two independent appraisals, both of which assessed the value of these assets at
5 amounts considerably higher than the Purchase Price.

6 **Q. Please summarize your understanding of the standard of review for this**
7 **proceeding.**

8 A. Although I am not an attorney, my understanding of the standard of review is that
9 Aqua, as the applicant, must demonstrate that the Proposed Transaction is in the
10 public interest, will provide substantial benefit to customers, and can include
11 consideration of the impact on rates.⁶

12 **Q. What is Delaware County's interest in this proceeding?**

13 A. Delaware County is the incorporating municipality of DELCORA. Delaware
14 County is also served by DELCORA⁷.

15 As its protest describes, Delaware County does not believe Aqua PA has
16 adequately demonstrated that the system sale is in the public interest, the interests
17 of Delaware County, or the interests of DELCORA ratepayers.

18 **Q. Why is Aqua PA interested in acquiring DELCORA?**

19 A. Aqua PA has followed a strategy of growth through acquisition in Pennsylvania
20 for the purpose of obtaining market share and, as confirmed in a recent SEC 8-K

⁵ Application Exhibit B1 Asset Purchase Agreement, Section 3.02 Purchase Price and Additional Considerations at 16.

⁶ PA PUC Docket No. A-2019-3009502, Opinion and Order, Section III.A. Legal Standard at 14-16.

⁷ Protest of the County of Delaware, Pennsylvania.

filing by Aqua PA's parent company, Essential Utilities, Inc. ("Essential"), delivering growth in earnings per share in the 5-7% range to its shareholders.⁸ In the same shareholder presentation Essential refers to its "Municipal Initiative" as the driver for its wastewater business growth that requires opportunistic pursuit of large utilities, as shown below.⁹

Figure 1 Aqua PA Growth Strategy



⁸ Essential Form 8-K filed 2/27/2020, Slide 62, available at https://sec.report/Document/0001552781-20-000161/e20109_ex99-1.htm (last accessed Sep. 29, 2020).

⁹ Essential Form 8-K filed 2/27/2020, Slide 7, https://sec.report/Document/0001552781-20-000161/e20109_ex99-1.htm

1 **Q. How many wastewater customers does DELCORA serve?**

2 A. DELCORA maintains 16,000 wastewater customer connections and serves
3 197,000 Equivalent Dwelling Units (EDUs).¹⁰ Delaware County ratepayers
4 represent over 98% of the rate base of DELCORA.¹¹ In total, DELCORA serves
5 about a half million people in the Greater Philadelphia area, the vast majority of
6 which are in Delaware County.¹²

7 **Q. How many wastewater customers does Aqua PA serve currently?**

8 A. Aqua PA serves approximately 35,000 wastewater customers.¹³

9 **Q. If the Commission approves the Proposed Transaction, how many customers**
10 **would Aqua PA ultimately serve?**

11 A. When combined with DELCORA's nearly 16,000 wastewater customers, Aqua
12 PA's wastewater customer base will increase from 35,000 to 51,000 customers, or
13 by approximately 45%.¹⁴ However, even this figure understates the impact of the
14 transaction because of the extent of DELCORA's wholesale service. As noted
15 above, DELCORA serves 197,000 EDUs through its combined retail and
16 wholesale service operations.

¹⁰ Aqua Statement No. 2, Direct Testimony of William C. Packer at 9: 20-21.

¹¹ Response of DELCORA to OCA-I-43. Note: one wastewater connection can serve many EDUs.

¹² <https://www.delcora.org/about-us/areas-served/>

¹³ Aqua Statement No. 2, Appendix A 5 of 11.

¹⁴ This percentage increase appears in Aqua Statement No. 2 at 9:9.

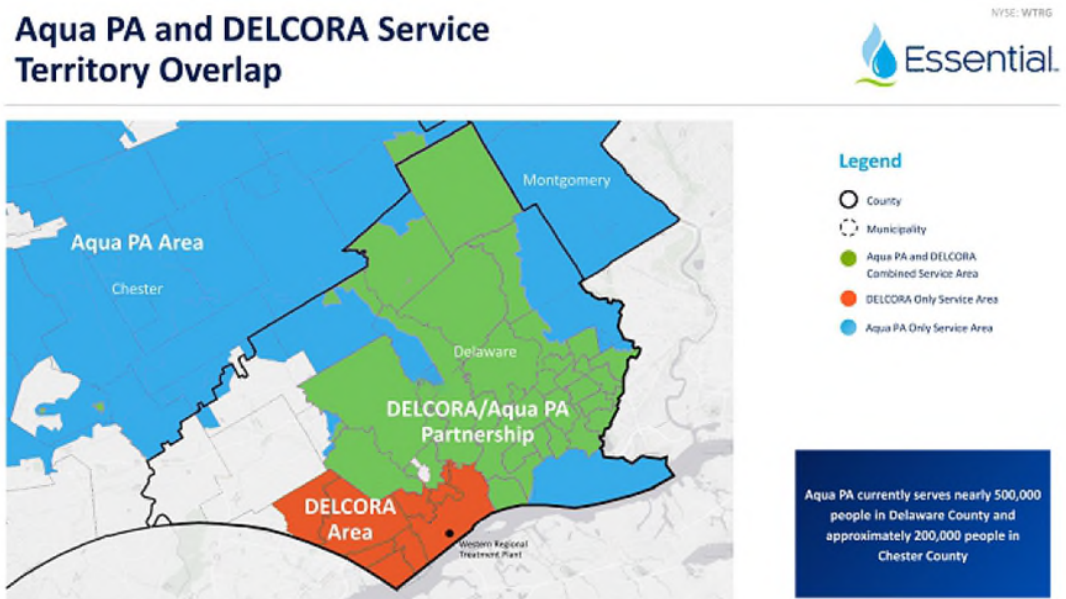
1 **Q. What percentage of Aqua PA's total customers are wastewater customers?**

2 A. Aqua PA recently reported that the percentage of existing wastewater customers
3 compared to total customers is 4.24%.¹⁵

4 **Q. Is it fair to say that such a large increase in wastewater customer counts and**
5 **EDUs will benefit Aqua PA's business?**

6 A. Yes, if approved, the Proposed Transaction will not only increase the customer
7 base for wastewater service but also the extent of Aqua PA's service territory. As
8 shown in Aqua PA's map below, the sub-areas highlighted in green and orange
9 show how Aqua PA's wastewater service territory will expand significantly.¹⁶

10 **Figure 2 Aqua PA and DELCORA Service Territory Map**



11

¹⁵ PA PUC Docket No. R-2018-3003068, Schedule C-4.4 at 1:10 (Aug 17, 2018).

¹⁶ Essential Form 8-K filed 02/27/2020, Slide 26, https://sec.report/Document/0001552781-20-000161/e20109_ex99-1.htm

1 **Q. What do you conclude about the case made by Essential in its Form 8-K**
2 **presentation for the acquisition of DELCORA?**

3 A. Aqua PA's parent company Essential views the purchase of the DELCORA
4 System Assets as integral to its future growth strategy. DELCORA's large size,
5 measured by both area and customer count, compared to Aqua PA's existing
6 system meets its search criteria to make opportunistic acquisitions. This purchase,
7 following a series of recent smaller acquisitions, represents an opportunity to
8 acquire assets relatively inexpensively.

9 **Q. Does Aqua PA acknowledge that this transaction will lead to rate increases**
10 **for DELCORA customers?**

11 A. Yes. In fact, Aqua PA agreed that proceeds remaining from the Purchase Price
12 after paying down DELCORA debt would be earmarked to establish a Trust
13 intended to mitigate increases in revenue requirements and stabilize rates - at least
14 for a time.
15 Our analysis of the Trust and its numerous shortcomings is described in the next
16 section of my testimony.

17 **IV. DESCRIPTION OF THE TRUST AGREEMENT**

18 **Q. Please describe your understanding of the purpose of the Trust.**

19 A. The DELCORA Rate Stabilization Fund and Trust Agreement between
20 DELCORA and Univest Bank and Trust Co. ("Univest"), effective on December
21 27, 2019, created a trust intended to benefit the DELCORA customers (the
22 "Trust"). The purpose of the Trust is to apply proceeds from the sale of the
23 DELCORA wastewater system to offset future rate increases implemented by

1 Aqua PA. The intent is for any rate increase over 3 percent, compounded
2 annually, to be offset by funds from the Trust until the Trust has been depleted.

3 **Q. How long will the Trust limit rate increases to 3 percent?**

4 A. Aqua PA projects rate increases will be limited to 3 percent through 2028, with a
5 partial offset to a rate increase in 2029.¹⁷ According to Aqua PA's projections, in
6 2029, the Trust will not have enough funds to limit that anticipated rate increase
7 to 3%, but the remaining funds will be used to lower the increase as much as
8 possible. At that point, the Trust would be fully depleted.

9 **Q. Is the 3 percent annual rate increase guaranteed to last through 2028?**

10 A. Not at all. The Memorandum of Understanding governing the Trust
11 disbursements only creates an obligation to apply Trust balances to limit rate
12 adjustments to the 3 percent compound annual increases for as long as funds
13 remain available. The projection by Aqua PA for rate increases to be limited to 3
14 percent annually through 2028 is an estimate based on projected Aqua PA annual
15 revenue requirements. As I describe later in my testimony, a variety of
16 circumstances can affect the duration of the Trust's ability to limit annual rate
17 increases to 3 percent per year on average.

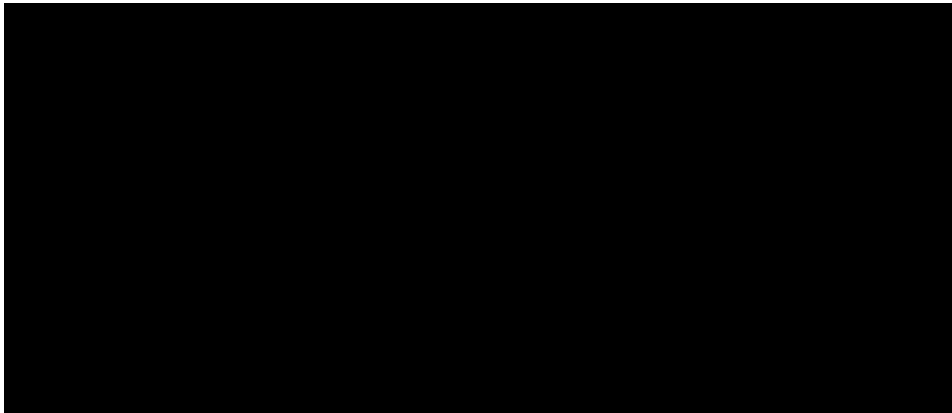
18 **Q. Would payments from the Trust to Aqua PA be prorated over the life of the**
19 **Trust?**

20 A. No. As described above, the Trust has been set up to make payments to Aqua PA
21 in order to limit rate increases to 3 percent, compounded annually. This will result
22 in variable and generally escalating Trust payments while it exists. Each time

¹⁷ Response of DELCORA to OCA-III-12, Attachment 1.

1 Aqua PA increases its revenue requirement, the Trust disbursements must also
2 increase. There are also instances where payments from the Trust can decrease
3 from the prior year if Aqua PA does not increase its revenue requirement, since
4 the 3% limit is measured against the prior year's revenue requirement after the
5 credit by the Trust is applied (adjusted revenue requirement). For a visual
6 example of fluctuating Trust contributions, see Table 1 below.¹⁸

7 **[BEGIN CONFIDENTIAL]**



8 **[END CONFIDENTIAL]**

9 As you can see, the Adjusted Revenue Requirement in each year increases by 3
10 percent, even as the actual Revenue Requirement does not increase. The Payment
11 from the Trust is calculated by subtracting the Revenue Requirement from the
12 Adjusted Revenue Requirement in each year.¹⁹

13 **Q. Who will serve as the Trustee?**

14 A. Univest will serve as the Trustee, however, through a recently executed
15 Information Sharing Memorandum of Understanding ("MOU"), another party, the
16 "Calculation Agent" will have sole responsibility to confirm the application of

¹⁸ See CONFIDENTIAL Response of DELCORA to COUNTY V-1 Attachment 1.

¹⁹ Based on data from Response of DELCORA to OCA-III-12, Attachment 1.

1 funds from the Trust to DELCORA customer bills to offset future Aqua PA rate
2 increases.²⁰

3 **Q. How are the services of the Calculation Agent secured?**

4 A. The Calculation Agent is intended to be an accounting or financial advisory firm
5 who will enter into a service agreement with DELCORA defining responsibilities
6 with respect to the Trust Agreement, as described below.²¹

7 **Q. How will payments from the Trust be applied to customer bills?**

8 A. Aqua PA intends to include customer assistance payments from the Trust as a line
9 item on the customer bill.²²

10 **Q. Please explain the bill credit mechanism proposed?**

11 A. For any rate increase, Aqua PA would calculate both the new rate ("Full Cost
12 Rate") and the rate limited to a 3 percent annual average increase ("Existing Rate
13 Plus 3 percent). The difference between the customer's bill under the Full Cost
14 Rate and Existing Rate Plus 3 percent would be the amount credited on a
15 customer's bill ("Trust Portion" or "DELCORA Customer Assistance
16 Payment.")²³

²⁰ Response of DELCORA to OCA-I-36 SUPPLEMENTAL Attachment 1 (attaching the executed version of the MOU dated August 27, 2020).

²¹ Response of DELCORA to OCA-I-36 SUPPLEMENTAL Attachment 1, Article 1 Definitions, sections 1.1.d. and 1.1.e. at 2.

²² Aqua Statement No. 2 at 5:21-23.

²³ Response of Aqua to I&E-1-1 Attachment 1, Sample Bill with proposed trust line item amount.

1 **Q. How does the recently executed MOU amend the credit bill mechanism**
2 **described above?**

3 A. Following approval of the MOU by the Commission, Aqua PA will calculate the
4 Total Customer Assistance Amount to be applied to each customer bill and
5 convey this amount to the Calculation Agent within 20 business days after the
6 close of each billing period.²⁴

7 **Q. What is the role of the Calculation Agent as described in the MOU?**

8 A. The Calculation Agent would receive and confirm the Total Customer Assistance
9 Amount within 10 business days. Once confirmed, the Calculation Agent would
10 notify DELCORA and tell Aqua PA to place the Customer Assistance Amount
11 and adjusted amount due on each DELCORA bill.

12 **Q. How is the Trustee informed of the amount to be distributed from the Trust?**

13 A. Following the actions of the Calculation Agent described above, DELCORA
14 would direct the Trustee in writing to distribute the verified Total Customer
15 Assistance Amount from the Trust to Aqua PA after which Aqua PA would apply
16 the Customer Assistance Amount to DELCORA customer bills.²⁵

²⁴ Note: with the advent of the MOU executed on August 27, 2020, the term "DELCORA Customer Assistance Payment" has been replaced by the term "Total Customer Assistance Amount".

²⁵ Response of DELCORA to OCA-I-36 SUPPLEMENTAL Attachment 1, Article 4.2 Payment of Total Customer Assistance Amount at 4.

1 **V. DISCUSSION OF FINDINGS**

2 **Q. Throughout your testimony, you make projections of future revenue**
 3 **requirements under various scenarios. Please provide an overview of your**
 4 **methodology.**

5 A. Tables 2 – 8 project future revenue requirements for Aqua PA ownership under
 6 various sale price scenarios. The revenue requirements derive from the
 7 methodology utilized by witness Packer in CONFIDENTIAL-COUNTY-V-1
 8 Attachment 1. This methodology is based on standard IOU ratemaking, as
 9 described later in my testimony. Operations and maintenance expenses grow each
 10 year, based on an inflation rate utilized by Mr. Packer. The capital expenditures
 11 projections are based on information provided by Witness Bubel. For the
 12 "DELCORA no sale" projections shown in Tables 2, 4, and 5, I used the
 13 methodology provided in County-II-11 Attachment 10 - Rate Model 2020 –
 14 CONFIDENTIAL, which is based on a municipally-owned utility ratemaking
 15 methodology, also described later in my testimony. The capital expenditures
 16 provided by Mr. Bubel are also used in this methodology based on the assumption
 17 that these would occur regardless of the ownership structure.

18 **Q. Do your tables account for the timing of rate case filings?**

19 A. In Tables 2-8, I make no assumptions regarding periodic rate case filings. Instead,
 20 I show the annual projected revenue requirements, based on the given ratemaking
 21 methodology, as if a rate case occurred every year in a magnitude to meet that
 22 year's revenue requirement. This eliminates the speculation of when rate cases
 23 would occur and simply shows the impact of a growing investments in the system

1 under the various scenarios and different ownership structures. I also make no
2 assumptions for Act 11 subsidies, as described later in my testimony. The only
3 exception is Table 1, which is intended to model how Trust payments can
4 fluctuate year-to-year.

5 **A. FINDING 1)**

6 **Q. Please discuss how you reached Finding 1) that the Proposed Transaction**
7 **does not offer substantial benefits to DELCORA customers?**

8 A. Based on my review of the evidence and following various analyses using Aqua
9 PA and DELCORA revenue requirements models (in some cases with updated or
10 modified assumptions), I was able to isolate the impacts to DELCORA's
11 customers in both the near and longer-terms. Specifically, I find that the Trust's
12 suppressive effect on DELCORA revenue requirements under the Proposed
13 Transactions is limited at best and will be followed by significant rate increases to
14 DELCORA customers. After performing the rate path projections both with and
15 without sale of DELCORA assets to Aqua PA, I find that any benefit from the
16 rate stabilization proposal under the Proposed Transaction in the near term is
17 more than offset by the increases in revenue required to fund DELCORA's long-
18 term capital expenditure plan at Aqua's higher cost of capital.

19 **Q. Can you isolate the first-year rate impact caused by the change of ownership**
20 **from DELCORA to Aqua PA?**

21 A. Yes. By using DELCORA's actual 2020 Council-approved revenue requirement
22 compared to Aqua PA's projected revenue requirement, we are able to see the
23 immediate impact caused by the ownership structure changing from a

1 municipally-owned system to an investor owned ("IOU") system. DELCORA's
2 2020 revenue requirement is \$70,978,127.²⁶ This compares to Aqua PA's 2020
3 revenue requirement projection²⁷ of [BEGIN CONFIDENTIAL] [REDACTED].
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]. [END CONFIDENTIAL] In other words, approximately \$15
8 million of Aqua's projected 2020 revenue requirement is being driven by the
9 equity component earned on a rate base of \$276.5 million (the sale price).

10 **Q. The revenue requirement under Aqua PA ownership is projected to be**
11 **[BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL]**
12 **when the Trust has been fully exhausted. How does this compare to a**
13 **projected revenue requirement under DELCORA ownership?**

14 **A.** The projected revenue requirement in 2029 under Aqua PA ownership is
15 projected to be [BEGIN CONFIDENTIAL] [REDACTED]
16 [REDACTED] [END
17 CONFIDENTIAL] as shown in Table 2 below.²⁸

18 **Q. Do the revenue requirements for Aqua PA and DELCORA ownership**
19 **include similar capital expenditures?**

²⁶Aqua Statement No. 2, Appendix A 1 of 11.

²⁷ Calculation derived from CONFIDENTIAL Response of DELCORA to COUNTY-V-I Attachment 1.

²⁸ CONFIDENTIAL Responses of DELCORA to COUNTY V-1 Attachment 1 and COUNTY II-11 Attachment 10 – Rate Model 2020 – CONFIDENTIAL.

1 A. [BEGIN CONFIDENTIAL] [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED] [END CONFIDENTIAL]²⁹
7 [BEGIN CONFIDENTIAL]

8 [END CONFIDENTIAL]

²⁹ Aqua Statement No. 4 (Testimony of Mark J. Bubel, Sr.) at 8: 19-21, and Aqua Statement No 5 (Direct Testimony of Robert Willert, Executive Director of DELCORA) at 9:11-17.

1 **Q. Does this support your argument that DELCORA customers are better off**
2 **without the sale?**

3 A. Yes. Although there is a short period where customers are projected to pay lower
4 rates under Aqua PA ownership, this only occurs because of the Trust-subsidized
5 revenue requirement. Once the Trust runs out, customers will begin to pay the full
6 the revenue requirement associated with Aqua PA ownership, and they will
7 continue to pay more over time as part of the Aqua PA customer base.

8 **B. FINDING 2)**

9 **Q. Please explain Finding 2) that the Proposed Transaction would result in**
10 **"rate shock" for DELCORA customers.**

11 A. Rate shock is a sudden, abrupt, and substantial increase in rates. Above, I
12 discussed the increased revenue requirements that DELCORA customers would
13 experience in the long term under Aqua ownership. In addition to the general
14 upward trajectory of the increasing revenue requirements, there also exists a
15 concern with the rate impacts occurring immediately upon expiration of the Trust.
16 Disbursements from the Trust limit rate increases to 3 percent, compounded
17 annually, in the beginning under the Proposed Transaction. However, this rate
18 mitigation is temporary and illusory in the sense that customers are immediately
19 exposed to the higher tariff rates once the Trust is depleted.

20 Table 3 displays the projected rate impact when the Trust expires.³⁰

³⁰ Calculation derived from CONFIDENTIAL Response of DELCORA to COUNTY-V-I Attachment 1.

1 [BEGIN CONFIDENTIAL]

[REDACTED]

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]. [END CONFIDENTIAL] ³¹

7 As demonstrated above, DELCORA customers will experience an approximately
8 70% rate increase upon expiration of the Trust. From a ratemaking perspective,
9 rate increases driven by revenue requirements of this magnitude are characterized
10 as rate shock and disfavored by both regulators and customers.

³¹ Based on data from CONFIDENTIAL Response of DELCORA to COUNTY-V-1 Attachment 1.

1 **Q. Are customers at least assured that the Trust would defer any rate shock**
2 **until at least 2028?**

3 A. No. Variables such as future acquisitions, Commission policy initiatives,
4 changing environmental regulations, or changing market conditions affecting
5 Aqua's authorized rate of return could impact the level future rate increases
6 approved by the Commission for Aqua, which directly affects the revenue
7 shortfall to be recovered through Trust disbursements. For example, Aqua PA
8 witness Erin M. Feeney indicates an intention to apply the Distribution System
9 Improvement Charge ("DSIC") to DELCORA customers following transfer of the
10 system to Aqua PA.³² Aqua PA has further confirmed that DSIC charges would
11 also be offset by the Trust.³³ Depending on the rate of future DSIC charges, the
12 available funds in the Trust could be depleted much faster than projected.

13 **C. FINDING 3)**

14 **Q. Please explain how you determine that DELCORA customers would be**
15 **better off if DELCORA remained independent and funded its capital plan**
16 **exclusively with publicly backed municipal debt.**

17 A. I analyzed the impact of the Proposed Transaction assuming that DELCORA's
18 capital investment plan is maintained through 2030 and evaluated the difference
19 in revenue requirement under different weighted average cost of capital (WACC)
20 assumptions.

³² Aqua Statement No. 3 (Direct Testimony of Erin M. Feeney), at 6:7-10.

³³ Response of DELCORA to County-I-4(a).

1 This analysis begins with the following review of the difference in ratemaking for
2 Municipals versus Investor Owned Utilities ("IOUs) like Aqua.

3 **Municipal vs. IOU ratemaking**

4 **Q. What are the most significant differences in the revenue requirement**
5 **calculations of a municipal utility and an IOU?**

6 A. Municipal ratemaking is designed to allow the municipal-owned utility to recover
7 operating expenses, make payments on their debt ("debt service"), and ensure an
8 additional reserve above operating income available for debt service ("debt
9 service coverage")³⁴. IOU ratemaking is designed to recover operating expenses,
10 including taxes and annual depreciation expense, and earn a fair return on their
11 capital investments ("rate base"³⁵). Therefore, the major differences between
12 municipal utilities and IOUs are that IOU rates need to be set to earn a return, pay
13 taxes, and recover depreciation expense.

14 **Q. What is the impact of an IOU earning a return on rate base?**

15 A. Generally speaking, while both ownership structures recover O&M and certain
16 other expenses, the most significant difference is the recovery of the cost to
17 finance capital expenditures ("CapEx"). The utility business, including
18 wastewater, is a capital-intensive business requiring continuous investment in
19 infrastructure in order to safely and reliably serve customers. This necessity for

³⁴ Debt service coverage is often expressed as a ratio of available cash flow to pay current debt obligations.

³⁵ Rate base is defined as Gross Plant in Service Net of Accumulated Depreciation, also known as Net Plant in Service.

ongoing capital expenditures exists for both municipal utilities and IOUs. The difference is how they recover costs to finance the CapEx. Municipal utilities typically fund CapEx through bonds issued by the municipality or municipal authority. IOUs will fund CapEx mainly through a combination of debt and equity. The debt portion is the money borrowed by the utility. The equity portion is shareholder funded. As part of what is known as the "regulatory compact", insofar as it has made "prudent" and "used and useful" investments in the enterprise, a utility is granted the opportunity to earn a fair return on their investments in order to pay interest on debt and a "bottom line" net revenue which accrues to shareholders. This is also known as the return on equity ("ROE"). A PUC-approved ROE is designed to allow the IOU the opportunity to earn a fair return for shareholders in line with a proxy group of utilities facing similar risk profiles.

Q. Is the rate on the municipal bonds the same as the interest rate on the debt of an IOU?

A. The difference between the interest rate paid on municipal bonds and IOU debt can differ in both directions. A municipality or municipal authority may be able to obtain a lower rate because the interest paid to bondholders is not subject to state and federal taxes and is backed by the municipal taxpayers, all else equal allowing for a lower rate. At the same time, it is also possible that a large IOU may also be able to achieve lower rates on incurred debt due to a lower risk profile. For the purpose of this analysis, I have assumed the interest rate paid by DELCORA to be

1 4.0 percent based on DELCORA's own rate model for 2020³⁶ and the interest rate
2 paid by Aqua PA to be 4.43 percent based on data provided by Aqua³⁷.

3 **Q. If interest rates on debt for DELCORA and Aqua are similar in your**
4 **analysis, why does a municipal utility tend to have a significantly lower**
5 **overall costs of capital?**

6 A. The difference in capital costs are attributed to the difference in the weighted
7 average cost of capital ("WACC"). Since DELCORA CapEx will be fully funded
8 through debt, the WACC will equal the interest rate on its debt.
9 However, Aqua PA, an IOU, has presented a capital structure of roughly 47
10 percent debt and 53 percent equity, assuming a debt rate of 4.43 percent and a
11 ROE of 10 percent, which equates to a WACC of 7.37 percent.³⁸

12 **Q. How would a higher WACC under an IOU ownership structure impact**
13 **DELCORA customers?**

14 A. The difference between the municipal rate of interest on debt, which we have
15 assumed for now is 4.0 percent and Aqua PA's assumed WACC of 7.37 percent,
16 is 3.37 percent. When this higher WACC is evaluated in isolation, assuming all
17 other costs are the same, over a 21-year period, the revenue requirement, not
18 adjusted by Trust contributions, is [BEGIN CONFIDENTIAL] [REDACTED]

19 [REDACTED]

20 [REDACTED]

³⁶ CONFIDENTIAL Response of DELCORA to COUNTY-II-11 Attachment 10.

³⁷ Aqua Statement No. 2, Appendix A 1 of 11

³⁸ Aqua Statement No. 2, Appendix A 1 of 11.

1

[REDACTED]

2

[REDACTED]³⁹

[REDACTED]

3

[END CONFIDENTIAL]

4

Q. Do the contributions from the Trust offset the higher revenue requirement under Aqua PA ownership over the 21-year period?

5

6

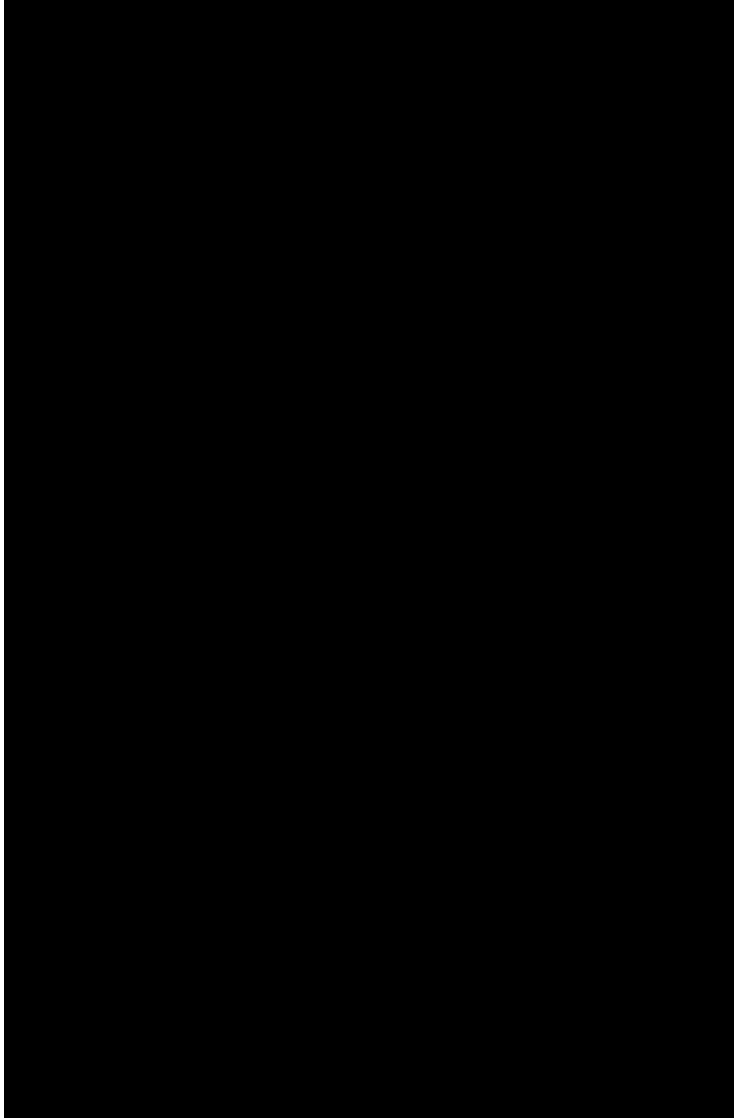
A. No. The total of the Aqua PA ownership revenue requirement over the 21-year period is projected to be [BEGIN CONFIDENTIAL] [REDACTED]

7

³⁹ CONFIDENTIAL Responses of DELCORA to COUNTY V-1 Attachment 1 and COUNTY II-11 Attachment 10 – Rate Model 2020 – CONFIDENTIAL.

1 [REDACTED] [END

2 **CONFIDENTIAL]** as shown in Table 5.⁴⁰ **[BEGIN CONFIDENTIAL]**



3 **[END CONFIDENTIAL]**

⁴⁰ CONFIDENTIAL Responses of DELCORA to COUNTY V-1 Attachment and COUNTY II-11 Attachment 10 – Rate Model 2020 – CONFIDENTIAL.

1 **Q. Has Aqua provided evidence showing benefits accruing to DELCORA**
2 **customers that could justify paying a higher cost of capital compared to**
3 **DELCORA ownership?**

4 A. No. It is generally true that IOU ownership under certain circumstances can
5 provide efficiencies compared to municipal ownership, such as economies of
6 scale and improved customer service, and early adoption of technology
7 advancements. While DELCORA provided a discovery response pointing to
8 anticipated customer service and capital planning improvements under Aqua
9 ownership, these claims are unsubstantiated and particularly unpersuasive in light
10 of comments from DELCORA's Executive Director indicating that DELCORA
11 wastewater operational expertise is superior to Aqua's.⁴¹ Further, as DELCORA
12 operates conveyance and treatment facilities that mostly serve wholesale
13 municipal and industrial customers, expanded customer service capabilities are
14 not as relevant as they might be for a utility serving primarily end-use customers.

15 **D. FINDING 4)**

16 **Q. Please discuss why the Purchase Price indicates this is not an arm's length**
17 **transaction.**

18 A. DELCORA agreed to be acquired at a price well below appraised value, which
19 indicates that the transaction was not conducted at arm's length. The Corporate
20 Finance Institute defines an arm's length transaction as one where the negotiation

⁴¹ See DELCORA Response to OCA Set III, No. 9; *but see* Exhibit No. BPZ-3 (Deposition of Robert Willert in Court of Common Pleas) at 48:1-5.

is expected to result in a transaction price that "closely matches the fair market value of the consideration."⁴² County witness Brian Zidek concurs, as follows: "Without a competitive bidding process, this transaction appears to fall far short of the requisite arm's length negotiation."⁴³

Additionally, a detailed examination of the valuation conducted for DELCORA casts further doubt on the competitiveness of the purchase price. ScottMadden evaluated DELCORA's system assets by three methods as shown in the figure below from the ScottMadden appraisal of the assets⁴⁴:

Table 3: Conclusion of Value for the Subject Interest

Valuation Approach	Indicated Value	Weight	Weighted Value
Cost	\$292,413,993	45%	\$131,586,297
Market	\$613,520,480	5%	\$30,676,024
Income	\$291,863,370	50%	\$145,931,685
Indicated Value		100%	\$308,194,006

ScottMadden concluded the fair market value (FMV) of DELCORA's system assets at a weighted average where the weights differ for each of the three valuation approaches, and produced an FMV of \$308.19 million, significantly above the Purchase Price of \$276.5 million. However, if you assume an equal weighting of the valuation approaches assumed in the appraisal (as done in the appraisal conducted by Aqua's valuation expert), this suggests that the FMV should be closer to a much higher value of \$400 million.

⁴² <https://corporatefinanceinstitute.com/resources/knowledge/deals/arms-length-transaction/>

⁴³ Direct Testimony of Brian P. Zidek, at 5:7-9.

⁴⁴ Aqua Exhibit R, Fair Market Value Appraisal, ScottMadden Table 3, "Conclusion of Value for the Subject Interest" at 12.

1 **Q. Does this mean that the amount available to fund the Trust is directly**
2 **dependent on the sale price of the DELCORA assets?**

3 A. Yes it does, as I will explain using different sale price assumptions below.

4 **Q. Are there alternative scenarios that impact the revenue requirements?**

5 A. Yes. I have already discussed the higher costs under any IOU ownership model,
6 all else being equal, due to the equity component of the revenue requirement.
7 However, to test this finding under other sale scenarios, I analyzed how
8 DELCORA's revenue requirements change under varying sale price scenarios.
9 My analysis examined the following scenarios: 1) A higher sale price, equivalent
10 to an adjusted average⁴⁵ appraised value of the DELCORA system, which
11 increases Trust funding, and 2) a sale price set to pay off DELCORA debt only,
12 which is insufficient to fund a Trust, but does ensure a lower starting rate base.

13 **Q. What would be the effect of a higher sale price for the DELCORA system?**

14 A. A higher sale price would increase the net proceeds, which under Aqua's proposed
15 Trust paradigm, would increase the amount of funding available for the Trust.
16 With more initial funding, the Trust could stabilize rates at the 3 percent annual
17 cap for longer than the projected 8-year horizon. The current sale price of \$276.5
18 million is well below the appraisals by both ScottMadden and Gannett Fleming so
19 one could argue that a higher sale price is justified.

20 For illustrative purposes, I have modeled future revenue requirements based on a
21 sale price of \$400 million as discussed above. This sale price increases the

⁴⁵ See discussion of the weighting of the different valuation approaches used by Scott Madden in its appraisal on the previous page.

1 starting value of the Trust by \$133 million from \$200 million to \$333 million.
2 The additional \$133 million added to the Trust, would be sufficient to offset
3 increased revenue requirements facing DELCORA customers for an additional
4 one year.

5 **Q. Why does an additional \$133 million only last one year?**

6 A. The first \$200 million in the Trust is projected to last approximately eight years,
7 but an additional \$133 million only increases the duration of the Trust by one year
8 because as time goes on and Aqua PA continues to make capital investments,⁴⁶
9 the revenue requirement will grow, requiring a larger contribution from the Trust
10 to limit annual rate increases to 3 percent on average.

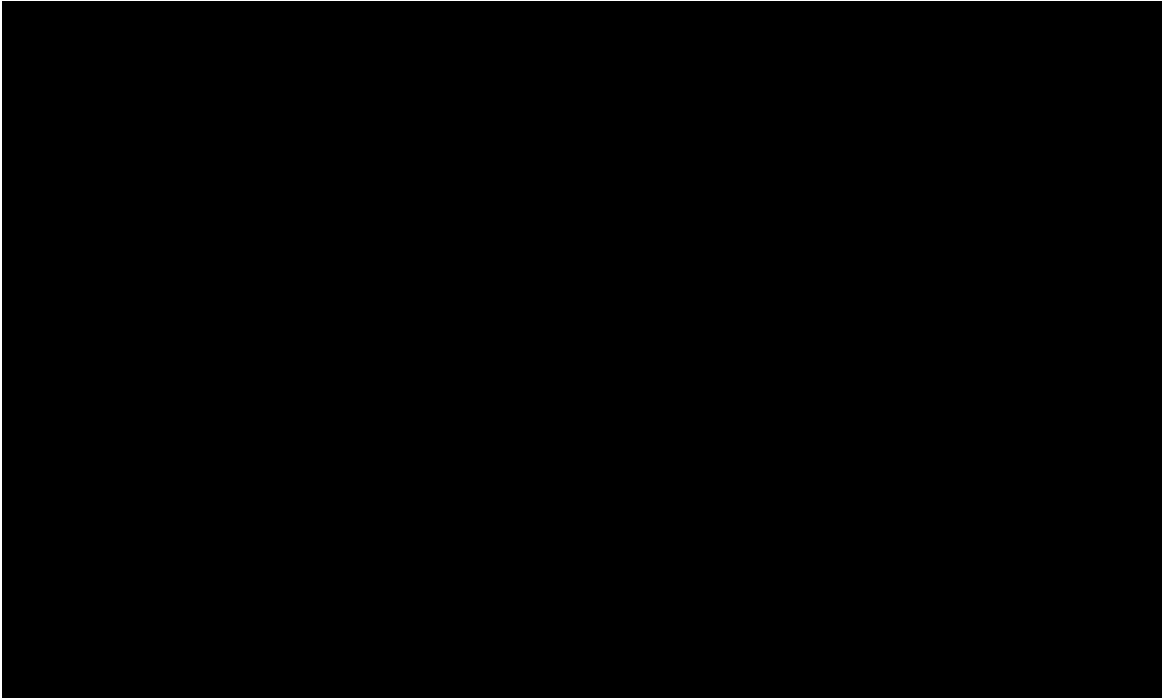
11 **Q. Are there downsides to an increased sale price?**

12 A. Yes. One major downside is the magnification of the rate shock issue I discussed
13 early and illustrated in Table 3. While the Trust lasts one year longer, the non-
14 Trust subsidized Aqua PA revenue requirement continues to grow at the same
15 pace as projected under the negotiated \$276.5 million sale price. Consequently,
16 the gap between the adjusted revenue requirement and the actual revenue
17 requirement increases. So instead of a 67 percent increase in the first two years
18 after the Trust expires, the rate shock escalates to a 75 percent increase. Due to
19 the higher sale price, the rate base on which Aqua PA's return is calculated would
20 also be greater immediately upon close of the Proposed Transaction. Table 6

⁴⁶ Including the costly improvements to the Western Regional Wastewater Treatment Plant as described in Aqua Statement No. 4 at 7-9.

1 below illustrates the additional two years of the Trust and the magnified rate
2 shock.⁴⁷

3 [BEGIN CONFIDENTIAL]



4 [END CONFIDENTIAL]

5 **Q. Please explain the downside of a higher rate base.**

6 A. As I explained earlier, an IOU earns a return based on the amount of rate base or
7 net plant in service. The larger the rate base, the larger the allowed return, and
8 consequently, the larger the revenue requirement. In the short-run, a larger Trust
9 benefits customers more than it harms them with an increased rate base, because
10 the return on rate base is spread out over a number of years, whereas the benefit
11 from the Trust is available immediately to DELCORA customers. But in the long
12 run, once the Trust is exhausted, that higher rate base results in a steep increase in

⁴⁷ See CONFIDENTIAL Response of DELCORA to COUNTY V-1 Attachment 1.

revenue requirements and therefore higher rates to DELCORA's customers. Table 6 above shows a higher revenue requirement in each given year than Table 3. The driving factor is a higher rate base to which the WACC return is applied. Table 7 below provides a side-by-side comparison of the revenue requirements under the negotiated sale price and a higher sale price based on the average of the valuations.⁴⁸

Table 7: Revenue Requirements Comparison - Negotiated \$276 million Sale Price w/ Trust vs. Higher \$400 million Sale Price w/ Trust		
Year	Negotiated Sale Price w/ Trust	Higher Sale Price w/ Trust
2020	\$70,978,127	\$70,978,127
2021	\$73,107,471	\$73,107,471
2022	\$75,300,695	\$75,300,695
2023	\$77,559,716	\$77,559,716
2024	\$79,886,508	\$79,886,508
2025	\$82,283,103	\$82,283,103
2026	\$84,751,596	\$84,751,596
2027	\$87,294,144	\$87,294,144
2028	\$118,920,886	\$89,912,968
2029	\$146,208,143	\$154,847,296
2030	\$146,330,696	\$157,651,866
2031	\$147,055,959	\$158,069,450
2032	\$148,975,187	\$159,688,930
2033	\$152,073,517	\$162,496,151
2034	\$155,584,070	\$165,723,207
2035	\$158,960,753	\$168,823,857
2036	\$160,348,040	\$169,943,003
2037	\$161,089,047	\$170,423,039
2038	\$161,581,056	\$170,660,820
2039	\$161,917,331	\$170,750,338
2040	\$162,201,238	\$170,793,960
Total	\$2,612,407,281	\$2,700,946,244
PVRR at 7.37%	\$1,153,212,759	\$1,178,653,971

⁴⁸ See CONFIDENTIAL Response of DELCORA to COUNTY V-1 Attachment 1.

1 The PVRR of a higher sale price is \$25 million more than the PVRR of the
2 negotiated sale price.

3 **Q. As an alternative scenario, and based on the premise of a lower DELCORA-**
4 **related rate base being a long-term benefit to customers, did you model**
5 **revenue requirement projections based on a lower sale price?**

6 A. Yes. This is the aforementioned lower sale price scenario. I modeled a scenario
7 where the sale price was only high enough to allow DELCORA to pay off its
8 existing debt. That sale price of \$76 million results in no remaining funds to
9 create a Trust but also generates a much lower rate base addition for the
10 DELCORA system. It is important to note that this is an illustrative scenario and
11 not an endorsement for the reasonableness of a \$76 million purchase price for the
12 DELCORA system. The revenue requirement under this scenario is actually
13 projected to be lower than before the acquisition. It takes about three years for the
14 post-Proposed Transaction to revenue requirement to equal the DELCORA no-
15 sale 2020 revenue requirement.

16 **Q. Is there a downside to the lower sale price scenario?**

17 A. Yes. Although it takes three years for the revenue requirement in this lower sales
18 price scenario to equal the 2020 DELCORA Board-approved revenue requirement
19 there is a subsequent time period where rates are projected to be higher than they
20 would have been after being offset by a contribution from the Trust. Over this
21 period, customers would actually pay higher rates. These comparative higher rates
22 under the lower sale price scenario are short-lived because they only persist

1 throughout the rate stabilization period from the Trust funded under a higher sale
2 price scenario. At the time the Trust expires, the revenue requirement under the
3 higher sale price scenario begins to outpace the revenue requirement under the
4 lower sale price scenario. For example, a negotiated \$276.5 million purchase
5 price is projected to generate a 2029 revenue requirement of [BEGIN
6 CONFIDENTIAL] [REDACTED]
7 [REDACTED]. [END CONFIDENTIAL]

8 Table 8 displays this comparison.⁴⁹ [BEGIN CONFIDENTIAL]
[REDACTED]

⁴⁹ See CONFIDENTIAL Response of DELCORA to COUNTY V-1 Attachment 1.

1

2

3

. [END CONFIDENTIAL]

4

As a result, I conclude that regardless of the sale price, the requirement to recover

5

a return on rate base for Aqua PA's equity shareholders automatically results in a

6

higher necessary revenue requirement than if DELCORA were to borrow at its

7

lower cost of capital consisting exclusively of publicly-backed municipal debt.

8

Q. How did you confirm that DELCORA's marginal cost of debt to fund its

9

long-term capital plan appears to be lower than Aqua PA's cost of debt?

10 A.

I found references to DELCORA's prior debt issuances for sewer revenue bonds

11

at various interest rates over the last several years as low as 4.0 percent,

12

suggesting that DELCORA's embedded cost of debt is comparable to Aqua PA's

13

assumed debt rate of 4.43 percent, if not lower. Additionally, I noted that

14

DELCORA used this same 4 percent interest rate for projected debt in its own rate

15

model for 2020.⁵⁰ With 100 percent debt financing, DELCORA's WACC is by

16

definition also 4.0 percent compared to Aqua PA's higher debt component (4.43

17

percent), which results in a WACC of 7.37 percent when combined with Aqua

18

PA's equity component, as shown in COUNTY V-1 Appendix A, item 2 and

19

reproduced here.

⁵⁰ Response of DELCORA to COUNTY-II-11 Attachment 10.

1

2.) Rate of Return

	<u>Ratio</u>	<u>Cost Rate</u>	<u>WACC</u>
Debt	47.15%	4.43%	2.09%
Equity	52.85%	10.00%	5.29%
	100.00%		7.37%

2

3 E. FINDING 5)

4 **Q. What is the basis for your conclusion that existing DELCORA customers will**
 5 **be subject to higher blended rate base per customer going forward?**

6 A. I recognize that large acquisitions are often driven first by an intent to purchase
 7 market share for the benefit of shareholders, and second to realize operating
 8 efficiencies. My observations are supported by witness testimony included in the
 9 Application and recent guidance provided to shareholders in SEC Form 8-K,
 10 discussed in detail in Section II above.

11 **Q. What is the metric used by Aqua PA to demonstrate that the Proposed**
 12 **Transaction will allow it to acquire DELCORA customers at a discount?**

13 A. Aqua PA emphasized the fact in testimony that it is able to acquire DELCORA
 14 customers at about a third of Aqua PA's existing rate base per customer.

15 **Q. Please explain why the Purchase Price of \$276.5 million, the Proposed**
 16 **Transaction, has been undervalued.**

17 A. My view that this purchase price undervalues the worth of the DELCORA system
 18 is illustrated directly by Aqua PA in its filing. The Company acknowledges the
 19 low cost as offering "economies of scale" to the combined entity and makes its
 20 case for the acquisition by comparing the rate base per customer for both Aqua
 21 PA and DELCORA:

1 The Company's current rate base per customer for its
2 existing systems included in its most recent rate case is \$7,750. As
3 calculated above, the approximate purchase price per connection of
4 DELCORA' s retail customers is \$2,250. Therefore, the Company is
5 acquiring these customers at less rate base per customer than its existing
6 systems, which indicates there are economies of scale that will be realized
7 from this Proposed Transaction.⁵¹

8 The observation that economies of scale exist usually refers to the opportunity to
9 lower per unit costs by spreading costs over a larger customer base. While this
10 acquisition includes a mechanism to hold increases in revenue requirements to 3
11 percent per year for a period of time, because rate base is certain to increase over
12 time due to Aqua PA's capital investment plan, an increasing rate path is
13 inevitable.

14 **Q. Does Aqua PA acknowledge that this transaction will lead to rate increases**
15 **for Aqua PA customers?**

16 A. Yes, Aqua PA acknowledges that

17 "While the rates of the DELCORA customers are reasonably
18 expected to increase, either on their own, or whether acquired by the
19 Company, when part of Aqua, there is more flexibility and opportunity to
20 deal with those impacts over a much larger customer base."⁵²

21

⁵¹ Aqua Statement No. 2 at 12:14-19.

⁵² Aqua Statement No. 2 at 12:11-14.

1 **Q. Please describe the risks associated with the difference in rate base per**
2 **customer and the Company's acknowledgement of economies of scale.**

3 A. Aqua PA has acknowledged that this Proposed Transaction likely will have an
4 impact on rates for a couple of reasons. First of all, at some point in the future,
5 Aqua PA may be allowed to impose a DSIC surcharge on the acquired customers,
6 whether DELCORA is operated as a separate division or not. Second, it is
7 possible that Aqua PA could reprioritize DELCORA's long-term capital
8 investment plan in a way that would accelerate capital investment and bring costs
9 forward, resulting in a revenue deficiency that must be offset by a rate increase
10 earlier than planned.

11 **Q. Are there any features associated with the Proposed Transaction that are**
12 **intended to mitigate an increasing rate path besides the establishment of the**
13 **Trust as explained earlier in your testimony?**

14 A. Yes, there are two features associated with this Application that appear intended
15 to mitigate an increasing rate path.
16 The first feature is the establishment of a Trust as described earlier, whose terms
17 are described in a separate agreement signed by both parties. The terms of the
18 Trust Agreement call for the Trust to be funded with net proceeds from the
19 Purchase Price after retiring DELCORA's existing debt. The same agreement
20 would enable disbursements from the Trust in amounts intended to help stabilize
21 revenue to avoid a deficiency leading to a rate increase of greater than 3 percent,
22 compounded annually.

1 However, a second feature of the Application is the opportunity for Aqua PA to
2 use Act 11⁵³ to shift costs of wastewater operations, including those of
3 DELCORA, to Aqua PA's water customer base.

4 **Q. Do you agree that these tools ensure that customers benefit from the**
5 **Proposed Transaction?**

6 A. No. My review of the record in this proceeding shows that the ability of either the
7 proposed rate stabilization or reliance on Act 11 revenue reallocations to provide
8 rate benefits for DELCORA customers is at best limited and short-lived. Both of
9 the mechanisms relied upon by Aqua PA to portray purported rate benefits
10 accruing from the transaction are flawed and steeped in uncertainty.

11 1) Although Aqua PA touts the use of Act 11 to reduce rate pressure in certain
12 discovery responses⁵⁴, any future reallocation of Aqua PA's sewer revenue
13 requirements cannot be definitively assumed because such reallocations must
14 be approved by the Commission in a separate proceeding. This is significant
15 because Aqua has not previously sought nor received Commission approval
16 for Act 11 subsidies of the magnitude that would be necessary to bridge the
17 gap between the projected Aqua revenue requirements for DELCORA and the
18 revenue requirements projected under continued DELCORA ownership.
19 Moreover, even if Aqua receives approval to allocate revenue from
20 DELCORA customers to its water customers under Act 11, Aqua fails to

⁵³ See PA PUC Docket No. R-2018-3003068, Aqua Pennsylvania, Inc., 1-A Water and 1-B Wastewater Revenue Requirement Summary, Schedule Act 11 at 1 (showing the amount shifted from wastewater to water customers proposed by the Company).

⁵⁴ Response of Aqua to COUNTY V-1 (d)

1 account for the reality that the vast majority of DELCORA customers are also
2 Aqua water customers and would therefore still pay a portion of the Act 11
3 reallocation through their water bill.

4 2) As for the Trust, as described earlier in this testimony we undertook a
5 thorough analysis of the impact of disbursements from the Trust and found
6 that it is likely to be exhausted by or before 2029, at which time the
7 DELCORA ratepayers will be forced to absorb bill increases up to the tariff
8 rates that had been offset by Trust subsidies up to that point.

9 As previously noted, we expect this differential in rate base per customer to close
10 over time consistent with an expectation for an acceleration in Aqua PA rate
11 increases, rather than the flat 3 percent annual average proffered by Aqua PA. Our
12 expectation is based on three observations made by Aqua PA:

13 1) Aqua PA conceded that the differential in acquisition cost metrics leads to
14 economies of scale that it suggests can benefit existing and acquired
15 customers.⁵⁵

16 2) Aqua PA predicts that future infrastructure investments across the state,
17 driven by normal replacement cycles will be shared at lower incremental
18 cost per customer for all of Aqua PA's customers over time.⁵⁶

19 3) Representations made by Aqua PA regarding its regulatory expertise and
20 favorable rulings across all jurisdictions in which it operates that allows it
21 to share costs following acquisitions.⁵⁷

⁵⁵ Aqua Statement No. 2 at 12:19.

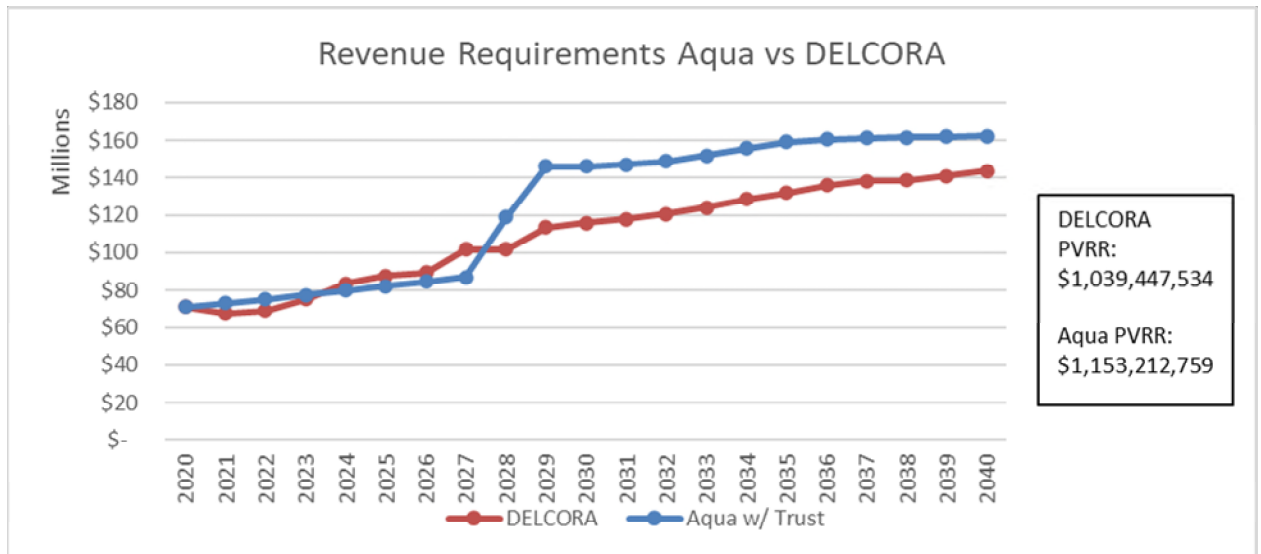
⁵⁶ Aqua Statement No. 2 at 14:14-18.

1 Q. Please summarize your findings for the Commission

2 A. I contend that the foregoing mechanisms proposed by the Company to mitigate
3 rate increases do not offer benefits to DELCORA customers sufficient to
4 overcome the higher costs of service under Aqua ownership.

5 The chart below succinctly summarizes my analysis that, based on the record
6 available today, DELCORA customers would be better off in the long term under
7 continued DELCORA ownership. Furthermore, if acquired by Aqua PA, they
8 would be subject to rate shock by 2028 [i.e. where the blue line (Aqua w/ Trust)
9 crosses the red line (DELCORA stand-alone) and remains higher thereafter]

10 **Figure 3 Revenue Requirements Aqua vs DELCORA**



11
12

⁵⁷ Essential 2019 Financial Report p. 3 and p. 5.

1 **VI. CONCLUSIONS AND RECOMMENDATIONS**

2 **Q. Please summarize your conclusions.**

3 A. I conclude that the Proposed Transaction does not offer substantial benefits
4 because, as I demonstrated above, DELCORA customers would be better off with
5 DELCORA remaining a stand-alone municipal authority. This is because Aqua
6 PA has higher costs of capital compared to DELCORA and because, aside from a
7 limited upfront savings from the Trust, no quantifiable benefits from operational
8 efficiencies or other incremental benefits under Aqua PA ownership have been
9 established. Indeed, Aqua PA has itself indicated that rates are likely to increase.
10 We conclude that this transaction will primarily benefit Aqua PA shareholders by
11 growing the organization's wastewater footprint and do not believe the
12 Application presents affirmative benefits for other key stakeholder groups,
13 including DELCORA customers.

14 **Q. Please summarize your recommendations to the Commission.**

15 A. I respectfully recommend that the Commission:

- 16 1) Deny the Application because the Proposed Transaction is expected to cause
17 rate shock due to short term rate subsidization from the Trust and higher
18 revenue requirements due to Aqua PA's higher cost of capital;
19 2) Deny the Application because the Proposed Transaction does not offer
20 affirmative public benefits sufficient to offset the higher revenue
21 requirements; or
22 3) At minimum, adopt the recommendation detailed in the testimony from
23 County Witness Zidek to direct DELCORA to issue a Request for Proposals

1 for sale of the wastewater system in order to provide assurance of an arm's
2 length transaction prior to further consideration of the Application.

3 **Q. Does this conclude your testimony at this time?**

4 A. Yes, at this time it does. However, I reserve the right to amend my testimony
5 should new information become available in this proceeding.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania :
Wastewater, Inc. pursuant to Sections 507, :
1102 and 1329 of the Public Utility Code :
For, inter alia, approval of the acquisition of : Docket No. A-2019-3015173
The wastewater system assets of the :
Delaware County Regional Water Quality :
Control Authority :

**EXHIBITS
OF
STAN FARYNIARZ**

**ON BEHALF OF
THE COUNTY OF DELAWARE, PENNSYLVANIA**

SEPTEMBER 29, 2020

County Exhibit No. SCF-1



Stan Faryniarz, CEP

Principal Consultant

Mr. Faryniarz is a member of Daymark Energy Advisors senior management team, leads the firm's rate design and procurement and portfolio management (PPM) practices, and served for several years on its Board of Directors. He has consulted on power procurement & transactions, economic and rate analyses and strategic matters for a wide variety of energy industry and other clients in New England, the U.S. and Canada, concentrating in particular on public power agencies, industrial clients and regulators. Mr. Faryniarz has an extensive range of skills and experience in economic and financial analyses, contract negotiations, ratemaking and pricing, regulatory, government and consumer relations for utilities, customers and industry groups, economic impact studies and studies for clients undergoing legislative or regulatory scrutiny. He has substantial expertise in the New England, New York & PJM power markets, which has lead to highly successful outcomes for clients for whom various wholesale and retail power procurements and transactions have been conducted. Mr. Faryniarz is the primary advisor to, or manager of, client power supply portfolios totaling almost 300 MW, with combined annual spend approaching \$200 million. Over a 35 year career he has overseen well over \$1 billion in energy transactions. He also specializes in operational and economic analyses for utilities, industrial and aggregated commercial customers, and regulators. Mr. Faryniarz has evaluated, prepared and defended financial proformas, load forecasts, power cost and allocated cost of service analyses, rate design studies and tariffs, integrated resource plans, market studies, special contracts, asset valuations and other components of successful utility and power purchasing programs and operations.

He holds a BA in Economics and M.P.A. (Finance and Managerial Economics concentration) from the University of Vermont, and the Certified Energy Procurement (CEP) Professional designation from the Association of Energy Engineers.

PROFESSIONAL EXPERIENCE

Power Procurement, Transactions, Commerce & Resource Planning

- Lead procurement and portfolio advisor for 21 years to the National Passenger Railroad Corporation (Amtrak) in: utility interconnection issues, rates, special contracts and other rate designs, and retail purchase power procurement and power supply management for an annual \$100 million, 200+ MW portfolio of traction and non-traction accounts in eight states and three northeastern U.S. control areas. Structure and negotiate power procurements and hedging transactions, special contracts, counterparty credit guarantees, rate designs and provide expert testimony, saving Amtrak tens of millions of dollars supplying its electrified Northeast Corridor train and station service, while stabilizing costs.
- Lead procurement and portfolio advisor to the Massachusetts Port Authority on electricity and natural gas energy procurement and management for this industrial operation since 2012. Prepare and assist with managing its \$26 million energy budget, designed and implement its energy hedging plan and strategy, lead its participation in the ISO-NE wholesale marketplace, lead special projects including its energy related environmental policies, assistance with capital budgeting and benefit-cost analyses associated with its Central Heating Plant, advisor to its Real Estate Division on energy related projects associated with Conley Terminal properties.

- Energy advisor to Materials Innovation and Recycling Authority on its waste to energy and jet engine peaking generation units totaling almost 200 MW, advisor on its participation in the ISO-NE wholesale marketplace for its generation assets, lead its energy market price forecasting and revenue projection efforts and its participation in the ISO-NE Forward Capacity Market.
- Advisor to large retail electricity end-users and utilities, ranging from commuter rail providers to defense contractors to small wholesale utilities, on portfolio development, power supply procurement, load forecasting and integrated resource planning (IRP). Oversaw the development of comprehensive time-series and econometric load forecasting models, and developed Monte-Carlo based simulation models to identify preferred portfolio paths for numerous IRPs for public power utilities transitioning their portfolios from fossil-fuel based to renewables and storage technology based.
- Assisted the WI CUB, Wisconsin Power & Light (WPL), WI PSC staff and interested parties in developing hedge position limits, purchasing strategy and protocols for WPL's Risk Management Plan, a confidential guidebook governing electricity and natural gas procurement practices and protocols for this 2,500 MW Wisconsin utility. These services led to modifications to the Risk Management Plan that helped ensure cost-effectiveness was an important criterion in considering the merits of various hedge transactions, in addition to power costs, retail rates and earnings stabilization.
- Advisor to Harvard University for a number of years, a direct ISO-NE wholesale participant supplying Harvard's retail load in Boston and Cambridge, on the economics, portfolio fit and contracts with proposed renewable projects and other resources.
- Power supply manager for Littleton (NH) Water & Light Department since 2004. Manage the ISO-NE participation, load and resources bid submissions, bill verification, annual budget and monthly reporting functions. Assisted in Littleton's becoming a direct ISO-NE wholesale market participant, obtaining an investment grade Moody's credit rating, and identifying and securing long-term, renewables-based resources to supplement its supply portfolio.
- Power supply manager for Washington Electric Cooperative for 11 years, and led its efforts to contract for and develop renewable resources as substantial additions to this system's power supply portfolio. Advised on the power cost resources portfolio management strategy, long-term power cost and transmission budget, rates, power contracts and procurement. Assisted in procuring or developing a number of landfill methane baseload and wind resources, and marketing renewable energy certificates. Assisted WEC with replacement of an expired nuclear entitlement in 2002 and backfilling with renewable-based supply since then for over 30% in total power cost savings (over 50% in total with RECs resales). Was a lead advisor and figured prominently in the successful regulatory approvals and receipt of close to \$10 million in low-cost debt financing for development of a substantial and growing 8.0 MW landfill methane project, one of only 2 new sizeable baseload power projects developed in Vermont in the last decade. Primary author of its strategic 20-year Integrated Resource Plans.
- A lead advisor to Vermont Electric Cooperative, which was successful in more than doubling its size via acquisition of a larger Vermont IOU system. Provided expert testimony to the Vermont Public Service Board on associated valuation matters, including forecast market prices and costs for the combined system's net short position, and the decrement to value of a substantial partial-contract disallowance of one of the IOU system's major supply contracts. Simultaneously advised this utility on successfully procuring power supply to meet a 50% net short position following its acquisition of the IOU system. A lead author of its six most recent strategic 20-year Integrated Resource Plans.
- An advisor to numerous of financial organizations and utilities on proforma development, value and financing requirements of numerous renewable energy projects including hydro, landfill methane, biomass and wind projects.

- An advisor to numerous renewable (hydro, landfill methane, biomass and wind) project developers on financial modeling, contractual provisions and control area export and import commerce issues for developers of New England projects and New York State projects selling into New England.
- Prepared feasibility studies and, in one case, a subsequent business plan, for Harvard University, Southeastern Pennsylvania Transit Authority, and several Chambers of Commerce in Vermont and Rhode Island on creation of alternative commercial and industrial sector aggregation programs and power purchase models.
- Prepared, defended and achieved regulatory approval for numerous integrated resource plans (IRPs) for municipal electric and cooperative utilities in Vermont, pursuant to Public Service Board regulations and Vermont 20-Year Electric Plan guidelines.
- In a Block Island Power Company rate case (RI PUC Docket 3655), prepared testimony that showed how rates and demand response could be integrated, together with appropriate system planning, to forestall the need for significant investment in additional diesel generation on Block Island, New Shoreham, RI.

Financial & Valuation

- For minority shareholders in a 96 MW Connecticut oil and gas-fired peaking unit, led a team that valued their interest in the facility, to support their position in a litigated civil proceeding with the majority shareholders.
- For Amtrak, recently valued the project and advised on the commitment by Amtrak of over \$20 million in capital improvements to repower a strategic merchant hydro generation asset used by Amtrak to power its Northeast Corridor (NEC) intercity high speed rail operations, in a transaction that secured a discounted price, long-term PPA. Prepared a project finance-based, benefit-cost model associated with the potential purchase of an eastern Pennsylvania substation and transmission power lines to Maryland, from two utilities to whom Amtrak pays for transmission under their respective OATTs. These models were used to develop break-even maximum purchase price limits to offer the utilities for those assets. Assisted Amtrak more recently with negotiations and ultimately a condemnation, and serving as its current expert witness on litigation before either the Pennsylvania PUC or FERC involving a substantial substation/transmission asset required to anchor its most critical south end generation resource.
- For Littleton (NH) Water & Light Department, currently advising the utility on the economic benefits of a proposed looped transmission infrastructure project creating a redundant feed for the town. This analysis is ongoing, and will lead to a financial proforma to develop and support the bond financing for this multi million dollar upgrade. Advised on how then-current forward market energy and capacity prices affected the value of a TransCanada hydroelectric station in a property tax dispute between TransCanada Hydro Northeast and the Town of Littleton, in Grafton County Superior Court.
- For Penn Warehousing Inc., oversaw development of a project pro-forma to analyze the economics of installing a gas-fired 1 MW microturbine cogeneration project to meet produce storage, steam-for-cooling and electricity requirements. In a similar fashion, oversaw analysis of a potential community-scale wind project at the site.
- Provided valuations to private capital firms and Penobscot River Restoration Trust on various northern New England hydro facilities and other renewable power projects.
- Sponsored valuations and expert testimony involving a NASDAQ-traded energy company, an investor-owned transmission utility and consumer-owned electric utilities in Maine and Vermont.
- For the Delaware County Electric Cooperative and Steuben Rural Electric Cooperatives, assisted with development of cash flow based financial pro-formas and analysis of offtake options in order

to maximize net revenues for LFG generation projects then under development by these two cooperative utilities in upstate New York. The analysis explored a range of offtake options which maximized project value and finance capability, including sales to the local IOU distribution utility, specific nearby customers or wheeling to New England in order to market project renewable energy certificates.

- For the Cape Light Compact, prepared analysis of ISO-NE financial assurance exposure associated with various power supply configurations (bilateral contracts vs spot market) for serving an approximately 20 MW load on Cape Cod. This analysis supported minimizing spot market price exposure and creating instead a high hedge fraction through bilateral contracts.
- For Washington Electric Cooperative, advised WEC on development, regulatory and proforma economic support, and associated agreements to construct a now 8 MW landfill gas generating plant (the Coventry LFG Project), including eventual expansions. Assisted WEC with development of the long-term PPA with its subsidiary, the Coventry Clean Energy Corporation. Developed the cash flow pro-forma and provided expert analysis and testimony in support of WEC's successful receipt of over \$10 million in federal project financing for the Coventry Project, as well as federal and state regulatory and siting approvals.
- For Montague Energy, oversaw preparation of a financial pro-forma to support the resurrection of a mothballed 20 MW coal-fired power plant in central Massachusetts, based on grid electricity production, and steam sales to a neighboring manufacturer, as well as pursuit of \$3.7 million in project financing.
- For the Northeast Solid Waste Committee (NESWC), assisted with protection of its investment in a Power Purchase Agreement (PPA) with an offtaker counterparty entering bankruptcy. Provided an assessment of the going-forward market value of the plant's output over the remaining 13 months of the PPA to inform the NESWC member towns of the potential benefits of termination, and selling the station's output at then-current market-based prices.
- For the Massachusetts Technology Collaborative, provided a pro-forma project finance valuation opinion and assisted with negotiations for a successful long-term RECs supply contract with the MTC for production from the Ameresco Chicopee landfill-gas project.
- For the Massachusetts Technology Collaborative, evaluated the economic and non-economic features of various renewable energy project proposals, for selection of some for long-term RECs supply contracts to the MTC under the MGPP program. Evaluated over 15 different large-scale renewable energy projects (wind, hydroelectric, landfill gas and biomass) during two rounds of MGPP solicitations.
- For different private venture capital firms, prepared valuations of specific hydro generation units in Maine to support merchant operator's purchase decisions as New England power markets were restructuring.
- Developed pro-forma and bottom-up capital cost models for determining estimates of the busbar cost of power from generic new combined cycle and combustion turbine generation assets, to support valuations made by the firm in stranded cost and market deregulation proceedings in various northeastern U.S. states.
- Developed a cross-sectional regression model based on publicly-available information on domestic utility generation asset sales, which provided statistically-significant estimates of the value of various natural gas, oil, coal-fired and nuclear stations baseload generation plant, combustion turbine peakers, and run-of-river and pondable hydro units. This work supported valuations made by the firm in stranded cost and property-tax proceedings throughout the U.S.

- For the Arkansas Public Service Commission Staff, prepared valuations of over \$1 billion of generation assets for determinations of Entergy Arkansas Inc. stranded cost position as Arkansas was considering deregulation of its power markets.
- In a proceeding on behalf of the Ohio Consumers Counsel (OCC), prepared stranded cost valuations of utility generation assets and purchased power contracts for support in developing policies regarding recovery of those costs as the state restructured its power markets.
- In a Bennington Vermont Family Court civil matter, prepared and sponsored Plaintiff testimony in a valuation of Environmental Power Corporation, a NASDAQ-traded generation company comprised of 3 domestic U.S. natural gas-fired cogeneration power projects and others in development.
- For the Vermont Department of Public Service, prepared a valuation opinion and delivered testimony before a joint session of the Senate Finance and House Commerce Committees of the Vermont General Assembly, on the value of the Vermont Electric Power Company (VELCO), the transmission utility for the State of Vermont.

Cost Allocation & Rate Design

- For Amtrak, reviewed the Baltimore Gas & Electric 2020 multi-year plan (MYP) rate filing, made recommendations for rates parity and sponsored expert witness testimony supporting rate reform to Schedule T (transmission level service customers distribution rate) and other retail rates.
- For the Georgia Public Service Commission Staff, reviewed, made recommendations, and sponsored expert witness testimony concerning Georgia Power Company plans for retail rate modernization and tariff reform in Docket 42516.
- For the New Hampshire Public Utilities Commission Staff, led a team that advised on the going-forward New Hampshire Net Energy Metering (NEM) program and tariff design; served as expert witness for the NH PUC Staff in Docket DE 16-576.
- Assisted the Manitoba Public Utilities Board (PUB) with a comprehensive review of and report on the most recently filed Manitoba Hydro cost of service study (COSS) and rate design.
- Led a team on behalf of the Kauai (HI) Island Utility Cooperative (KIUC), in developing an LED streetlight tariff (Transmittal 2015-03, approved), and a statutorily-driven Community-Based Renewable Energy (CBRE) tariff (approval pending, Docket 2015-0382). Presently overseeing a team preparing a rate case and a comprehensive rate redesign intended to help KIUC integrate and fairly compensate significant distributed energy resources (DER, mostly customer-sited solar) into its system, scheduled to be filed in 2020. Assisted KIUC with participation on rate design issues in a statewide HI PUC proceeding on further integration of DER into the Hawaii island grids (Docket 2014-0192).
- For the Stowe (VT) Electric Department, led a team that prepared a load research study compiled from smart meter data, developed custom cost allocators using this load research, prepared a comprehensive allocated cost of service study (ACOSS) reflecting customer class consolidation, and a voluntary seasonal time-of-use (TOU) and critical peak pricing (CPP) rate design. Offered supporting testimony before the Vermont Public Service Board (Docket 8463) and gained approval from the VT Department of Public Service (DPS) and PSB without changes.
- Lead a team on behalf of Norwich (CT) Public Utilities that conducted an independent analysis of the rates proposed by the Sewer Authority of the City of Norwich in response to a civil suit by two of its customers (Docket KNL-CV-12-6013751-S, Superior Court Judicial District of New London), and prepared a report and draft expert testimony for presentation on behalf of the defendant, Norwich Public Utilities.

- Testified before the Utah Public Service Commission in Dockets 13-035-184 & 14-035-114, on behalf of the Utah Division of Public Utilities (DPU), regarding the rate design and implementation proposals, and a proposal for a new net metering charge, sponsored by Rocky Mountain Power.
- Prepared and sponsored in testimony over a dozen cost of service, cost allocation, rate design, special contracts, and three demand elasticity studies for numerous electric and water companies in Maine, New Hampshire, Pennsylvania, Rhode Island and Vermont.
- For Amtrak, developed special contracts and tariffs across 3 service territories from Connecticut Light & Power to Narragansett Electric Company (RI PUC Docket 2867) to Boston Edison Company when Amtrak electrified its north end high speed rail system, which reflected the unique characteristics of Amtrak's high-speed train loads. More recently, negotiated appropriately-priced special contracts in the Baltimore Gas & Electric territory for distributed generation dedicated to serving Amtrak. Advised Amtrak with a now-expired load retention special contract, and assisted with negotiations with Philadelphia Electric Company on preservation of conjunctive demand billing for Amtrak traction power deliveries which led to a stipulated settlement. Currently assisting Amtrak with a PA PUC complaint based on a pancaked transmission tariff arrangement Amtrak is under in PJM.
- For Washington (VT) Electric Cooperative (VT PSB Dockets 7427 & 7575); completed, successfully defended and obtained Public Service Board approval for a contested long-term marginal cost-based rate design. Prepared for filing Open Access Distribution and Transmission Tariffs applicable to distributed generation and renewable power projects.
- For the Vermont Public Power Supply Authority, led a team that trained its in-house rate analysts using proprietary Daymark Energy Advisors cost allocation, billing curve and rate design models. Assisted VPPSA with preparation for filing of an embedded cost allocation and marginal cost-based rate design involving several of its systems. These have included a unique special contract design for a ski area that encourages minimization of demand during system coincident peak conditions, a design for one system which recognizes the requirement to integrate output from a hydro station approximately equivalent to the load for the entire system, and an electric vehicle charging rate.
- For Littleton (NH) and Woodsville (NH) Water & Light Departments, assisted with proforma rate decreases occasioned by more economic power supply arrangements we arranged, and reviewed and made recommendations on and developed its allocated cost of service studies and rate redesigns.
- For the Town of New Shoreham (RI), in a Block Island Power Company rate case (RI PUC Docket 3655), prepared testimony that showed how rates and demand response could be integrated, together with appropriate system planning, to forestall the need for significant investment in additional diesel generation on Block Island.
- For Belmont (MA) Municipal Electric Department, oversaw first draft time-of-use and seasonal cost allocation study and rate design, which led to eventual seasonal rates for all customers, and inclining block rates for residential customers. Advised the Municipal Light Advisory Board on various time-of-use rate designs, including critical peak pricing (CPP) and real-time pricing (RTP) approaches.
- For Bar Harbor (ME) Water Company, prepared an allocated cost of service study and rate design that phases from declining block to uniform volumetric rates and reduced allowances for year-round and seasonal customer classes.
- For a large industrial customer intervener in an Aqua Maine Water Company rate case (Maine PUC Docket 2010-72), reviewed company workpapers and testimony, and supported successful negotiations that led to modifications in the Aqua Maine design to more fairly reflect the capacity costs of serving that largest customer on the system, without having to produce prefiled testimony.
- For the Pennsylvania Office of Consumer Advocate (York Water Company v Pennsylvania PUC, Dockets R-00016236 & R-00016236C0001-C0006), filed testimony supporting changes to the York

Water Company excess capacity allocations to reflect a more equitable revenue requirement responsibility for and better price signals to the residential class.

EMPLOYMENT HISTORY

Daymark Energy Advisors (formerly La Capra Associates, Inc.) <i>Principal Consultant</i> <i>Managing Consultant</i> <i>Senior Consultant</i>	Boston, MA 2015 – Present 2008 – 2014 1999 - 2007
Decisions Economics LLC <i>President and Consultant</i>	Underhill, VT 1994 – 1999
Weil & Howe, Inc. <i>Consultant</i>	Augusta, ME 1990 – 1999
Vermont Department of Public Service <i>Special Counsel for Financial Analysis</i>	Montpelier, VT 1986 – 1990

EDUCATION

Association of Energy Engineers <i>Certified Energy Procurement (CEP) Professional</i>	Atlanta, GA 2008
University of Vermont <i>Masters in Public Administration with extensive</i> <i>M.B.A. curriculum in Finance, Managerial Economics</i>	Burlington, VT 1986
Michigan State University <i>NARUC Graduate Studies Program in Regulatory Economics</i>	East Lansing, MI 1986
University of Vermont <i>B.A. in Economics, Cum Laude with Departmental Honors</i> <i>Omicron Delta Epsilon, International Economics Honor Society</i>	Burlington, VT 1982

CERTIFICATES, TESTIMONY & RECENT PRESENTATIONS

Certificates

Certified Energy Procurement (CEP) Professional, Association of Energy Engineers, Atlanta, GA | 2008

Expert Testimony

FORUM	ON BEHALF OF	MATTER
Maryland Public Service Commission	National Railroad Passenger Corporation (Amtrak)	Case No. 9645 Application of Baltimore Gas and Electric Company for an Electric and Gas Multi-Year Plan

FORUM	ON BEHALF OF	MATTER
Georgia Public Service Commission	Georgia PSC Public Interest Advocacy Staff	Docket No. 42516 In the Matter of Georgia Power Company's 2019 Rate Case
Vermont Public Utility Commission	Town of Stowe Electric Department	Petition of Town of Stowe Electric Department pursuant to 30 V.S.A §§ 225 and 227(a) for a 7.9% rate increase to take effect on a service-rendered basis August 15, 2018 Case No. 18-2372-TF. June 2018.
Public Service Commission of Utah	Utah Division of Public Utilities	Investigation of the costs and benefits of PacifiCorp's net metering program, which addressed allocated cost of service, rate design, and net energy metering rate design Docket No. 14-035-114. July 2017
New Hampshire Public Utilities Commission	New Hampshire Public Utilities Commission Staff	Development of new alternative net metering tariffs and/or other regulatory mechanisms and tariffs for customer-generators (net energy metering, rate design) Docket No. DE 16-576. December 2016, January 2017, and March 2017.
Public Service Commission of Utah	Utah Division of Public Utilities	Application of Rocky Mountain Power for authority to increase its retail electric utility service rates in Utah and for approval of its proposed electric service schedules and electric service regulations Docket No. 13-035-184. May, June, and July 2014.
Pennsylvania Public Utility Commission	National Railroad Passenger Corporation (Amtrak)	Pennsylvania Public Utility Commission vs. PPL Electric Utilities Corporation Docket No. R-2015-2469275
Pennsylvania Public Utility Commission	National Railroad Passenger Corporation (Amtrak)	Petition of PPL Electric Utilities Corporation for waiver of the distribution system improvement charge cap of 5% of billed revenues Docket No. P-2015-2474714
Rhode Island Public Utilities Commission	Town of New Shoreham	Block Island Power Company request for a rate change application Docket No. 3655
Rhode Island Public Utilities Commission	National Railroad Passenger Corporation (Amtrak)	Narragansett Electric Company's proposal to introduce two new companion generic tariffs to its existing tariffs relating to High Voltage Delivery Service. Docket No. 2867
Public Service Commission of Utah	Utah Division of Public Utilities	Application of Rocky Mountain Power for authority to increase its retail electric utility service rates in Utah and for approval of its proposed electric service schedules and electric service regulations
Vermont Public Service Board (now Vermont Public Utility Commission)	Town of Stowe Electric Department	Petition for approval of the company's 2015 rate design and tariff amendments (rate design) Docket No. 8463
Vermont Public Service Board	Washington Electric Cooperative	Petition for approval of rate design changes and a change in rate schedules pursuant to 30 V.S.A. § 225

FORUM	ON BEHALF OF	MATTER
		(rate design) Docket No. 7575
Vermont Public Service Board	Washington Electric Cooperative	Petition for: (1) a Certificate of Public Good pursuant to 30 V.S.A. § 248(j) authorizing the Second Coventry Project Expansion; and (2) approval of Washington Electric Cooperatives' promissory note to the Rural Utilities Service pursuant to 30 V.S.A. § 108 to finance the Second Coventry Project Expansion. (Certificate of Public Good) Docket No. 7455
Vermont Public Service Board	Washington Electric Cooperative	Petition for: (1) a Certificate of Public Good pursuant to 30 V.S.A. § 248(j) authorizing the First Coventry Project Expansion; and (2) approval of Washington Electric Cooperatives' promissory note to the National Rural Utilities Cooperative Finance Corporation (CFC) pursuant to 30 V.S.A. § 108 to finance the Coventry Project Expansion (IRP, Certificate of Public Good) Dockets No. 6896 & 7432
Vermont Public Service Board	Washington Electric Cooperative Coventry Clean Energy Corporation	Joint petition for: (1) a certificate of public good authorizing Coventry Clean Energy Corporation to operate as a corporation that generates and transmits electricity; (2) authorization for Washington Electric Cooperative to have a 100% ownership interest in Coventry Clean Energy Corporation; (3) approval for Coventry Clean Energy Corporation to sell all its generation to Washington Electric Cooperative; (4) approval of Washington Electric Cooperative's promissory note to the Rural Utilities Service; and (5) approval of Coventry Clean Energy Corporation's promissory note to Washington Electric Cooperative (Certificate of Public Good) Docket No. 6925
Vermont Public Service Board	Washington Electric Cooperative, Inc. Vermont Electric Power Company, Inc. Citizens Communications Corporation Vermont Electric Cooperative, Inc.	Joint petition for a Certificate of Public Good pursuant to 30 V.S.A. § 248 authorizing: (1) Washington Electric Cooperative to construct an electric generation station in Coventry, Vermont; (2) Washington Electric Cooperative and Vermont Electric Power Company to make improvements to the Irasburg substation; (3) Washington Electric Cooperative, Vermont Electric Cooperative, and Citizens Communications Corporation to construct 46 kV transmission lines in Coventry and Irasburg, Vermont, including provisions for distribution system construction by Citizens Communications Corporation and Vermont Electric Cooperative (Certificate of Public Good) Docket No. 6924
Vermont Public Service Board	Vermont Electric Cooperative, Inc. and Citizens Communications Company	Joint petition for transfer of assets and transfer and assignment of Hydro-Québec contracts (merger, load forecast, power supply contract disallowance) Docket Nos. 6850 & 6853

FORUM	ON BEHALF OF	MATTER
Vermont Public Service Board	Washington Electric Cooperative	Investigation into the tariff filing of Washington Electric Cooperative re: proposed rate design changes Docket No. 6328
Vermont Public Service Board	Washington Electric Cooperative	Investigation into the tariff filing of Washington Electric Cooperative for a 3.8% rate increase Docket No. 6315
Maryland Public Service Commission	National Railroad Passenger Corporation (Amtrak)	Phase II in the matter of the current and future financial condition of Baltimore Gas and Electric Company (merger) Case No. 9173. August 2009.
Pennsylvania Public Utility Commission	National Railroad Passenger Corporation (Amtrak)	Petition of the PPL Electric Utilities Corporation for approval of a default service program and procurement plan for the period January 1, 2011 through May 31, 2014 Docket No. P-2008-2060309
Pennsylvania Public Utility Commission	National Railroad Passenger Corporation (Amtrak)	Application of Safe Harbor Water Power Corporation pursuant to Section 1102(a)(2) of the Pennsylvania Public Utility Code authorizing Safe Harbor Water Power Corporation to abandon public service authorized by a Certificate of Public Convenience Docket A-2008-2078319
Pennsylvania Public Utility Commission	Pennsylvania Office of Consumer Advocate	York Water Company vs. Pennsylvania PUC (rate case, rate design) Dockets R-00016236 & R-00016236C0001-C0006
Maine Public Utilities Commission	Camden & Rockland Water Company et al	Petition for a proposed increase in rates and rate design Docket No. 93-145
Nova Scotia Utility and Review Board	Small power project developer	Investigation into non-utility generation resources and U.S. PURPA Qualifying Facility policies
Vermont Public Service Board	Vermont Department of Public Service	Investigation into the tariff filing for VPX Inc. (rate case) Docket No. 5411
Vermont Public Service Board	Vermont Department of Public Service	Review of Bonneville Pacific Corporation's proposed cogeneration facility Docket Nos. 5395 & 5401
Vermont Public Service Board	Vermont Department of Public Service	Investigation into fee schedules for VPX Inc. (rate case) Docket No. 5298
Vermont Public Service Board	Vermont Department of Public Service	Investigation into least cost investments, energy efficiency, conservation and management of the demand for energy (IRP) Docket No. 5270
Vermont Public Service Board	Vermont Department of Public Service	Petition of Great Falls Hydroelectric for 30-year levelized rates pursuant to Rule 4.100 (PURPA QF) Docket No. 5233
Vermont Public Service Board	Vermont Department of Public Service	Petition of Vermont Department of Public Service requesting deletion of the decremental pricing provision contained in the contract between VPX Inc.

FORUM	ON BEHALF OF	MATTER
		and Missisquoi Associates approved in Docket 5106 (PURPA QF) Docket No. 5193
Vermont Public Service Board	Vermont Department of Public Service	Petition of First Energy Associates vs. VPX Inc. re: Decker Energy Letter of Intent with VPX (PURPA QF) Docket No. 5181
Vermont Public Service Board	Vermont Department of Public Service	Petition of East Georgia Cogeneration re: approval of levelized rates pursuant to Rule 4.100 and issuance of a Certificate of Public Good pursuant to 30 V.S.A. §§ 248 (PURPA QF) Docket No. 5179
Vermont Public Service Board	Vermont Department of Public Service	Rule 4.100, Small Power Production Rates filed by the Vermont Department of Public Service (PURPA QF; avoided costs) Docket No. 5177
Vermont Public Service Board	Vermont Department of Public Service	Petition of Comtu Falls Hydro for Long-term Levelized Rates pursuant to Rule 4.100 (PURPA QF) Docket No. 5168
Vermont Public Service Board	Vermont Department of Public Service	Agreement for sale of electricity between VPX Inc. and Vermont Marble Power Company pursuant to Rule 4.100 (PURPA QF) Docket No. 5109
Vermont Public Service Board	Vermont Department of Public Service	Petition of Bio-Energy Corporation for 30-year power sales contract pursuant to Rule 4.100 (PURPA QF) Docket No. 4964
Vermont Public Service Board	Vermont Department of Public Service	Petition of Emerson Falls Hydroelectric for 30-year power sales contract pursuant to Rule 4.100 (PURPA QF) Docket No. 4949
Bennington Vermont Family Court	Judith Livingston	Livingston vs. Livingston, Valuation of Environmental Power Corporation for Plaintiff (Valuation) Docket No. F182-6-93BnDmd
Joint Hearing of the Vermont House Commerce and Senate Finance Committee	Vermont Department of Public Service	1987, Valuation of the Vermont Electric Power Company (VELCO) (Valuation)

Recent Invited Speaker, Papers & Conference Presentations

- *Electric Vehicles: The Revolution Power by the Electricity Industry*, Renewable Energy Vermont, Burlington, VT, October 2019.
- *Quarterly Presentation to Amtrak Commuter Rail Agency Partners on the State of the Wholesale Energy Markets (Natural Gas, Electricity) in the mid-Atlantic region, 2012-2020.*
- *Modern Rate Design and Iowa Net Energy Metering Legislation*, Iowa Industrial Energy Group, Johnston, IA, April 2020.
- *Modernizing with transactive energy and block chain*, panel moderator, Renewable Energy Vermont, Burlington, VT, October 2018.
- *A review of energy storage at a Hawaiian utility*, PowerGen International, Las Vegas, NV, December 2017.
- *A review of distributed energy resource policymaking in three states*, presented at PowerGen International, Las Vegas, NV, December 2017.
- *Utilities of the Future: rate design and regulation for total energy transformation*, presented at Renewable Energy Vermont, Burlington, VT, October 2017.
- *Electric Vehicle Rate Design*, Kauai Energy Conference, Lihue, HI, May 2017.

County Exhibit No. SCF-2

Respondent: John Pileggi
Date: 7/24/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET I INTERROGATORIES DIRECTED TO DELCORA

OCA-I-43 What is the number of DELCORA wastewater utility customers by year, by type of customer, for ten years through December 31, 2019?

RESPONSE:

Delcora # Of Customers												
			2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Retail												
Chester			10,605	10,566	10,541	10,650	10,027	10,111	9,719	9,778	9,897	9,929
Parkside			754	753	753	753	753	745	741	745	750	752
Upland			1,265	1,266	1,266	1,266	1,240	1,237	1,218	1,218	1,235	1,241
Chester Township			649	640	585	582	659	642	635	631	640	643
Trainer			685	685	686	690	660	680	669	677	683	687
Ridley Mills			25	25	25	25	25	25	25	25	25	25
Rose Valley			489	489	489	489	489	489	489	489	489	489
Marcus Hook				871	891	898	867	862	848	849	860	869
Pocopson Riverside			155	155	155	155	155	155	155	155	155	155
Edgmont								606	713	711	717	726
Pocopson Preserve								67	67	67	67	67
Springhill Farms												285
Total Retail			14,627	15,450	15,391	15,508	14,875	15,619	15,279	15,345	15,518	15,868
Retail Industrial			8	7	7	8	8	7	7	7	7	7
EDU Wholesale			2	2	2	2	2	2	2	2	2	2
Western Wholesale			6	5	5	5	6	6	6	6	6	6
Industrial Wholesale			7	6	6	7	7	7	6	6	6	6
Eastern Wholesale			3	3	3	3	3	3	3	3	3	3
Chester Ridley Creek							2	2	2	2	2	2
			26	23	23	25	28	27	26	26	26	26
Total			14,653	15,473	15,414	15,533	14,903	15,646	15,305	15,371	15,544	15,894

Scale Factor	\$1,000,000.00
Scale Factor 2	\$1,000.00

Scale Factor	\$1,000,000.00
Scale Factor 2	\$1,000.00

FULL SYSTEM - PROJECTED ANNUAL REV

Year Ending	Retail	EASTERN SERVICE AREA			Edgemont Breakout (CDCA)	Retail Indus.	Southern Delaware Cty	
		CDCA Total	Darby Creek Total	Muckinipates Total			Wholesale EDU	Auth.
2019	6,052,048	8,693,981	16,476,575	3,806,114	99,981	385,336	1,673,793	2,012,499
2020	6,734,298	10,057,344	19,060,380	4,402,977	115,659	421,792	1,928,926	2,271,431
2021	7,115,639	10,905,026	20,666,881	4,774,081	125,408	443,827	2,085,236	2,456,371
2022	7,637,338	12,170,666	23,065,485	5,328,162	139,963	473,268	2,317,013	2,730,831
2023	8,271,633	13,769,450	26,095,453	6,028,089	158,349	508,664	2,608,967	3,076,672
2024	8,941,834	15,467,584	29,313,706	6,771,511	177,877	546,004	2,918,945	3,443,881
2025	10,124,554	18,715,945	35,469,903	8,193,601	215,233	610,228	3,508,559	4,142,845
2026	10,916,491	20,763,879	39,351,087	9,090,161	238,785	654,076	3,881,840	4,585,125
2027	11,238,084	21,368,828	40,497,569	9,355,000	245,742	673,390	3,995,055	4,718,835
2028	12,177,348	23,843,213	45,186,949	10,438,254	274,197	725,093	4,445,475	5,252,599
2029	12,396,540	24,272,391	46,000,314	10,626,142	279,132	738,145	4,525,493	5,347,146
2030	12,619,678	24,709,294	46,828,320	10,817,413	284,157	751,432	4,606,952	5,443,395
2031	12,846,832	25,154,061	47,671,230	11,012,126	289,272	764,957	4,689,877	5,541,376
2032	13,078,075	25,606,834	48,529,312	11,210,345	294,479	778,727	4,774,295	5,641,121
2033	13,313,481	26,067,757	49,402,839	11,412,131	299,779	792,744	4,860,232	5,742,661
2034	13,553,123	26,536,977	50,292,091	11,617,549	305,175	807,013	4,947,716	5,846,029
2035	13,797,080	27,014,642	50,292,091	11,617,549	310,668	807,013	4,947,716	5,846,029
2036	14,045,427	27,500,906	50,292,091	11,617,549	316,260	807,013	4,947,716	5,846,029
2037	14,298,245	27,500,906	50,292,091	11,617,549	316,260	828,874	4,947,716	5,846,029
2038	14,555,613	27,500,906	50,292,091	11,617,549	316,260	857,152	4,947,716	5,846,029
2039	14,817,614	27,500,906	50,292,091	11,617,549	316,260	878,911	4,947,716	5,846,029
2040	14,963,340	27,500,906	50,584,744	11,685,153	316,260	908,317	5,021,315	5,926,563
2041	15,452,285	27,614,067	52,333,360	12,089,086	317,562	937,662	5,193,939	6,130,444
2042	15,835,286	28,197,177	53,438,453	12,344,364	324,268	961,576	5,305,525	6,261,878
Totals	\$284,781,887	\$528,433,645	\$991,725,105	\$229,090,003	\$6,076,987	\$17,061,212	\$98,027,735	\$115,801,843

REVENUE BY CUSTOMER CLASS (LEAVE PWD)

Other Western Wholesale	Wholesale Industrial	WHOLE INDUSTRIAL BREAKOUT			Southwest Authority	Middletown Township Authority	Non-Flow Based Revenue	Total Revenue
		Kimberly Clark	Monroe Energy	Sunoco				
685,854	8,206,260	4,321,568	136,322	2,872,381	2,819,622	1,911,517	1,819,448	54,643,028
774,098	8,876,159	4,674,349	147,450	3,106,862	3,153,161	2,137,635	1,819,448	61,753,309
837,125	10,572,807	5,327,652	168,058	3,541,087	3,382,468	2,293,090	1,819,448	67,477,405
930,660	11,176,503	5,885,752	185,663	3,912,035	3,715,507	2,518,868	1,819,448	74,023,714
1,048,522	12,505,944	6,585,860	207,748	4,377,370	4,131,369	2,800,795	1,819,448	82,823,354
1,173,666	13,916,677	7,328,778	231,183	4,871,160	4,572,386	3,099,776	1,819,448	92,163,295
1,411,871	16,577,926	8,730,241	275,392	5,802,659	5,396,570	3,658,518	1,819,448	109,845,200
1,562,599	18,273,121	9,622,962	303,552	6,396,016	5,925,238	4,016,920	1,819,448	121,078,769
1,608,167	18,806,836	9,904,026	312,418	6,582,829	6,098,562	4,134,422	1,819,448	124,559,939
1,790,072	20,848,417	10,979,160	346,333	7,297,430	6,733,876	4,565,123	1,819,448	138,100,066
1,822,294	21,223,689	11,176,785	352,567	7,428,783	6,855,086	4,647,296	1,819,448	140,553,117
1,855,095	21,605,715	11,377,967	358,913	7,562,502	6,978,478	4,730,947	1,819,448	143,050,323
1,888,487	21,994,618	11,582,771	365,373	7,698,627	7,104,090	4,816,104	1,819,448	145,592,479
1,922,479	22,390,521	11,791,261	371,950	7,837,202	7,231,964	4,902,794	1,819,448	148,180,393
1,957,084	22,793,551	12,003,503	378,645	7,978,272	7,362,139	4,991,044	1,819,448	150,814,890
1,992,312	23,203,835	12,219,566	385,461	8,121,880	7,494,658	5,080,883	1,819,448	153,496,808
1,992,312	23,203,835	12,219,566	385,461	8,121,880	7,494,658	5,080,883	1,819,448	154,223,923
1,992,312	23,203,835	12,219,566	385,461	8,121,880	7,494,658	5,080,883	1,819,448	154,964,126
1,992,312	23,203,835	12,219,566	385,461	8,121,880	7,494,658	5,080,883	1,819,448	155,238,805
1,992,312	23,203,835	12,219,566	385,461	8,121,880	7,494,658	5,080,883	1,819,448	155,524,451
1,992,312	23,203,835	12,115,802	382,188	8,052,912	7,529,350	5,104,402	1,819,448	155,866,422
2,019,757	23,839,492	12,554,315	396,020	8,344,375	7,798,860	5,287,112	1,819,448	157,671,268
2,089,240	24,652,932	12,982,688	409,533	8,629,098	8,062,911	5,466,121	1,819,448	162,159,056
2,134,032	25,194,836	13,268,064	418,535	8,818,777	8,244,269	5,589,070	1,819,448	165,650,180
\$39,464,971	\$462,679,014	\$243,311,338	\$7,675,147	\$161,719,779	\$150,569,197	\$102,075,971	\$43,666,752	\$3,069,454,322

FULL SYSTEM - PROJECTED ANNUAL REVENUE

Year Ending	Retail	EASTERN SERVICE AREA			Edgemont Breakout (CDCA)	Retail Indus.	Wholesale EDU	Southern Delaware Cty Auth.
		CDCA Total	Darby Creek Total	Muckinipates Total				
2019	6,052,048	8,693,981	16,476,575	3,806,114	99,981	385,336	1,673,793	2,012,499
2020	6,623,699	9,720,593	18,422,180	4,255,552	111,787	416,005	1,868,206	2,199,391
2021	6,894,143	10,230,622	19,388,772	4,478,836	117,652	432,238	1,963,634	2,312,097
2022	7,415,858	11,496,309	21,787,464	5,032,937	132,208	461,680	2,195,420	2,586,567
2023	7,734,197	12,133,080	22,994,253	5,311,707	139,530	480,546	2,313,912	2,726,606
2024	8,022,979	12,669,884	24,011,589	5,546,713	145,704	497,932	2,414,489	2,845,374
2025	8,728,465	14,465,178	27,413,977	6,332,670	166,350	537,187	2,742,099	3,233,486
2026	9,170,992	15,449,241	29,278,942	6,763,480	177,666	562,755	2,923,552	3,448,174
2027	9,439,638	15,892,976	30,119,896	6,957,742	182,769	579,298	3,007,699	3,547,395
2028	10,366,931	18,330,911	34,740,198	8,025,038	210,805	630,376	3,451,546	4,073,362
2029	10,771,338	19,165,217	36,321,350	8,390,287	220,400	654,173	3,606,369	4,256,399
2030	11,062,336	19,642,309	37,225,520	8,599,152	225,887	672,117	3,696,914	4,363,155
2031	12,016,992	22,127,819	41,935,985	9,687,276	254,470	724,864	4,149,735	4,899,710
2032	12,391,144	22,833,189	43,272,782	9,996,078	262,582	747,323	4,281,716	5,055,586
2033	12,692,769	23,304,718	44,166,410	10,202,508	268,004	766,075	4,371,677	5,161,588
2034	13,557,378	25,476,999	48,283,252	11,153,504	292,985	814,370	4,768,450	5,631,581
2035	14,231,167	27,054,468	51,272,824	11,844,100	311,126	852,774	5,058,125	5,974,487
2036	14,534,324	27,489,224	52,096,762	12,034,431	316,126	871,881	5,141,914	6,073,096
2037	15,729,509	30,625,354	58,040,262	13,407,388	352,192	937,755	5,712,952	6,749,774
2038	16,186,743	31,499,505	59,696,927	13,790,081	362,244	965,121	5,876,297	6,942,724
2039	16,516,770	31,970,799	60,590,109	13,996,407	367,664	985,935	5,967,174	7,049,670
2040	17,746,283	35,164,814	66,643,313	15,394,706	404,395	1,053,915	6,549,164	7,739,267
2041	18,381,440	36,532,663	69,235,619	15,993,533	420,126	1,090,909	6,802,059	8,038,384
2042	18,917,445	37,581,638	71,223,605	16,452,761	432,189	1,122,829	6,997,646	8,269,480
Totals	\$285,184,587	\$519,551,491	\$984,638,565	\$227,453,001	\$5,974,842	\$17,243,395	\$97,534,543	\$115,189,851

VALUE BY CUSTOMER CLASS (STAY WITH PWD)

Other Western Wholesale	Wholesale Industrial	WHOLESALE INDUSTRIAL BREAKOUT			Southwest Authority	Middletown Township Authority	Non-Flow Based Revenue	Total Revenue
		Kimberly Clark	Monroe Energy	Sunoco				
685,854	8,206,260	4,321,568	136,322	2,872,381	2,819,622	1,911,517	1,819,448	54,643,028
749,547	8,876,159	4,674,349	147,450	3,106,862	3,070,071	2,081,305	1,819,448	60,213,942
787,957	9,757,970	5,138,727	162,099	3,415,516	3,216,064	2,180,279	1,819,448	63,579,713
881,495	10,633,074	5,599,573	176,636	3,721,823	3,549,115	2,406,065	1,819,448	70,397,639
929,220	11,187,279	5,891,427	185,842	3,915,807	3,727,608	2,527,072	1,819,448	74,024,457
969,696	11,662,157	6,141,507	193,731	4,082,026	3,882,076	2,631,791	1,819,448	77,119,831
1,101,964	13,152,456	6,926,325	218,488	4,603,665	4,347,727	2,947,472	1,819,448	86,988,477
1,175,129	13,990,332	7,367,566	232,407	4,896,941	4,613,893	3,127,915	1,819,448	92,501,519
1,208,943	14,394,133	7,580,215	239,114	5,038,280	4,747,439	3,218,450	1,819,448	95,115,826
1,388,191	16,406,341	8,639,881	272,541	5,742,600	5,373,759	3,643,054	1,819,448	108,459,961
1,450,570	17,127,697	9,019,761	284,524	5,995,091	5,605,140	3,799,915	1,819,448	113,188,303
1,486,952	17,562,664	9,248,822	291,750	6,147,340	5,749,147	3,897,542	1,819,448	116,003,143
1,669,808	19,617,626	10,331,003	325,887	6,866,624	6,389,504	4,331,662	1,819,448	129,624,898
1,722,931	20,239,626	10,658,560	336,219	7,084,339	6,591,438	4,468,559	1,819,448	133,682,402
1,759,056	20,674,793	10,887,727	343,448	7,236,657	6,736,510	4,566,909	1,819,448	136,490,464
1,919,228	22,482,163	11,839,521	373,472	7,869,279	7,302,091	4,950,335	1,819,448	148,451,785
2,036,090	23,811,910	12,539,790	395,562	8,334,721	7,721,794	5,234,866	1,819,448	157,223,180
2,069,696	24,222,562	12,756,047	402,384	8,478,458	7,860,456	5,328,870	1,819,448	159,858,790
2,300,306	26,811,917	14,119,649	445,398	9,384,793	8,666,603	5,875,384	1,819,448	177,028,843
2,366,063	27,580,327	14,524,308	458,163	9,653,754	8,915,594	6,044,184	1,819,448	182,045,258
2,402,509	28,026,013	14,759,014	465,567	9,809,755	9,066,182	6,146,272	1,819,448	184,904,953
2,637,522	30,667,776	16,150,215	509,451	10,734,433	9,889,609	6,704,502	1,819,448	202,414,716
2,739,461	31,839,962	16,767,510	528,924	11,144,725	10,263,504	6,957,978	1,819,448	210,115,086
2,818,217	32,757,282	17,250,588	544,162	11,465,809	10,559,811	7,158,854	1,819,448	216,111,205
\$39,256,405	\$461,688,481	\$243,133,653	\$7,669,542	\$161,601,678	\$150,664,755	\$102,140,752	\$43,666,752	\$3,050,187,420

Scale Factor	\$1,000,000.00
Scale Factor 2	\$1,000.00

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
	2020	2021	2022	2023	2024	2025	2026	2027
Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369	102,415,369	102,415,369
Amount Over Original Revenue Requirement		0	\$28,121,789	\$28,121,789	\$28,121,789	\$42,597,271	\$42,597,271	\$42,597,271
Revenue Requirement - Customer Growth Assumption		59,818,098	61,612,641	63,461,020	65,364,851	67,325,796	69,345,570	71,425,937
Revenue Requirement - Trust Portion		\$0	\$26,327,246	\$24,478,867	\$22,575,036	\$35,089,573	\$33,069,799	\$30,989,432
Revenue Requirement - Additional Needed		0	0	0	0	0	0	0
Total Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369	102,415,369	102,415,369
Check		ok	ok	ok	ok	ok	ok	ok
Percentage of Year		100%	100%	100%	100%	100%	100%	100%
Number of Months		12.0	12.0	12.0	12.0	12.0	12.0	12.0

Trust Value - Beginning of Year (BOY)		217,000,000	221,340,000	199,439,554	178,949,478	159,953,431	128,062,927	97,554,387
Interest		4,340,000	4,426,800	3,988,791	3,578,990	3,199,069	2,561,259	1,951,088
Payout from Trust - End of Year (EOY)		0	(26,327,246)	(24,478,867)	(22,575,036)	(35,089,573)	(33,069,799)	(30,989,432)
Trust Value - EOY	217,000,000	\$221,340,000	\$199,439,554	\$178,949,478	\$159,953,431	\$128,062,927	\$97,554,387	\$68,516,042
Trust Life Check		Yes	Yes	Yes	Yes	Yes	Yes	Yes

	2022	2023	2024	2025	2026	2027
Customer Bill Paid	\$2.59	\$2.67	\$2.75	\$2.83	\$2.91	\$3.00
Blended Bill		\$2.67	\$2.75	\$2.83	\$2.91	\$3.00
		3.0%	3.0%	3.0%	3.0%	3.0%
Customer Bill Calculations	\$26,327,246	\$50,806,113	\$73,381,149	\$108,470,722	\$141,540,521	\$172,529,953

	Actual Year (Year End)	Year for chart Year Beginning	Leave PWD	Stay With PWD	Aqua Rates (Actual, No SF)	Aqua Rates (Annual Increase Factor)	Aqua Rates (Annual Increase Factor)
Rate Case Rate Increases	12/31/2020	1/1/2020	\$2.51	\$2.43	\$2.51	\$2.51	\$2.51
	12/31/2021	1/1/2021	\$2.73	\$2.56	\$2.51	\$2.51	\$2.51
Rate Case	12/31/2022	1/1/2022	\$3.04	\$2.87	\$3.70	\$2.59	\$2.59
	12/31/2023	1/1/2023	\$3.44	\$3.03	\$3.70	\$2.67	\$2.67
	12/31/2024	1/1/2024	\$3.87	\$3.17	\$3.70	\$2.75	\$2.75
Rate Case	12/31/2025	1/1/2025	\$4.68	\$3.62	\$4.30	\$2.83	\$2.83
	12/31/2026	1/1/2026	\$5.19	\$3.86	\$4.30	\$2.91	\$2.91
	12/31/2027	1/1/2027	\$5.34	\$3.97	\$4.30	\$3.00	\$3.00
Rate Case	12/31/2028	1/1/2028	\$5.96	\$4.58	\$5.34	\$3.09	\$3.09
	12/31/2029	1/1/2029	\$6.07	\$4.79	\$5.34	\$3.19	\$4.66
	12/31/2030	1/1/2030	\$6.18	\$4.91	\$5.34	\$3.28	\$5.34
Rate Case	12/31/2031	1/1/2031	\$6.29	\$5.53	\$5.45	\$3.38	\$5.45
	12/31/2032	1/1/2032	\$6.40	\$5.71	\$5.45	\$3.48	\$5.45
	12/31/2033	1/1/2033	\$6.52	\$5.83	\$5.45	\$3.58	\$5.45
Rate Case	12/31/2034	1/1/2034	\$6.63	\$6.37	\$5.56	\$3.69	\$5.56
	12/31/2035	1/1/2035	\$6.75	\$6.76	\$5.56	\$3.80	\$5.56
	12/31/2036	1/1/2036	\$6.88	\$6.87	\$5.56	\$3.92	\$5.56
Rate Case	12/31/2037	1/1/2037	\$6.88	\$7.66	\$5.67	\$4.03	\$5.67
	12/31/2038	1/1/2038	\$6.88	\$7.87	\$5.67	\$4.16	\$5.67
	12/31/2039	1/1/2039	\$6.88	\$7.99	\$5.67	\$4.28	\$5.67

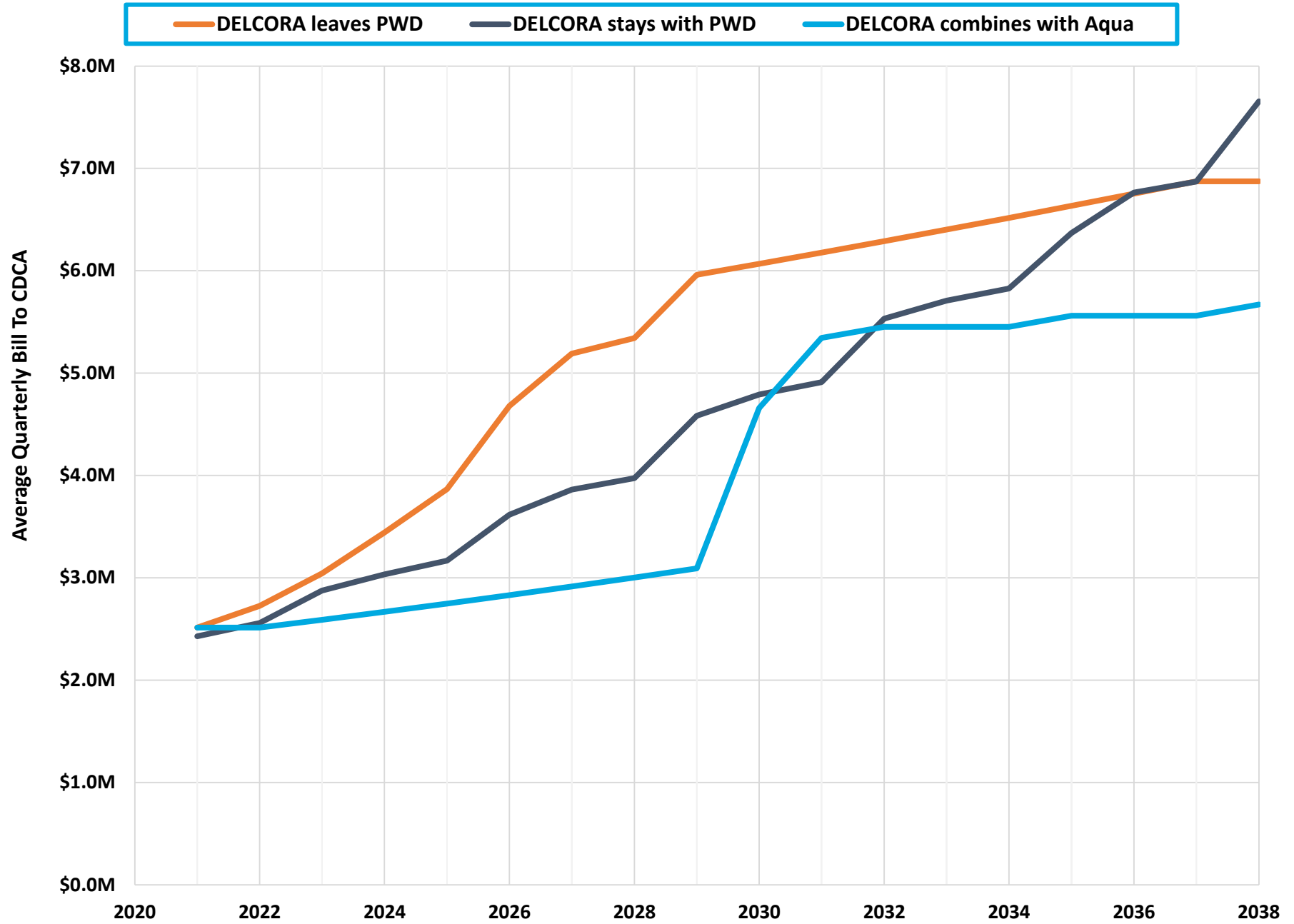
24.161%	0.000%	0.000%	2.000%	0.000%	0.000%	2.000%	0.000%	0.000%	2.000%	0.000%	0.000%
Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
127,159,455	127,159,455	127,159,455	129,702,644	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
\$67,341,357	\$67,341,357	\$67,341,357	69,884,546	69,884,546	69,884,546	72,478,599	72,478,599	72,478,599	75,124,533	75,124,533	75,124,533
73,568,715	75,775,777	78,049,050	80,390,522	82,802,237	85,286,304	87,844,894	90,480,240	93,194,648	95,990,487	98,870,202	101,836,308
\$53,590,740	\$16,295,624	\$0	0	0	0	0	0	0	0	0	0
0	35,088,055	49,110,405	49,312,122	46,900,407	44,416,340	44,451,803	41,816,457	39,102,049	38,952,144	36,072,429	33,106,323
127,159,455	127,159,455	127,159,455	129,702,644	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok
100%	32%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12.0	3.8	-	-	-	-	-	-	-	-	-	-
		\$49,110,405									
68,516,042	16,295,624	0	0	0	0	0	0	0	0	0	0
1,370,321	0	0	0	0	0	0	0	0	0	0	0
(53,590,740)	(16,295,624)	0	0	0	0	0	0	0	0	0	0
\$16,295,624	\$0	\$0	0	0	0	0	0	0	0	0	0
Yes	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted

2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
\$3.09	\$4.66	\$5.34	\$5.45	\$5.45	\$5.45	\$5.56	\$5.56	\$5.56	\$5.67	\$5.67	\$5.67
\$3.09	\$4.66	\$5.34	\$5.45	\$5.45	\$5.45	\$5.56	\$5.56	\$5.56	\$5.67	\$5.67	\$5.67

3.0% 50.7% 14.7% 2.0%

\$226,120,693 \$242,416,316 \$242,416,316 \$242,416,316

Savings	Leave PWD - 10/2/2019 PFM Projection ANNUAL	Stay With PWD - 10/2/2019 PFM Projection ANNUAL	Leave PWD - 10/2/2019 PFM Projection ANNUAL	Stay With PWD - 10/2/2019 PFM Projection ANNUAL
	\$8,693,981.13	\$8,693,981.13		
\$0.85	\$10,057,344.10	\$9,720,593.36	15.68%	11.81%
\$1.81	\$10,905,025.72	\$10,230,622.36	8.43%	5.25%
\$3.10	\$12,170,666.17	\$11,496,309.05	11.61%	12.37%
\$4.48	\$13,769,449.99	\$12,133,080.05	13.14%	5.54%
\$7.40	\$15,467,584.02	\$12,669,884.22	12.33%	4.42%
\$9.10	\$18,715,944.70	\$14,465,178.36	21.00%	14.17%
\$9.36	\$20,763,878.90	\$15,449,240.70	10.94%	6.80%
\$11.47	\$21,368,828.28	\$15,892,975.78	2.91%	2.87%
\$5.63	\$23,843,212.83	\$18,330,910.78	11.58%	15.34%
\$3.33	\$24,272,390.66	\$19,165,216.73	1.80%	4.55%
\$3.35	\$24,709,293.69	\$19,642,308.68	1.80%	2.49%
\$3.80	\$25,154,060.98	\$22,127,818.71	1.80%	12.65%
\$4.26	\$25,606,834.07	\$22,833,188.83	1.80%	3.19%
\$4.29	\$26,067,757.09	\$23,304,718.21	1.80%	2.07%
\$4.77	\$26,536,976.72	\$25,476,998.73	1.80%	9.32%
\$5.26	\$27,014,642.30	\$27,054,467.85	1.80%	6.19%
\$4.81	\$27,500,905.86	\$27,489,224.35	1.80%	1.61%
\$87.08	\$27,500,905.86	\$30,625,353.82	0.00%	11.41%
	\$27,500,905.86	\$31,499,505.28	0.00%	2.85%
	\$27,500,905.86	\$31,970,798.81	0.00%	1.50%



Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
	2020	2021	2022	2023	2024	2025	2026
Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369	102,415,369
Amount Over Original Revenue Requirement		0	\$28,121,789	\$28,121,789	\$28,121,789	\$42,597,271	\$42,597,271
Revenue Requirement - Customer Growth Assumption		59,818,098	61,612,641	63,461,020	65,364,851	67,325,796	69,345,570
Revenue Requirement - Trust Portion		\$0	\$26,327,246	\$24,478,867	\$22,575,036	\$35,089,573	\$33,069,799
Revenue Requirement - Additional Needed		0	0	0	0	0	0
Total Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369	102,415,369
Check		ok	ok	ok	ok	ok	ok
Percentage of Year		100%	100%	100%	100%	100%	100%
Number of Months		12.0	12.0	12.0	12.0	12.0	12.0

Trust Value - Beginning of Year (BOY)		217,000,000	221,340,000	199,439,554	178,949,478	159,953,431	128,062,927
Interest		4,340,000	4,426,800	3,988,791	3,578,990	3,199,069	2,561,259
Payout from Trust - End of Year (EOY)		0	(26,327,246)	(24,478,867)	(22,575,036)	(35,089,573)	(33,069,799)
Trust Value - EOY	217,000,000	\$221,340,000	\$199,439,554	\$178,949,478	\$159,953,431	\$128,062,927	\$97,554,387
Trust Life Check		Yes	Yes	Yes	Yes	Yes	Yes

			2022	2023	2024	2025	2026
Customer Bill Paid			\$4.91	\$5.06	\$5.21	\$5.36	\$5.52
Blended Bill				\$5.06	\$5.21	\$5.36	\$5.52
				3.0%	3.0%	3.0%	3.0%
Customer Bill Calculations			\$26,327,246	\$50,806,113	\$73,381,149	\$108,470,722	\$141,540,521

	Actual Year (Year End)	Year for chart Year Beginning	Leave PWD	Stay With PWD	Aqua Rates (Actual, No SF)	Aqua Rates (Annual Increase Factor)	Aqua Rates (Annual Increase Factor)
Rate Case Rate Increases		12/31/2020	1/1/2020	\$4.77	\$4.61	\$4.77	\$4.77
		12/31/2021	1/1/2021	\$5.17	\$4.85	\$4.77	\$4.77
Rate Case	47.01218%	12/31/2022	1/1/2022	\$5.77	\$5.45	\$7.01	\$4.91
		12/31/2023	1/1/2023	\$6.52	\$5.75	\$7.01	\$5.06
		12/31/2024	1/1/2024	\$7.33	\$6.00	\$7.01	\$5.21
Rate Case	16.46066%	12/31/2025	1/1/2025	\$8.87	\$6.85	\$8.16	\$5.36
		12/31/2026	1/1/2026	\$9.84	\$7.32	\$8.16	\$5.52
		12/31/2027	1/1/2027	\$10.12	\$7.53	\$8.16	\$5.69
Rate Case	24.16052%	12/31/2028	1/1/2028	\$11.30	\$8.69	\$10.13	\$5.86
		12/31/2029	1/1/2029	\$11.50	\$9.08	\$10.13	\$6.04
		12/31/2030	1/1/2030	\$11.71	\$9.31	\$10.13	\$6.22
Rate Case	2.00000%	12/31/2031	1/1/2031	\$11.92	\$10.48	\$10.33	\$6.40
		12/31/2032	1/1/2032	\$12.13	\$10.82	\$10.33	\$6.60
		12/31/2033	1/1/2033	\$12.35	\$11.04	\$10.33	\$6.79
Rate Case	2.00000%	12/31/2034	1/1/2034	\$12.57	\$12.07	\$10.54	\$7.00
		12/31/2035	1/1/2035	\$12.57	\$12.82	\$10.54	\$7.21
		12/31/2036	1/1/2036	\$12.57	\$13.02	\$10.54	\$7.42
Rate Case	2.00000%	12/31/2037	1/1/2037	\$12.57	\$14.51	\$10.75	\$7.65
		12/31/2038	1/1/2038	\$12.57	\$14.92	\$10.75	\$7.88
		12/31/2039	1/1/2039	\$12.57	\$15.15	\$10.75	\$8.11

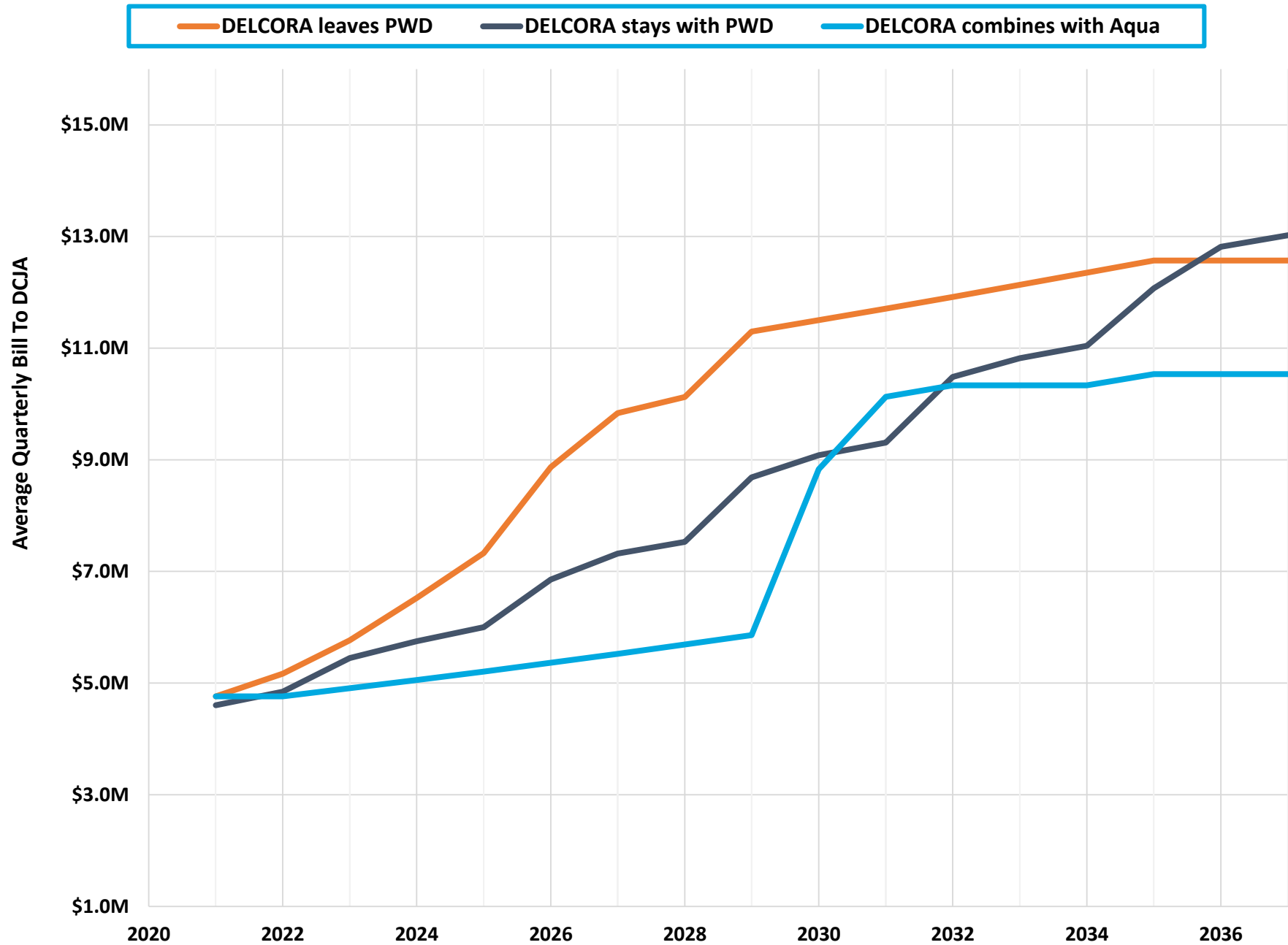
0.000%	24.161%	0.000%	0.000%	2.000%	0.000%	0.000%	2.000%	0.000%	0.000%	2.000%	0.000%	0.000%
Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
102,415,369	127,159,455	127,159,455	127,159,455	129,702,644	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
\$42,597,271	\$67,341,357	\$67,341,357	\$67,341,357	69,884,546	69,884,546	69,884,546	72,478,599	72,478,599	72,478,599	75,124,533	75,124,533	75,124,533
71,425,937	73,568,715	75,775,777	78,049,050	80,390,522	82,802,237	85,286,304	87,844,894	90,480,240	93,194,648	95,990,487	98,870,202	101,836,308
\$30,989,432	\$53,590,740	\$16,295,624	\$0	0	0	0	0	0	0	0	0	0
0	0	35,088,055	49,110,405	49,312,122	46,900,407	44,416,340	44,451,803	41,816,457	39,102,049	38,952,144	36,072,429	33,106,323
102,415,369	127,159,455	127,159,455	127,159,455	129,702,644	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok
100%	100%	32%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12.0	12.0	3.8	-	-	-	-	-	-	-	-	-	-
			\$49,110,405									
97,554,387	68,516,042	16,295,624	0	0	0	0	0	0	0	0	0	0
1,951,088	1,370,321	0	0	0	0	0	0	0	0	0	0	0
(30,989,432)	(53,590,740)	(16,295,624)	0	0	0	0	0	0	0	0	0	0
\$68,516,042	\$16,295,624	\$0	\$0	0	0	0	0	0	0	0	0	0
Yes	Yes	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted

2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
\$5.69	\$5.86	\$8.83	\$10.13	\$10.33	\$10.33	\$10.33	\$10.54	\$10.54	\$10.54	\$10.75	\$10.75	\$10.75
3.0%	3.0%	50.7%	14.7%	2.0%								
\$172,529,953	\$226,120,693	\$242,416,316	\$242,416,316	\$242,416,316								

Leave PWD - 10/2/2019 PFM Projection ANNUAL	Stay With PWD - 10/2/2019 PFM Projection ANNUAL	Leave PWD - 10/2/2019 PFM Projection ANNUAL	Stay With PWD - 10/2/2019 PFM Projection ANNUAL
\$16,476,574.98	\$16,476,574.98		
\$19,060,380.03	\$18,422,180.02	15.68%	11.81%
\$20,666,881.07	\$19,388,771.83	8.43%	5.25%
\$23,065,485.27	\$21,787,463.68	11.61%	12.37%
\$26,095,452.93	\$22,994,253.18	13.14%	5.54%
\$29,313,706.14	\$24,011,588.51	12.33%	4.42%
\$35,469,902.88	\$27,413,976.67	21.00%	14.17%
\$39,351,086.98	\$29,278,942.41	10.94%	6.80%
\$40,497,569.09	\$30,119,895.97	2.91%	2.87%
\$45,186,949.24	\$34,740,198.01	11.58%	15.34%
\$46,000,314.33	\$36,321,349.88	1.80%	4.55%
\$46,828,319.99	\$37,225,520.40	1.80%	2.49%
\$47,671,229.75	\$41,935,985.23	1.80%	12.65%
\$48,529,311.88	\$43,272,781.74	1.80%	3.19%
\$49,402,839.50	\$44,166,410.22	1.80%	2.07%
\$50,292,090.61	\$48,283,251.78	1.80%	9.32%
\$50,292,090.61	\$51,272,824.43	0.00%	6.19%
\$50,292,090.61	\$52,096,762.05	0.00%	1.61%
\$50,292,090.61	\$58,040,261.54	0.00%	11.41%
\$50,292,090.61	\$59,696,927.44	0.00%	2.85%
\$50,292,090.61	\$60,590,108.95	0.00%	1.50%

Savings

\$1.61
\$3.43
\$5.87
\$8.49
\$14.02
\$17.25
\$17.74
\$21.75
\$10.67
\$6.31
\$6.34
\$7.20
\$8.07
\$8.14
\$8.14
\$8.14
\$153.17



Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
	2020	2021	2022	2023	2024	2025	2026	2027
Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369	102,415,369	102,415,369
Amount Over Original Revenue Requirement		0	\$28,121,789	\$28,121,789	\$28,121,789	\$42,597,271	\$42,597,271	\$42,597,271
Revenue Requirement - Customer Growth Assumption		59,818,098	61,612,641	63,461,020	65,364,851	67,325,796	69,345,570	71,425,937
Revenue Requirement - Trust Portion		\$0	\$26,327,246	\$24,478,867	\$22,575,036	\$35,089,573	\$33,069,799	\$30,989,432
Revenue Requirement - Additional Needed		0	0	0	0	0	0	0
Total Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369	102,415,369	102,415,369
Check		ok	ok	ok	ok	ok	ok	ok
Percentage of Year		100%	100%	100%	100%	100%	100%	100%
Number of Months		12.0	12.0	12.0	12.0	12.0	12.0	12.0

Trust Value - Beginning of Year (BOY)		217,000,000	221,340,000	199,439,554	178,949,478	159,953,431	128,062,927	97,554,387
Interest		4,340,000	4,426,800	3,988,791	3,578,990	3,199,069	2,561,259	1,951,088
Payout from Trust - End of Year (EOY)		0	(26,327,246)	(24,478,867)	(22,575,036)	(35,089,573)	(33,069,799)	(30,989,432)
Trust Value - EOY		217,000,000	\$221,340,000	\$199,439,554	\$178,949,478	\$159,953,431	\$128,062,927	\$97,554,387
Trust Life Check			Yes	Yes	Yes	Yes	Yes	Yes

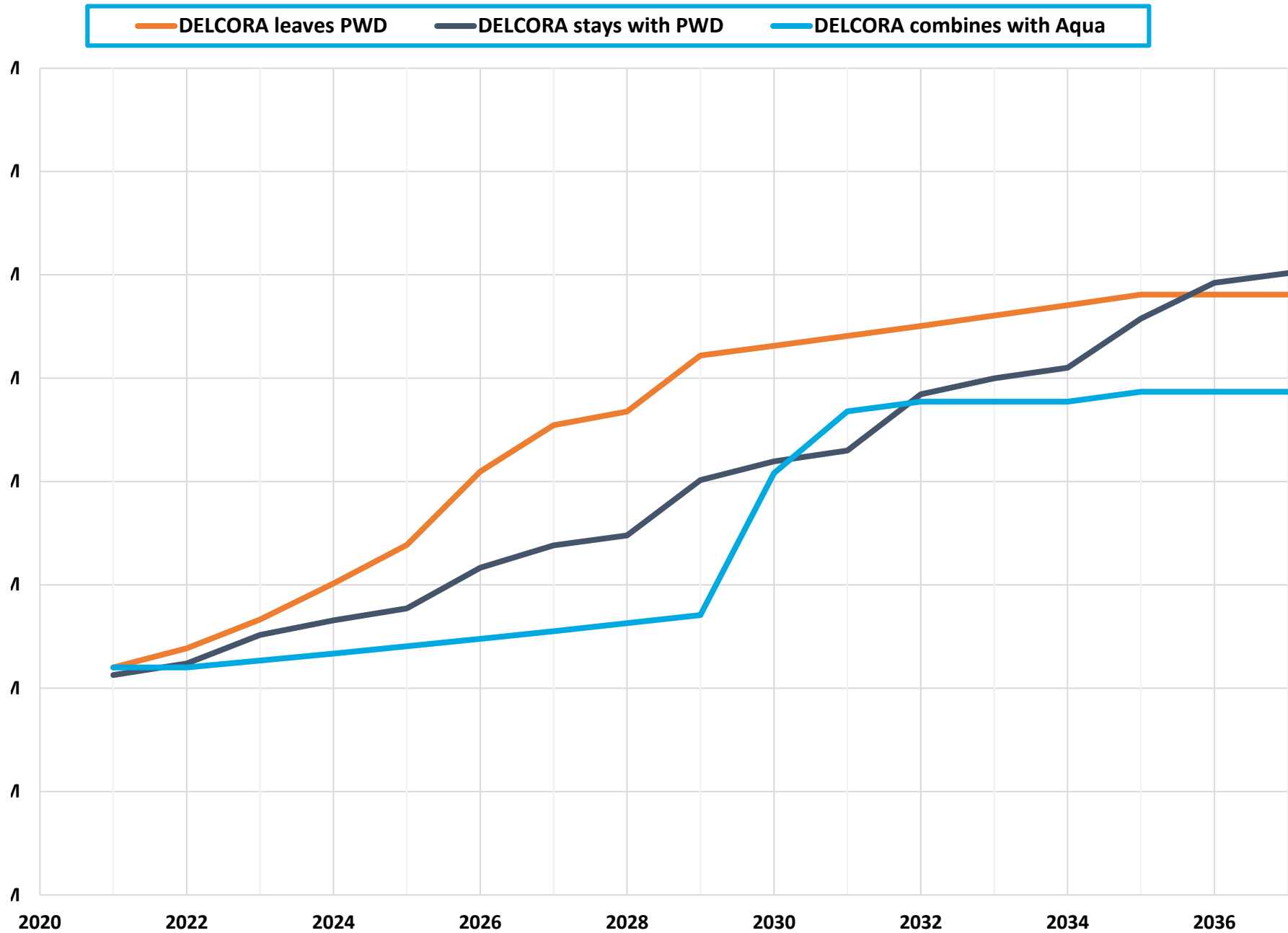
	2022	2023	2024	2025	2026	2027
Customer Bill Paid	\$1.13	\$1.17	\$1.20	\$1.24	\$1.28	\$1.31
Blended Bill		\$1.17	\$1.20	\$1.24	\$1.28	\$1.31
Customer Bill Calculations	\$26,327,246	\$50,806,113	\$73,381,149	\$108,470,722	\$141,540,521	\$172,529,953

	Actual Year (Year End)	Year for chart Year Beginning	Leave PWD	Stay With PWD	Aqua Rates (Actual, No SF)	Aqua Rates (Annual Increase Factor)	Aqua Rates (Annual Increase Factor)
Rate Case Rate Increases	12/31/2020	1/1/2020	\$1.10	\$1.06	\$1.10	\$1.10	\$1.10
Rate Case	47.01218%	12/31/2021	\$1.19	\$1.12	\$1.10	\$1.10	\$1.10
		12/31/2022	\$1.33	\$1.26	\$1.62	\$1.13	\$1.13
		12/31/2023	\$1.51	\$1.33	\$1.62	\$1.17	\$1.17
Rate Case	16.46066%	12/31/2024	\$1.69	\$1.39	\$1.62	\$1.20	\$1.20
		12/31/2025	\$2.05	\$1.58	\$1.88	\$1.24	\$1.24
		12/31/2026	\$2.27	\$1.69	\$1.88	\$1.28	\$1.28
Rate Case	24.16052%	12/31/2027	\$2.34	\$1.74	\$1.88	\$1.31	\$1.31
		12/31/2028	\$2.61	\$2.01	\$2.34	\$1.35	\$1.35
		12/31/2029	\$2.66	\$2.10	\$2.34	\$1.39	\$2.04
Rate Case	2.00000%	12/31/2030	\$2.70	\$2.15	\$2.34	\$1.44	\$2.34
		12/31/2031	\$2.75	\$2.42	\$2.39	\$1.48	\$2.39
		12/31/2032	\$2.80	\$2.50	\$2.39	\$1.52	\$2.39
Rate Case	2.00000%	12/31/2033	\$2.85	\$2.55	\$2.39	\$1.57	\$2.39
		12/31/2034	\$2.90	\$2.79	\$2.43	\$1.62	\$2.43
		12/31/2035	\$2.90	\$2.96	\$2.43	\$1.66	\$2.43
		12/31/2036	\$2.90	\$3.01	\$2.43	\$1.71	\$2.43
Rate Case	2.00000%	12/31/2037	\$2.90	\$3.35	\$2.48	\$1.77	\$2.48
		12/31/2038	\$2.90	\$3.45	\$2.48	\$1.82	\$2.48
		12/31/2039	\$2.90	\$3.50	\$2.48	\$1.87	\$2.48

24.161%	0.000%	0.000%	2.000%	0.000%	0.000%	2.000%	0.000%	0.000%	2.000%	0.000%	0.000%
Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
127,159,455	127,159,455	127,159,455	129,702,644	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
\$67,341,357	\$67,341,357	\$67,341,357	69,884,546	69,884,546	69,884,546	72,478,599	72,478,599	72,478,599	75,124,533	75,124,533	75,124,533
73,568,715	75,775,777	78,049,050	80,390,522	82,802,237	85,286,304	87,844,894	90,480,240	93,194,648	95,990,487	98,870,202	101,836,308
\$53,590,740	\$16,295,624	\$0	0	0	0	0	0	0	0	0	0
0	35,088,055	49,110,405	49,312,122	46,900,407	44,416,340	44,451,803	41,816,457	39,102,049	38,952,144	36,072,429	33,106,323
127,159,455	127,159,455	127,159,455	129,702,644	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok
100%	32%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12.0	3.8	-	-	-	-	-	-	-	-	-	-
		\$49,110,405									
68,516,042	16,295,624	0	0	0	0	0	0	0	0	0	0
1,370,321	0	0	0	0	0	0	0	0	0	0	0
(53,590,740)	(16,295,624)	0	0	0	0	0	0	0	0	0	0
\$16,295,624	\$0	\$0	0	0	0	0	0	0	0	0	0
Yes	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted

2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
\$1.35	\$2.04	\$2.34	\$2.39	\$2.39	\$2.39	\$2.43	\$2.43	\$2.43	\$2.48	\$2.48	\$2.48
\$1.35	\$2.04	\$2.34	\$2.39	\$2.39	\$2.39	\$2.43	\$2.43	\$2.43	\$2.48	\$2.48	\$2.48
3.0%	50.7%	14.7%	2.0%								
\$226,120,693	\$242,416,316	\$242,416,316	\$242,416,316								

	Leave PWD - 10/2/2019 PFM Projection ANNUAL	Stay With PWD - 10/2/2019 PFM Projection ANNUAL	Leave PWD - 10/2/2019 PFM Projection ANNUAL	Stay With PWD - 10/2/2019 PFM Projection ANNUAL
Savings	\$3,806,113.80	\$3,806,113.80		
	\$4,402,976.68	\$4,255,551.51	15.68%	11.81%
\$0.37	\$4,774,080.86	\$4,478,835.69	8.43%	5.25%
\$0.79	\$5,328,162.07	\$5,032,937.14	11.61%	12.37%
\$1.36	\$6,028,089.19	\$5,311,707.35	13.14%	5.54%
\$1.96	\$6,771,510.56	\$5,546,713.35	12.33%	4.42%
\$3.24	\$8,193,601.34	\$6,332,670.17	21.00%	14.17%
\$3.99	\$9,090,160.75	\$6,763,480.09	10.94%	6.80%
\$4.10	\$9,354,999.86	\$6,957,741.64	2.91%	2.87%
\$5.02	\$10,438,253.78	\$8,025,038.41	11.58%	15.34%
\$2.47	\$10,626,142.35	\$8,390,286.89	1.80%	4.55%
\$1.46	\$10,817,412.92	\$8,599,151.65	1.80%	2.49%
\$1.47	\$11,012,126.35	\$9,687,276.17	1.80%	12.65%
\$1.66	\$11,210,344.62	\$9,996,078.19	1.80%	3.19%
\$1.87	\$11,412,130.83	\$10,202,507.72	1.80%	2.07%
\$1.88	\$11,617,549.18	\$11,153,504.37	1.80%	9.32%
\$1.88	\$11,617,549.18	\$11,844,100.18	0.00%	6.19%
\$1.88	\$11,617,549.18	\$12,034,431.02	0.00%	1.61%
\$35.38	\$11,617,549.18	\$13,407,388.41	0.00%	11.41%
	\$11,617,549.18	\$13,790,080.75	0.00%	2.85%
	\$11,617,549.18	\$13,996,407.03	0.00%	1.50%
	\$11,685,152.61	\$15,394,706.26	0.58%	9.99%
	\$12,089,085.61	\$15,993,532.95	3.46%	3.89%
	\$12,344,363.62	\$16,452,760.66	2.11%	2.87%



Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
	2020	2021	2022	2023	2024	2025	2026
Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369	102,415,369
Amount Over Original Revenue Requirement		0	\$28,121,789	\$28,121,789	\$28,121,789	\$42,597,271	\$42,597,271
Revenue Requirement - Customer Growth Assumption		59,818,098	61,612,641	63,461,020	65,364,851	67,325,796	69,345,570
Revenue Requirement - Trust Portion		\$0	\$26,327,246	\$24,478,867	\$22,575,036	\$35,089,573	\$33,069,799
Revenue Requirement - Additional Needed		0	0	0	0	0	0
Total Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369	102,415,369
Check		ok	ok	ok	ok	ok	ok
Percentage of Year		100%	100%	100%	100%	100%	100%
Number of Months		12.0	12.0	12.0	12.0	12.0	12.0

Trust Value - Beginning of Year (BOY)		217,000,000	221,340,000	199,439,554	178,949,478	159,953,431	128,062,927
Interest		4,340,000	4,426,800	3,988,791	3,578,990	3,199,069	2,561,259
Payout from Trust - End of Year (EOY)		0	(26,327,246)	(24,478,867)	(22,575,036)	(35,089,573)	(33,069,799)
Trust Value - EOY	217,000,000	\$221,340,000	\$199,439,554	\$178,949,478	\$159,953,431	\$128,062,927	\$97,554,387
Trust Life Check		Yes	Yes	Yes	Yes	Yes	Yes

	2022	2023	2024	2025	2026
Customer Bill Paid	\$0.81	\$0.84	\$0.86	\$0.89	\$0.91
Blended Bill		\$0.84	\$0.86	\$0.89	\$0.91
		3.0%	3.0%	3.0%	3.0%
Customer Bill Calculations	\$26,327,246	\$50,806,113	\$73,381,149	\$108,470,722	\$141,540,521

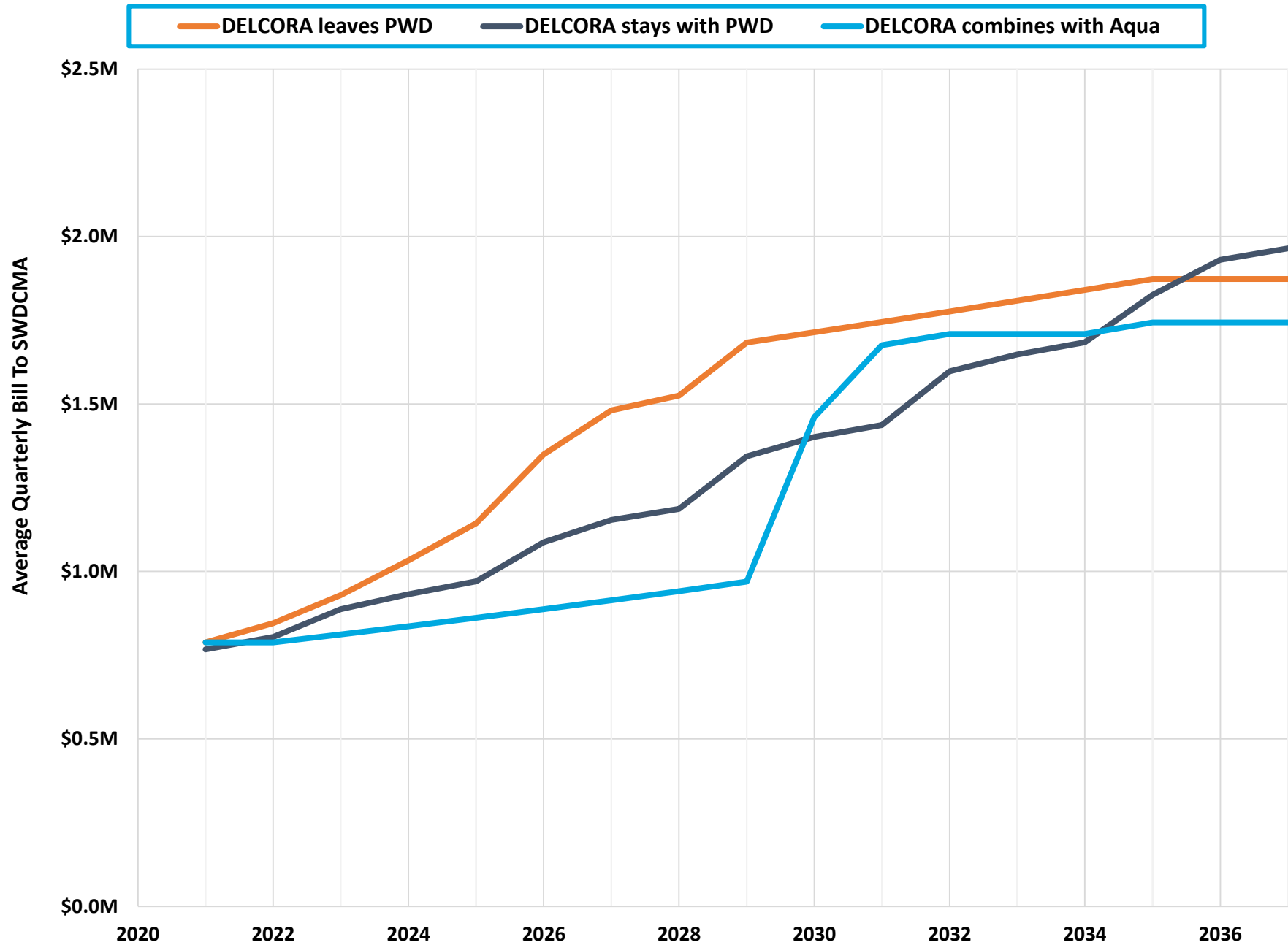
	Actual Year (Year End)	Year for chart Year Beginning	Leave PWD	Stay With PWD	Aqua Rates (Actual, No SF)	Aqua Rates (Annual Increase Factor)	Aqua Rates (Annual Increase Factor)
Rate Case Rate Increases	12/31/2020	1/1/2020	\$0.79	\$0.77	\$0.79	\$0.79	\$0.79
Rate Case	12/31/2021	1/1/2021	\$0.85	\$0.80	\$0.79	\$0.79	\$0.79
	12/31/2022	1/1/2022	\$0.93	\$0.89	\$1.16	\$0.81	\$0.81
	12/31/2023	1/1/2023	\$1.03	\$0.93	\$1.16	\$0.84	\$0.84
Rate Case	12/31/2024	1/1/2024	\$1.14	\$0.97	\$1.16	\$0.86	\$0.86
	12/31/2025	1/1/2025	\$1.35	\$1.09	\$1.35	\$0.89	\$0.89
	12/31/2026	1/1/2026	\$1.48	\$1.15	\$1.35	\$0.91	\$0.91
	12/31/2027	1/1/2027	\$1.52	\$1.19	\$1.35	\$0.94	\$0.94
Rate Case	12/31/2028	1/1/2028	\$1.68	\$1.34	\$1.68	\$0.97	\$0.97
	12/31/2029	1/1/2029	\$1.71	\$1.40	\$1.68	\$1.00	\$1.46
	12/31/2030	1/1/2030	\$1.74	\$1.44	\$1.68	\$1.03	\$1.68
Rate Case	12/31/2031	1/1/2031	\$1.78	\$1.60	\$1.71	\$1.06	\$1.71
	12/31/2032	1/1/2032	\$1.81	\$1.65	\$1.71	\$1.09	\$1.71
	12/31/2033	1/1/2033	\$1.84	\$1.68	\$1.71	\$1.12	\$1.71
Rate Case	12/31/2034	1/1/2034	\$1.87	\$1.83	\$1.74	\$1.16	\$1.74
	12/31/2035	1/1/2035	\$1.87	\$1.93	\$1.74	\$1.19	\$1.74
	12/31/2036	1/1/2036	\$1.87	\$1.97	\$1.74	\$1.23	\$1.74
Rate Case	12/31/2037	1/1/2037	\$1.87	\$2.17	\$1.78	\$1.26	\$1.78
	12/31/2038	1/1/2038	\$1.87	\$2.23	\$1.78	\$1.30	\$1.78
	12/31/2039	1/1/2039	\$1.88	\$2.27	\$1.78	\$1.34	\$1.78

0.000%	24.161%	0.000%	0.000%	2.000%	0.000%	0.000%	2.000%	0.000%	0.000%	2.000%	0.000%	0.000%
Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
102,415,369	127,159,455	127,159,455	127,159,455	129,702,644	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
\$42,597,271	\$67,341,357	\$67,341,357	\$67,341,357	69,884,546	69,884,546	69,884,546	72,478,599	72,478,599	72,478,599	75,124,533	75,124,533	75,124,533
71,425,937	73,568,715	75,775,777	78,049,050	80,390,522	82,802,237	85,286,304	87,844,894	90,480,240	93,194,648	95,990,487	98,870,202	101,836,308
\$30,989,432	\$53,590,740	\$16,295,624	\$0	0	0	0	0	0	0	0	0	0
0	0	35,088,055	49,110,405	49,312,122	46,900,407	44,416,340	44,451,803	41,816,457	39,102,049	38,952,144	36,072,429	33,106,323
102,415,369	127,159,455	127,159,455	127,159,455	129,702,644	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok
100%	100%	32%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12.0	12.0	3.8	-	-	-	-	-	-	-	-	-	-
			\$49,110,405									
97,554,387	68,516,042	16,295,624	0	0	0	0	0	0	0	0	0	0
1,951,088	1,370,321	0	0	0	0	0	0	0	0	0	0	0
(30,989,432)	(53,590,740)	(16,295,624)	0	0	0	0	0	0	0	0	0	0
\$68,516,042	\$16,295,624	\$0	\$0	0	0	0	0	0	0	0	0	0
Yes	Yes	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted

2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
\$0.94	\$0.97	\$1.46	\$1.68	\$1.71	\$1.71	\$1.71	\$1.74	\$1.74	\$1.74	\$1.78	\$1.78	\$1.78
\$0.94	\$0.97	\$1.46	\$1.68	\$1.71	\$1.71	\$1.71	\$1.74	\$1.74	\$1.74	\$1.78	\$1.78	\$1.78
3.0%	3.0%	50.7%	14.7%	2.0%								
\$172,529,953	\$226,120,693	\$242,416,316	\$242,416,316	\$242,416,316								

Savings

Leave PWD - 10/2/2019 PFM Projection ANNUAL	Stay With PWD - 10/2/2019 PFM Projection ANNUAL	Leave PWD - 10/2/2019 PFM Projection ANNUAL	Stay With PWD - 10/2/2019 PFM Projection ANNUAL
\$2,819,621.65	\$2,819,621.65		
\$3,153,161.41	\$3,070,070.81	11.83%	8.88%
\$3,382,467.91	\$3,216,064.18	7.27%	4.76%
\$3,715,506.89	\$3,549,114.57	9.85%	10.36%
\$4,131,368.95	\$3,727,607.53	11.19%	5.03%
\$4,572,386.14	\$3,882,075.70	10.67%	4.14%
\$5,396,570.04	\$4,347,726.86	18.03%	11.99%
\$5,925,238.44	\$4,613,893.24	9.80%	6.12%
\$6,098,562.38	\$4,747,438.82	2.93%	2.89%
\$6,733,876.48	\$5,373,759.28	10.42%	13.19%
\$6,855,086.25	\$5,605,140.25	1.80%	4.31%
\$6,978,477.81	\$5,749,147.15	1.80%	2.57%
\$7,104,090.41	\$6,389,504.06	1.80%	11.14%
\$7,231,964.03	\$6,591,437.76	1.80%	3.16%
\$7,362,139.39	\$6,736,509.76	1.80%	2.20%
\$7,494,657.90	\$7,302,090.52	1.80%	8.40%
\$7,494,657.90	\$7,721,793.86	0.00%	5.75%
\$7,494,657.90	\$7,860,456.11	0.00%	1.80%
\$7,494,657.90	\$8,666,602.59	0.00%	10.26%
\$7,494,657.90	\$8,915,593.71	0.00%	2.87%
\$7,529,349.71	\$9,066,181.83	0.46%	1.69%



Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
	2020	2021	2022	2023	2024	2025	2026
Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369	102,415,369
Amount Over Original Revenue Requirement		0	\$28,121,789	\$28,121,789	\$28,121,789	\$42,597,271	\$42,597,271
Revenue Requirement - Customer Growth Assumption		59,818,098	61,612,641	63,461,020	65,364,851	67,325,796	69,345,570
Revenue Requirement - Trust Portion		\$0	\$26,327,246	\$24,478,867	\$22,575,036	\$35,089,573	\$33,069,799
Revenue Requirement - Additional Needed		0	0	0	0	0	0
Total Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369	102,415,369
Check		ok	ok	ok	ok	ok	ok
Percentage of Year		100%	100%	100%	100%	100%	100%
Number of Months		12.0	12.0	12.0	12.0	12.0	12.0

Trust Value - Beginning of Year (BOY)		217,000,000	221,340,000	199,439,554	178,949,478	159,953,431	128,062,927
Interest		4,340,000	4,426,800	3,988,791	3,578,990	3,199,069	2,561,259
Payout from Trust - End of Year (EOY)		0	(26,327,246)	(24,478,867)	(22,575,036)	(35,089,573)	(33,069,799)
Trust Value - EOY	217,000,000	\$221,340,000	\$199,439,554	\$178,949,478	\$159,953,431	\$128,062,927	\$97,554,387
Trust Life Check		Yes	Yes	Yes	Yes	Yes	Yes

	2022	2023	2024	2025	2026
Customer Bill Paid	\$0.55	\$0.57	\$0.58	\$0.60	\$0.62

Blended Bill			\$0.57	\$0.58	\$0.60	\$0.62
			3.0%	3.0%	3.0%	3.0%
Customer Bill Calculations		\$26,327,246	\$50,806,113	\$73,381,149	\$108,470,722	\$141,540,521

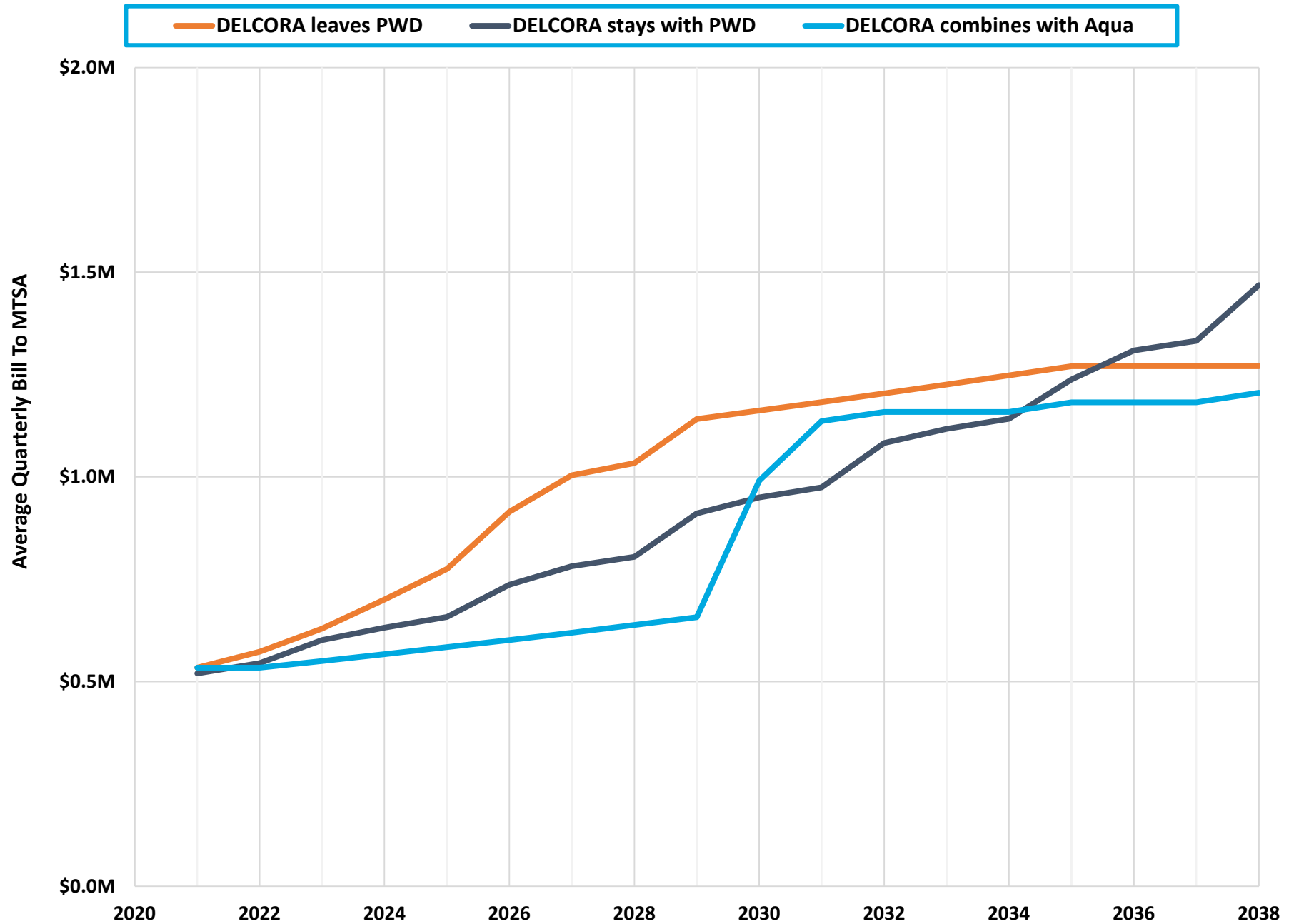
	Actual Year (Year End)	Year for chart Year Beginning	Leave PWD	Stay With PWD	Aqua Rates (Actual, No SF)	Aqua Rates (Annual Increase Factor)	Aqua Rates (Annual Increase Factor)
Rate Case Rate Increases		12/31/2020	1/1/2020	\$0.53	\$0.52	\$0.53	\$0.53
Rate Case	47.01218%	12/31/2021	1/1/2021	\$0.57	\$0.55	\$0.53	\$0.53
		12/31/2022	1/1/2022	\$0.63	\$0.60	\$0.55	\$0.55
		12/31/2023	1/1/2023	\$0.70	\$0.63	\$0.57	\$0.57
		12/31/2024	1/1/2024	\$0.77	\$0.66	\$0.58	\$0.58
Rate Case	16.46066%	12/31/2025	1/1/2025	\$0.91	\$0.74	\$0.60	\$0.60
		12/31/2026	1/1/2026	\$1.00	\$0.78	\$0.62	\$0.62
		12/31/2027	1/1/2027	\$1.03	\$0.80	\$0.64	\$0.64
Rate Case	24.16052%	12/31/2028	1/1/2028	\$1.14	\$0.91	\$0.66	\$0.66
		12/31/2029	1/1/2029	\$1.16	\$0.95	\$0.68	\$0.99
		12/31/2030	1/1/2030	\$1.18	\$0.97	\$0.70	\$1.14
Rate Case	2.00000%	12/31/2031	1/1/2031	\$1.20	\$1.08	\$0.72	\$1.16
		12/31/2032	1/1/2032	\$1.23	\$1.12	\$0.74	\$1.16
		12/31/2033	1/1/2033	\$1.25	\$1.14	\$0.76	\$1.16
Rate Case	2.00000%	12/31/2034	1/1/2034	\$1.27	\$1.24	\$0.78	\$1.18
		12/31/2035	1/1/2035	\$1.27	\$1.31	\$0.81	\$1.18
		12/31/2036	1/1/2036	\$1.27	\$1.33	\$0.83	\$1.18
Rate Case	2.00000%	12/31/2037	1/1/2037	\$1.27	\$1.47	\$0.86	\$1.21
		12/31/2038	1/1/2038	\$1.27	\$1.51	\$0.88	\$1.21
		12/31/2039	1/1/2039	\$1.28	\$1.54	\$0.91	\$1.21

0.000%	24.161%	0.000%	0.000%	2.000%	0.000%	0.000%	2.000%	0.000%	0.000%	2.000%	0.000%	0.000%
Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
102,415,369	127,159,455	127,159,455	127,159,455	129,702,644	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
\$42,597,271	\$67,341,357	\$67,341,357	\$67,341,357	69,884,546	69,884,546	69,884,546	72,478,599	72,478,599	72,478,599	75,124,533	75,124,533	75,124,533
71,425,937	73,568,715	75,775,777	78,049,050	80,390,522	82,802,237	85,286,304	87,844,894	90,480,240	93,194,648	95,990,487	98,870,202	101,836,308
\$30,989,432	\$53,590,740	\$16,295,624	\$0	0	0	0	0	0	0	0	0	0
0	0	35,088,055	49,110,405	49,312,122	46,900,407	44,416,340	44,451,803	41,816,457	39,102,049	38,952,144	36,072,429	33,106,323
102,415,369	127,159,455	127,159,455	127,159,455	129,702,644	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok
100%	100%	32%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12.0	12.0	3.8	-	-	-	-	-	-	-	-	-	-
			\$49,110,405									
97,554,387	68,516,042	16,295,624	0	0	0	0	0	0	0	0	0	0
1,951,088	1,370,321	0	0	0	0	0	0	0	0	0	0	0
(30,989,432)	(53,590,740)	(16,295,624)	0	0	0	0	0	0	0	0	0	0
\$68,516,042	\$16,295,624	\$0	\$0	0	0	0	0	0	0	0	0	0
Yes	Yes	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted

2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
\$0.64	\$0.66	\$0.99	\$1.14	\$1.16	\$1.16	\$1.16	\$1.18	\$1.18	\$1.18	\$1.21	\$1.21	\$1.21
\$0.64	\$0.66	\$0.99	\$1.14	\$1.16	\$1.16	\$1.16	\$1.18	\$1.18	\$1.18	\$1.21	\$1.21	\$1.21
3.0%	3.0%	50.7%	14.7%	2.0%								
\$172,529,953	\$226,120,693	\$242,416,316	\$242,416,316	\$242,416,316								

Savings

Leave PWD - 10/2/2019 PFM Projection ANNUAL	Stay With PWD - 10/2/2019 PFM Projection ANNUAL	Leave PWD - 10/2/2019 PFM Projection ANNUAL	Stay With PWD - 10/2/2019 PFM Projection ANNUAL
\$1,911,517.24	\$1,911,517.24		
\$2,137,635.17	\$2,081,305.23	11.83%	
\$2,293,089.83	\$2,180,279.09	7.27%	4.76%
\$2,518,868.26	\$2,406,065.26	9.85%	10.36%
\$2,800,795.27	\$2,527,071.70	11.19%	5.03%
\$3,099,775.79	\$2,631,790.91	10.67%	4.14%
\$3,658,518.04	\$2,947,471.64	18.03%	11.99%
\$4,016,920.30	\$3,127,914.87	9.80%	6.12%
\$4,134,422.48	\$3,218,449.95	2.93%	2.89%
\$4,565,123.48	\$3,643,053.85	10.42%	13.19%
\$4,647,295.70	\$3,799,914.87	1.80%	4.31%
\$4,730,947.02	\$3,897,542.03	1.80%	2.57%
\$4,816,104.07	\$4,331,661.73	1.80%	11.14%
\$4,902,793.94	\$4,468,559.43	1.80%	3.16%
\$4,991,044.23	\$4,566,908.67	1.80%	2.20%
\$5,080,883.03	\$4,950,335.06	1.80%	8.40%
\$5,080,883.03	\$5,234,866.21	0.00%	5.75%
\$5,080,883.03	\$5,328,870.06	0.00%	1.80%
\$5,080,883.03	\$5,875,384.12	0.00%	10.26%
\$5,080,883.03	\$6,044,183.65	0.00%	2.87%
\$5,104,401.78	\$6,146,272.46	0.46%	1.69%



Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
	2020	2021	2022	2023	2024	2025	2026	2027
Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369	102,415,369	102,415,369
Amount Over Original Revenue Requirement		0	\$28,121,789	\$28,121,789	\$28,121,789	\$42,597,271	\$42,597,271	\$42,597,271
Revenue Requirement - Customer Growth Assumption		59,818,098	61,612,641	63,461,020	65,364,851	67,325,796	69,345,570	71,425,937
Revenue Requirement - Trust Portion		\$0	\$26,327,246	\$24,478,867	\$22,575,036	\$35,089,573	\$33,069,799	\$30,989,432
Revenue Requirement - Additional Needed		0	0	0	0	0	0	0
Total Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369	102,415,369	102,415,369
Check		ok	ok	ok	ok	ok	ok	ok
Percentage of Year		100%	100%	100%	100%	100%	100%	100%
Number of Months		12.0	12.0	12.0	12.0	12.0	12.0	12.0

Trust Value - Beginning of Year (BOY)		217,000,000	221,340,000	199,439,554	178,949,478	159,953,431	128,062,927	97,554,387
Interest		4,340,000	4,426,800	3,988,791	3,578,990	3,199,069	2,561,259	1,951,088
Payout from Trust - End of Year (EOY)		0	(26,327,246)	(24,478,867)	(22,575,036)	(35,089,573)	(33,069,799)	(30,989,432)
Trust Value - EOY		217,000,000	\$221,340,000	\$199,439,554	\$178,949,478	\$159,953,431	\$128,062,927	\$97,554,387
Trust Life Check			Yes	Yes	Yes	Yes	Yes	Yes

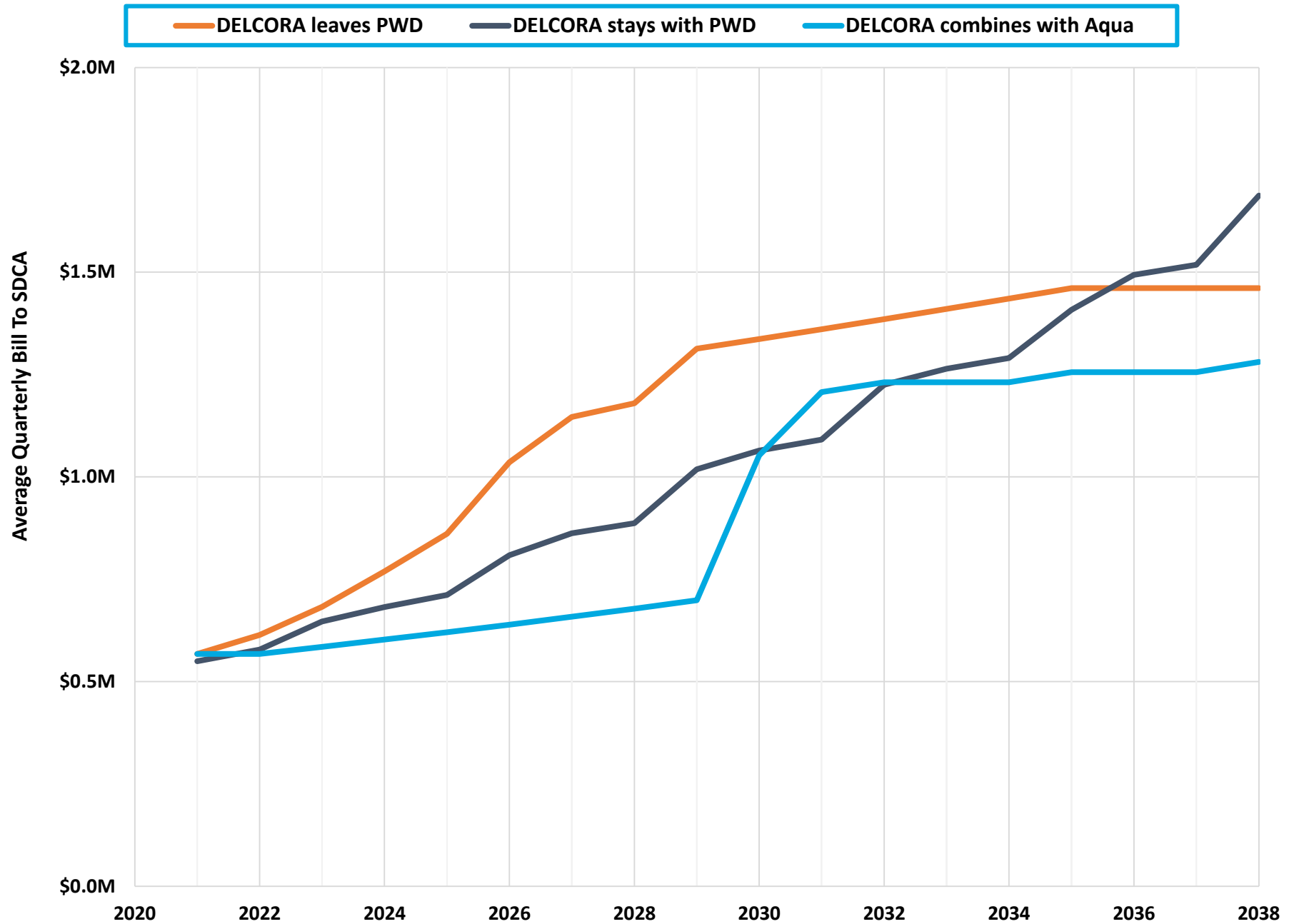
	2022	2023	2024	2025	2026	2027
Customer Bill Paid	\$0.58	\$0.60	\$0.62	\$0.64	\$0.66	\$0.68
Blended Bill		\$0.60	\$0.62	\$0.64	\$0.66	\$0.68
Customer Bill Calculations	\$26,327,246	\$50,806,113	\$73,381,149	\$108,470,722	\$141,540,521	\$172,529,953

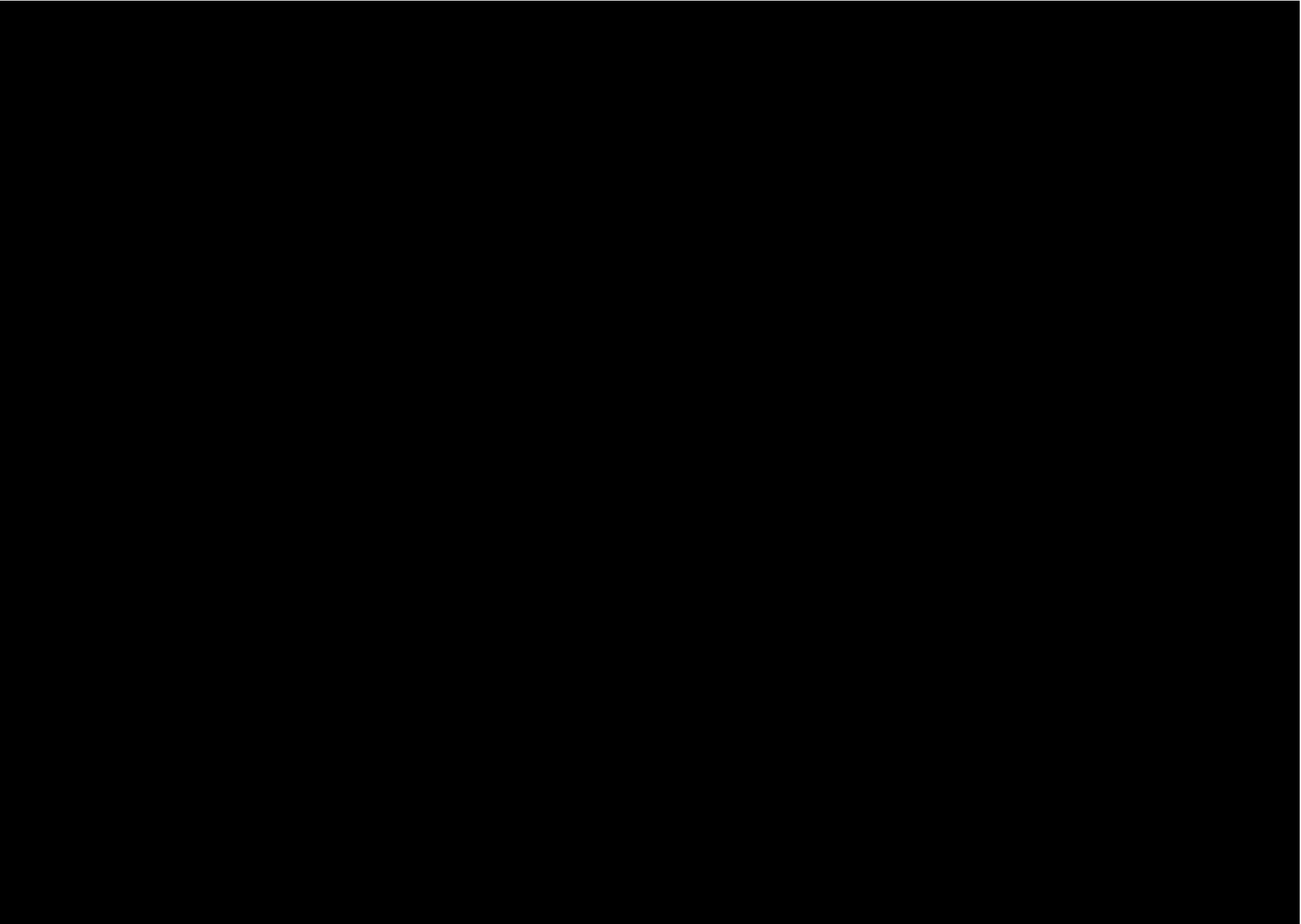
	Actual Year (Year End)	Year for chart Year Beginning	Leave PWD	Stay With PWD	Aqua Rates (Actual, No SF)	Aqua Rates (Annual Increase Factor)	Aqua Rates (Annual Increase Factor)
Rate Case Rate Increases	12/31/2020	1/1/2020	\$0.57	\$0.55	\$0.57	\$0.57	\$0.57
Rate Case	47.01218%	12/31/2021	\$0.61	\$0.58	\$0.57	\$0.57	\$0.57
		12/31/2022	\$0.68	\$0.65	\$0.83	\$0.58	\$0.58
		12/31/2023	\$0.77	\$0.68	\$0.83	\$0.60	\$0.60
Rate Case	16.46066%	12/31/2024	\$0.86	\$0.71	\$0.83	\$0.62	\$0.62
		12/31/2025	\$1.04	\$0.81	\$0.97	\$0.64	\$0.64
		12/31/2026	\$1.15	\$0.86	\$0.97	\$0.66	\$0.66
Rate Case	24.16052%	12/31/2027	\$1.18	\$0.89	\$0.97	\$0.68	\$0.68
		12/31/2028	\$1.31	\$1.02	\$1.21	\$0.70	\$0.70
		12/31/2029	\$1.34	\$1.06	\$1.21	\$0.72	\$1.05
Rate Case	2.00000%	12/31/2030	\$1.36	\$1.09	\$1.21	\$0.74	\$1.21
		12/31/2031	\$1.39	\$1.22	\$1.23	\$0.76	\$1.23
		12/31/2032	\$1.41	\$1.26	\$1.23	\$0.79	\$1.23
Rate Case	2.00000%	12/31/2033	\$1.44	\$1.29	\$1.23	\$0.81	\$1.23
		12/31/2034	\$1.46	\$1.41	\$1.26	\$0.83	\$1.26
		12/31/2035	\$1.46	\$1.49	\$1.26	\$0.86	\$1.26
		12/31/2036	\$1.46	\$1.52	\$1.26	\$0.88	\$1.26
Rate Case	2.00000%	12/31/2037	\$1.46	\$1.69	\$1.28	\$0.91	\$1.28
		12/31/2038	\$1.46	\$1.74	\$1.28	\$0.94	\$1.28
		12/31/2039	\$1.46	\$1.76	\$1.28	\$0.97	\$1.28

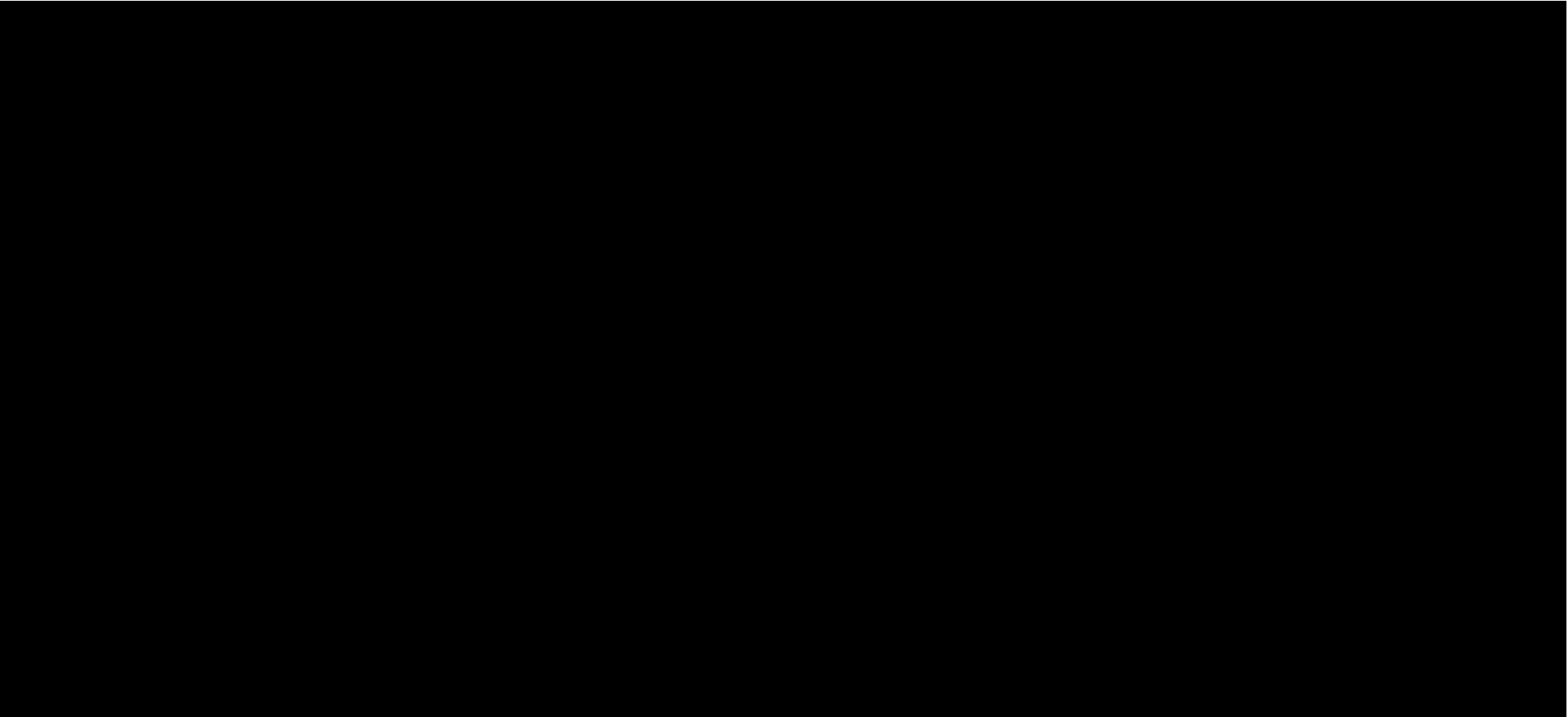
24.161%	0.000%	0.000%	2.000%	0.000%	0.000%	2.000%	0.000%	0.000%	2.000%	0.000%	0.000%
Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
127,159,455	127,159,455	127,159,455	129,702,644	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
\$67,341,357	\$67,341,357	\$67,341,357	69,884,546	69,884,546	69,884,546	72,478,599	72,478,599	72,478,599	75,124,533	75,124,533	75,124,533
73,568,715	75,775,777	78,049,050	80,390,522	82,802,237	85,286,304	87,844,894	90,480,240	93,194,648	95,990,487	98,870,202	101,836,308
\$53,590,740	\$16,295,624	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
0	35,088,055	49,110,405	49,312,122	46,900,407	44,416,340	44,451,803	41,816,457	39,102,049	38,952,144	36,072,429	33,106,323
127,159,455	127,159,455	127,159,455	129,702,644	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok
100%	32%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12.0	3.8	-	-	-	-	-	-	-	-	-	-
		\$49,110,405									
68,516,042	16,295,624	0	0	0	0	0	0	0	0	0	0
1,370,321	0	0	0	0	0	0	0	0	0	0	0
(53,590,740)	(16,295,624)	0	0	0	0	0	0	0	0	0	0
\$16,295,624	\$0	\$0	0	0	0	0	0	0	0	0	0
Yes	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted

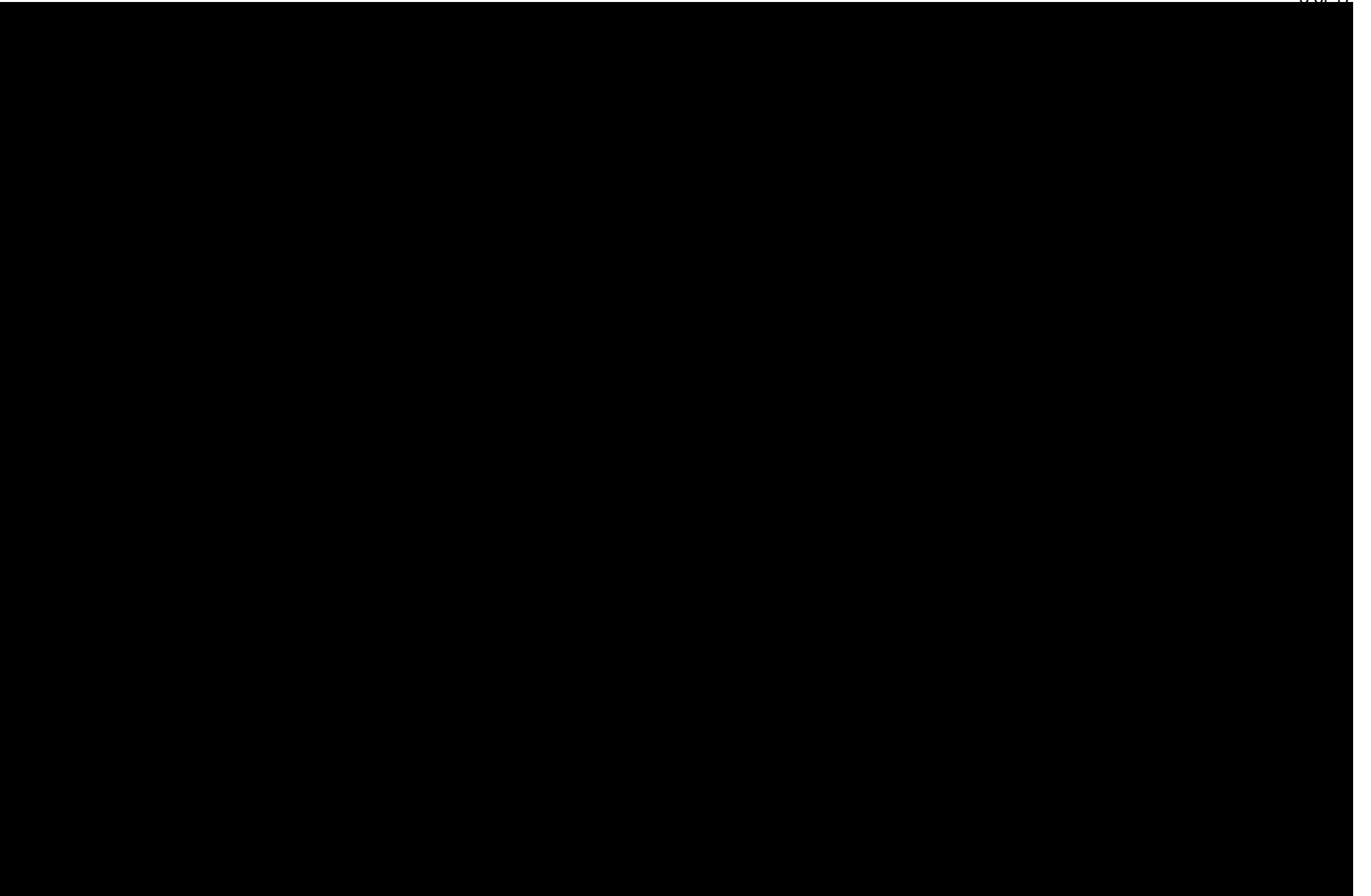
2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
\$0.70	\$1.05	\$1.21	\$1.23	\$1.23	\$1.23	\$1.26	\$1.26	\$1.26	\$1.28	\$1.28	\$1.28
\$0.70	\$1.05	\$1.21	\$1.23	\$1.23	\$1.23	\$1.26	\$1.26	\$1.26	\$1.28	\$1.28	\$1.28
3.0%	50.7%	14.7%	2.0%								
\$226,120,693	\$242,416,316	\$242,416,316	\$242,416,316								

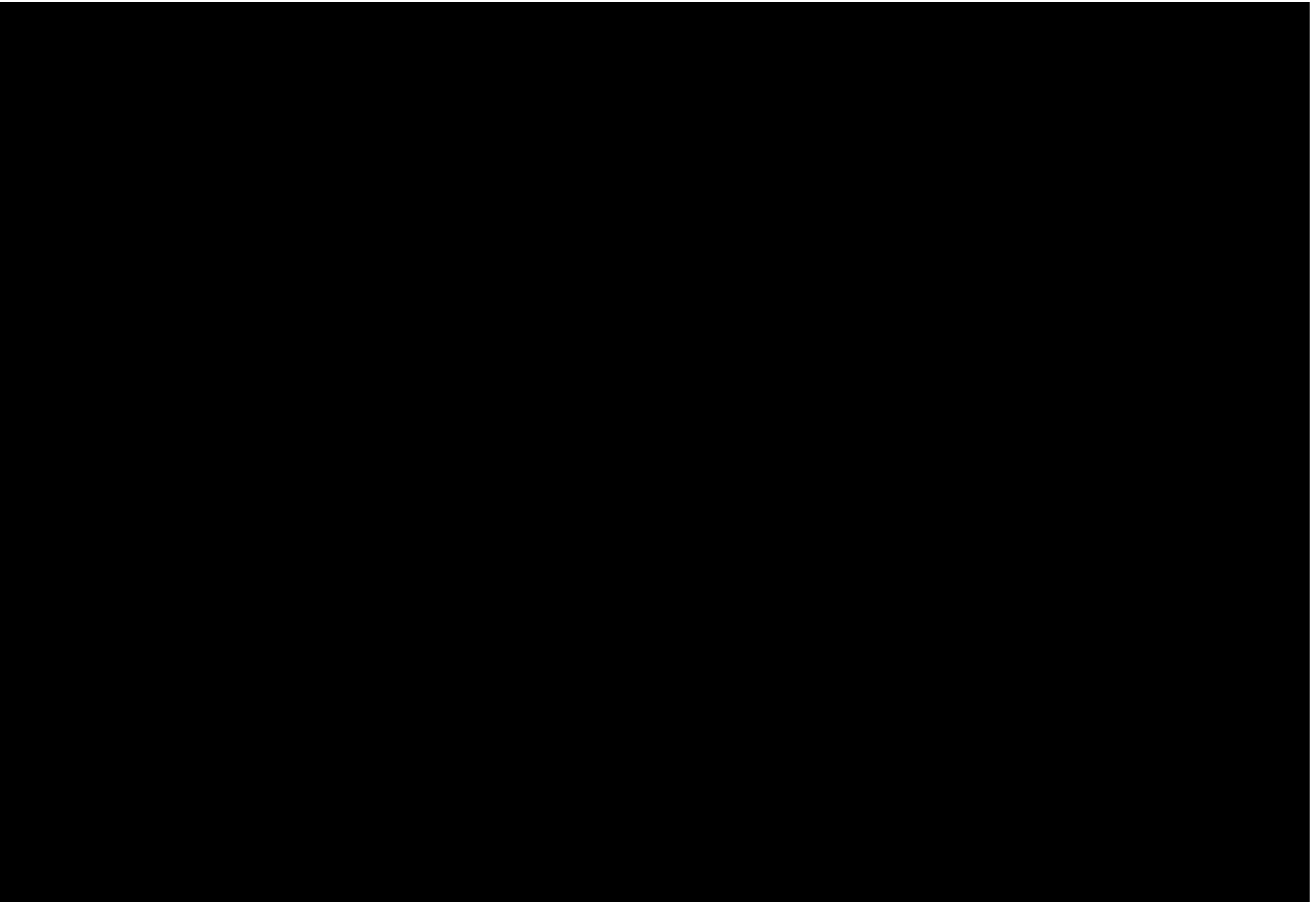
Savings	Year for chartYear Beginning	Leave PWD - 10/2/2019 PFM Projection ANNUAL	Stay With PWD - 10/2/2019 PFM Projection ANNUAL	Leave PWD - 10/2/2019 PFM Projection ANNUAL	Stay With PWD - 10/2/2019 PFM Projection ANNUAL
	1/1/2020	\$2,012,498.55	\$2,012,498.55		
\$0.18	1/1/2021	\$2,271,431.17	\$2,199,390.65	12.87%	9.29%
\$0.39	1/1/2022	\$2,456,370.68	\$2,312,096.71	8.14%	5.12%
\$0.67	1/1/2023	\$2,730,831.31	\$2,586,567.23	11.17%	11.87%
\$0.96	1/1/2024	\$3,076,671.86	\$2,726,606.01	12.66%	5.41%
\$1.59	1/1/2025	\$3,443,880.70	\$2,845,373.52	11.94%	4.36%
\$1.95	1/1/2026	\$4,142,844.80	\$3,233,485.55	20.30%	13.64%
\$2.01	1/1/2027	\$4,585,125.13	\$3,448,173.58	10.68%	6.64%
\$2.46	1/1/2028	\$4,718,835.24	\$3,547,395.38	2.92%	2.88%
\$1.14	1/1/2029	\$5,252,599.28	\$4,073,361.83	11.31%	14.83%
\$0.61	1/1/2030	\$5,347,146.06	\$4,256,399.32	1.80%	4.49%
\$0.62	1/1/2031	\$5,443,394.69	\$4,363,155.31	1.80%	2.51%
\$0.72	1/1/2032	\$5,541,375.80	\$4,899,709.54	1.80%	12.30%
\$0.82	1/1/2033	\$5,641,120.56	\$5,055,586.46	1.80%	3.18%
\$0.82	1/1/2034	\$5,742,660.73	\$5,161,587.57	1.80%	2.10%
\$0.82	1/1/2035	\$5,846,028.62	\$5,631,581.33	1.80%	9.11%
\$0.82	1/1/2036	\$5,846,028.62	\$5,974,486.53	0.00%	6.09%
\$16.58	1/1/2037	\$5,846,028.62	\$6,073,096.35	0.00%	1.65%
	1/1/2038	\$5,846,028.62	\$6,749,774.41	0.00%	11.14%
	1/1/2039	\$5,846,028.62	\$6,942,724.49	0.00%	2.86%
	1/0/1900	\$5,846,028.62	\$7,049,670.17	0.00%	1.54%
	1/0/1900	\$5,926,563.12	\$7,739,266.88	1.38%	9.78%
	1/0/1900	\$6,130,443.82	\$8,038,383.97	3.44%	3.86%
	1/0/1900	\$6,261,877.90	\$8,269,479.74	2.14%	2.87%

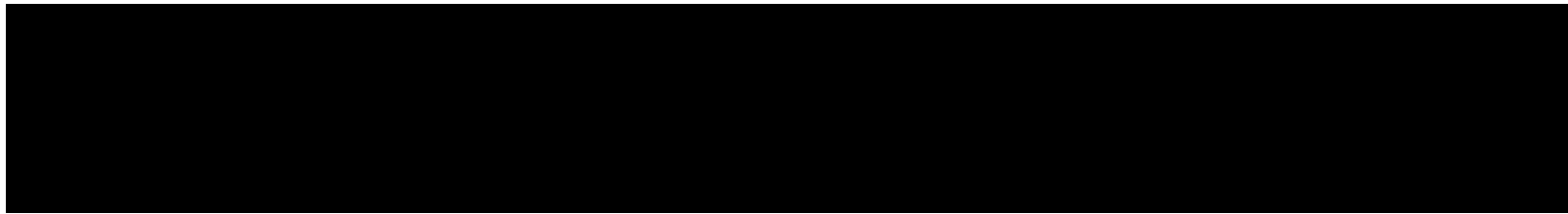


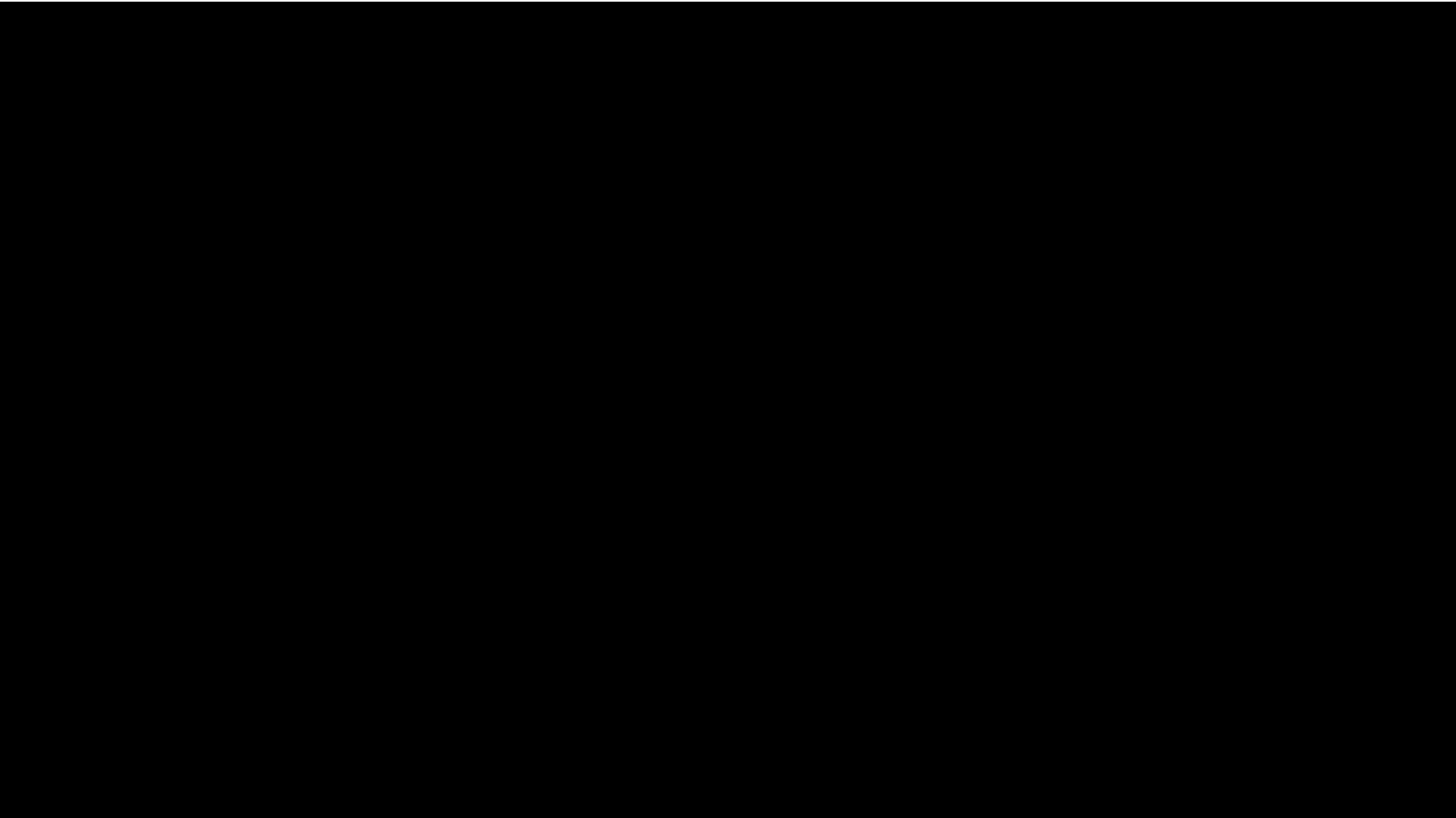




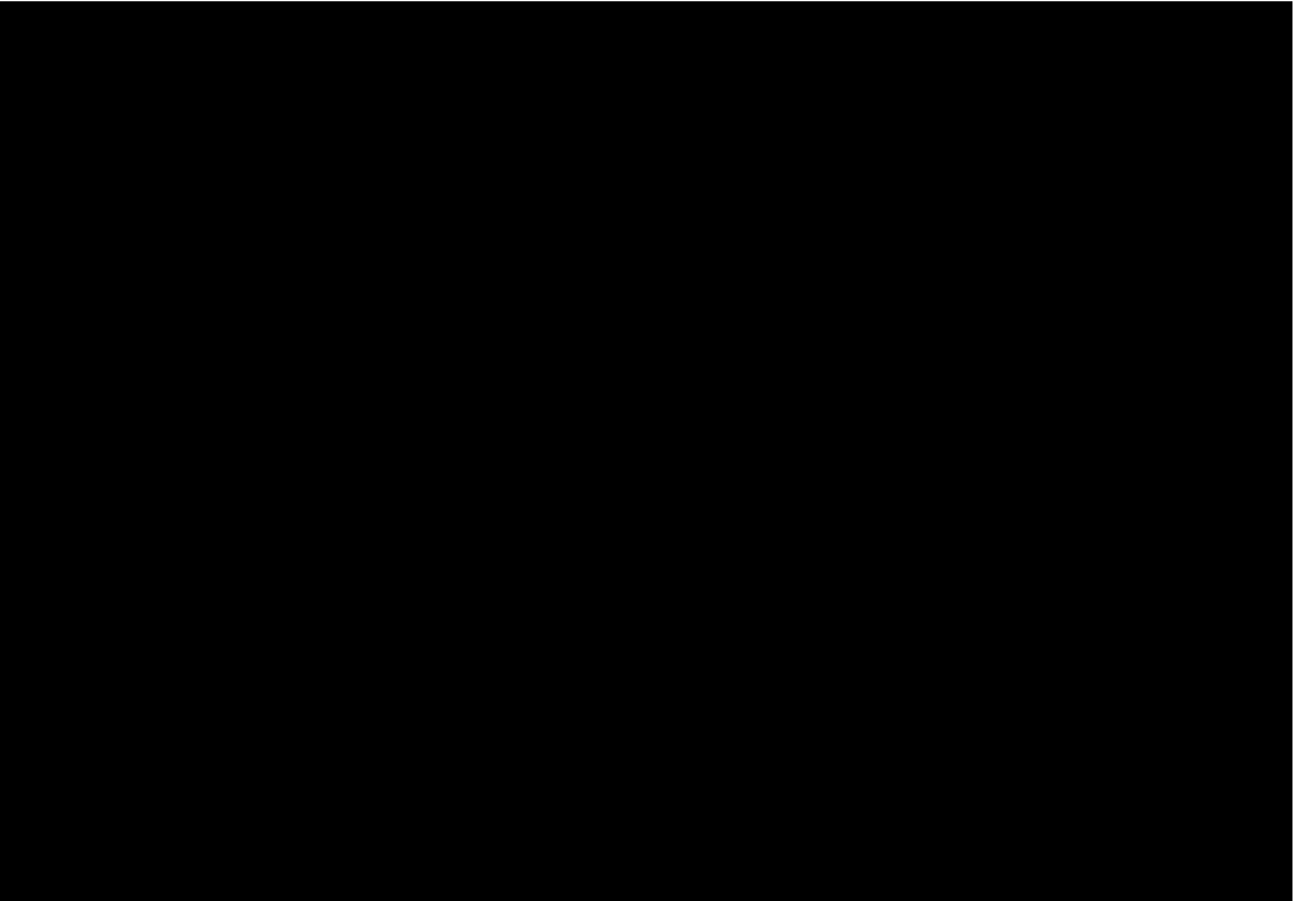


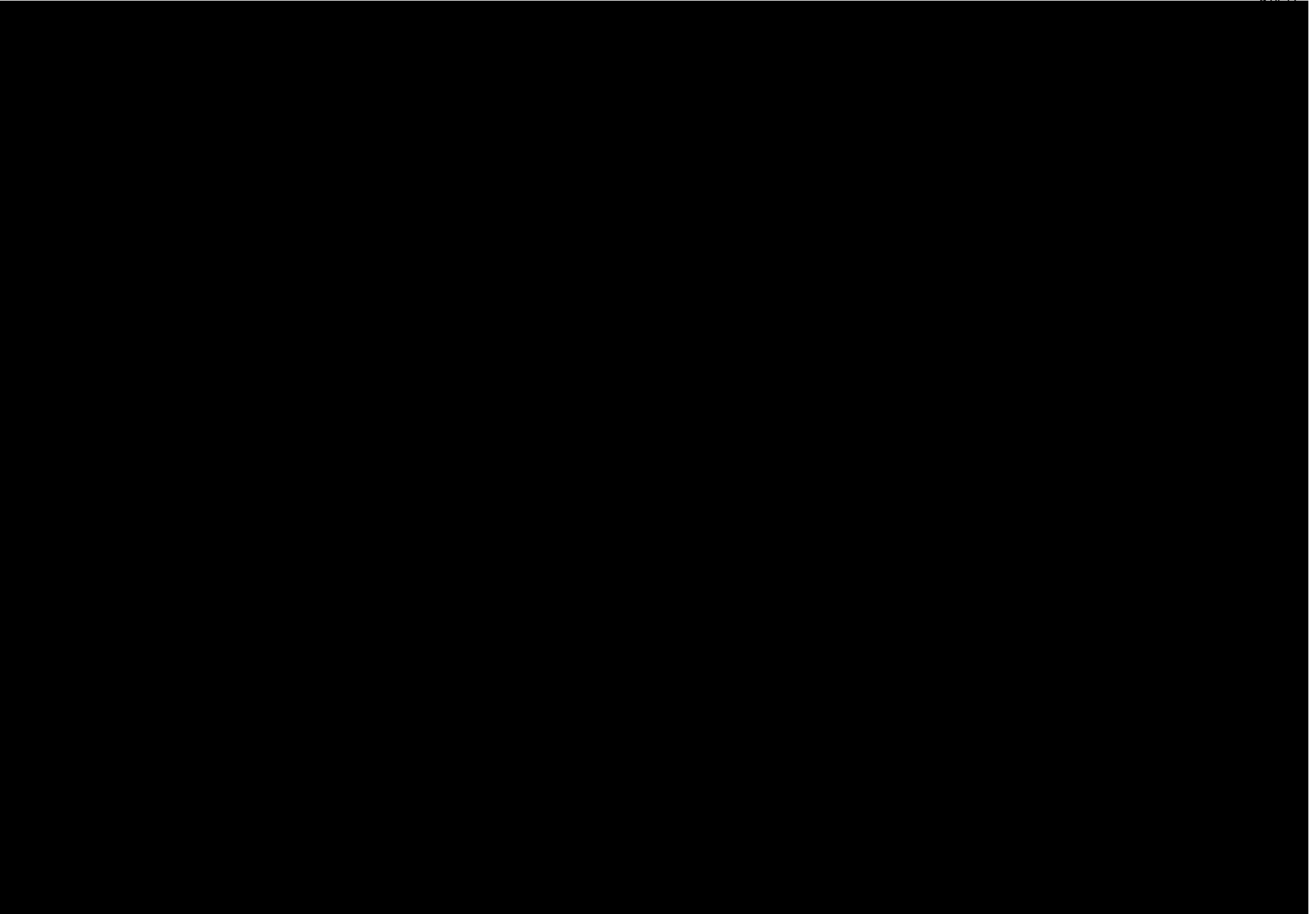


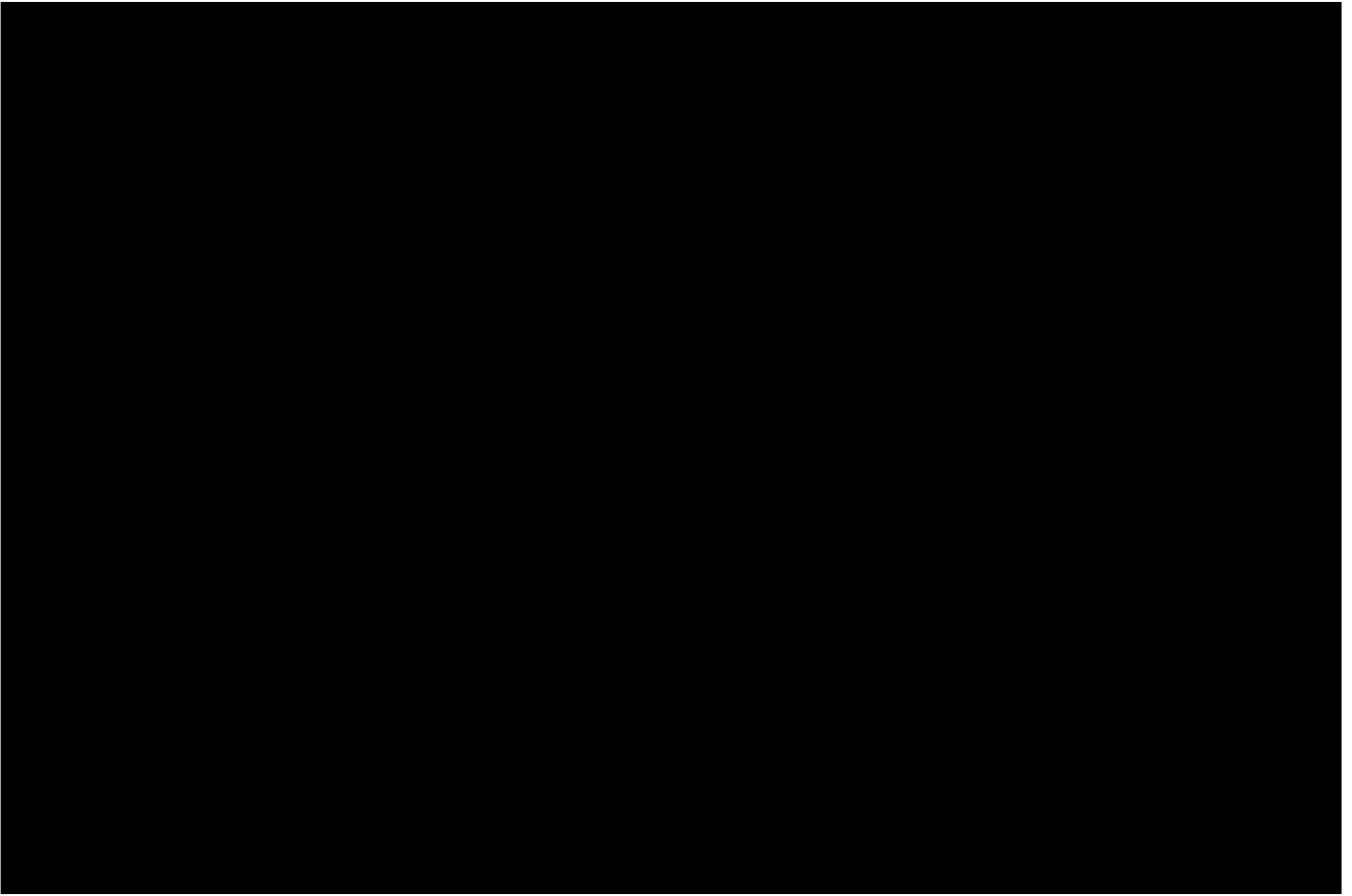


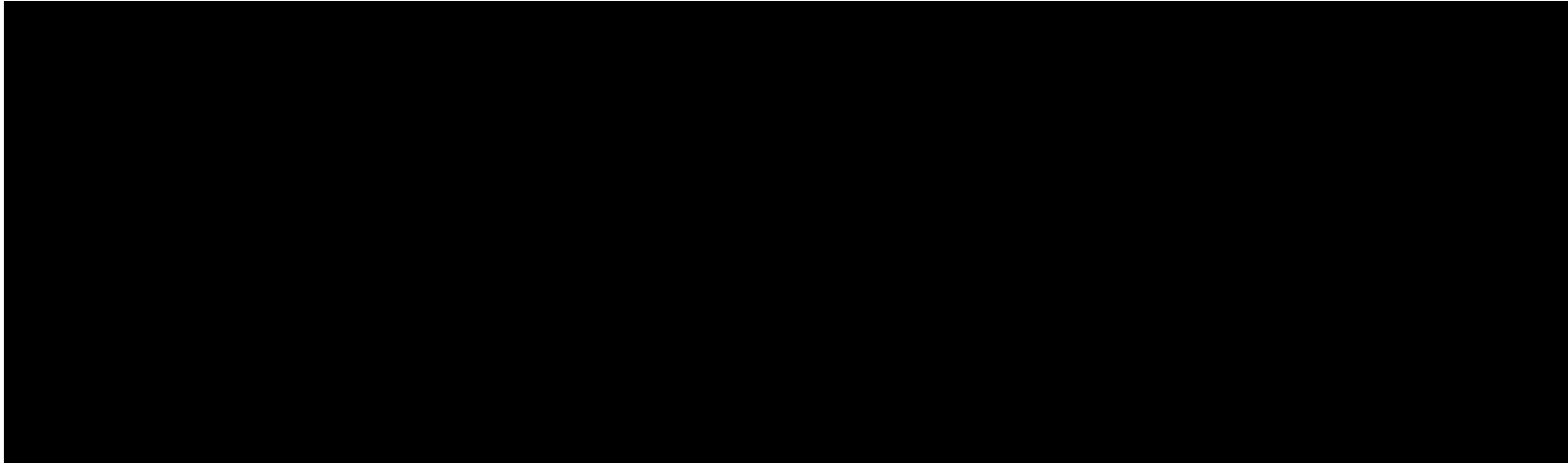


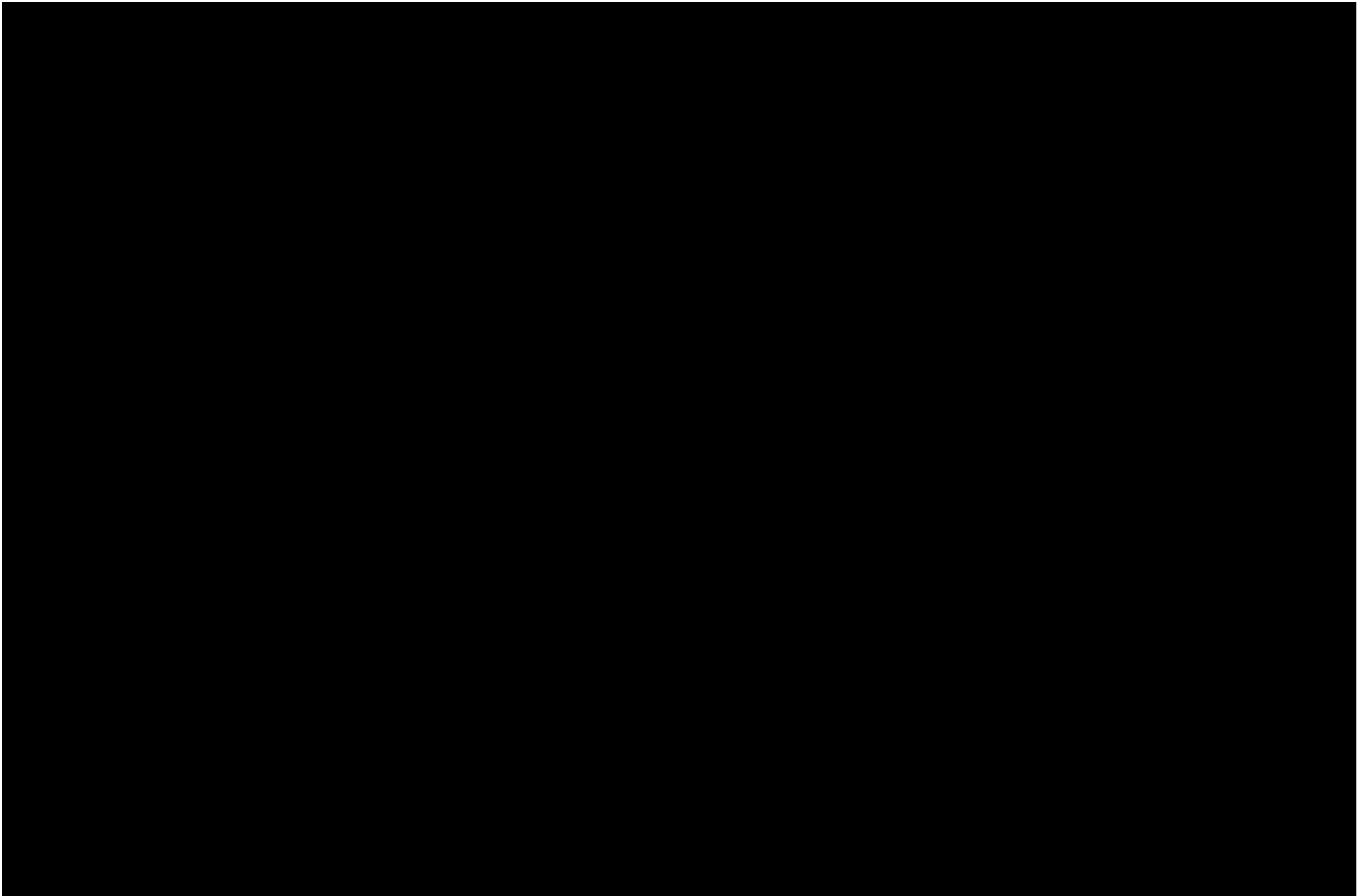












1. **Introduction**

2. **Background**

3. **Methodology**

4. **Results**

5. **Discussion**

6. **Conclusion**

7. **References**

8. **Appendix**

9. **Index**

10. **Table of Contents**

11. **Abstract**

12. **Summary**

13. **Key Words**

14. **Keywords**

15. **Keywords**

16. **Keywords**

17. **Keywords**

18. **Keywords**

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**DELCORA RATE STABILIZATION FUND
TRUST AGREEMENT**

between

**THE DELAWARE COUNTY REGIONAL
WATER QUALITY CONTROL AUTHORITY**

as SETTLOR

and

UNIVEST BANK AND TRUST CO.

as TRUSTEE

Effective Date: December 27, 2019

TABLE OF CONTENTS

	Page
ARTICLE 1. DEFINITIONS AND INCORPORATION BY REFERENCE.....	2
Section 1.1. Definitions.....	2
Section 1.2 Other Definitional Provisions	4
ARTICLE 2. ORGANIZATION	4
Section 2.1 Declaration of Trust	4
Section 2.2 Purposes of the Trust	4
Section 2.3 Appointment of Trustee	4
Section 2.4 Title to Trust Property.....	4
Section 2.5 Situs of Trust.....	5
Section 2.6 Use of Trust Assets	5
ARTICLE 3. CONTRIBUTIONS TO THE TRUST.....	5
Section 3.1 Initial Contribution.....	5
Section 3.2 Contribution of Sale Proceeds	5
Section 3.3 Additional Contributions	5
Section 3.4 Acceptance by the Trust.....	5
ARTICLE 4. DISTRIBUTIONS FROM THE TRUST.....	5
Section 4.1 Distributions.....	5
Section 4.2 No Right of Reversion	6
ARTICLE 5. THE TRUSTEE	6
Section 5.1 Trustee Resignation, Removal and Succession	6
Section 5.2 Duties of Trustee.....	7
Section 5.3 Acceptance of Trust and Duties	7
Section 5.4 Refrain from Certain Actions.....	10
Section 5.5 Reliance.....	10
Section 5.6 Compensation and Expenses.....	10
Section 5.7 Investment of Trust Assets.....	11
Section 5.8 Trustee Powers.....	11
Section 5.9 Indemnity of Trustee.....	12
Section 5.10 Interpretation and Direction.....	12
Section 5.11 Books and Records	12
Section 5.12 Accounting and Reports.....	13
Section 5.13 Third Party Reliance	13
Section 5.14 Interpretation; Rules.....	14

ARTICLE 6. POWER OF SUBSTITUTION	14
Section 6.1 Power of Substitution.....	14
Section 6.2 Confirmations	14
ARTICLE 7. TERMINATION.....	14
Section 7.1 Termination.....	14
Section 7.2 Trust Irrevocable.....	14
ARTICLE 8. AMENDMENTS	15
Section 8.1 Amendment of Agreement.....	15
ARTICLE 9. MISCELLANEOUS	15
Section 9.1 No Legal Title to Trust Property.....	15
Section 9.2 Limitations on Rights of Others.....	15
Section 9.3 Notices	15
Section 9.4 Counterparts.....	16
Section 9.5 Successors and Assigns.....	16
Section 9.6 Headings	16
Section 9.7 Governing Law	16
Section 9.8 Consent to Jurisdiction and Service or Process	17
Section 9.9 Tax Status of the Trust.....	17
Section 9.10 Entire Agreement.....	17
Section 9.11 Reliance on Trust Agreement	17

Exhibit A - Trustee Compensation and Reimbursement

**DELCORA RATE STABILIZATION FUND
TRUST AGREEMENT**

THIS DELCORA RATE STABILIZATION FUND TRUST AGREEMENT, dated as of the Effective Date, is by and between **THE DELAWARE COUNTY REGIONAL WATER QUALITY CONTROL AUTHORITY**, a body corporate and politic existing under the Pennsylvania Municipal Authorities Act, 42 P.S. 5601 *et seq.* (the "Settlor"), and **UNIVEST BANK AND TRUST CO.**, a Pennsylvania state-chartered bank and trust company, as trustee (the "Trustee").

WITNESSETH:

WHEREAS, the Settlor currently owns and operates a sewer system (the "Sewer System") serving various residential, commercial, industrial, and municipal customers in Delaware County, Pennsylvania (the "DELCORA Customers");

WHEREAS, pursuant to that certain agreement dated September 17, 2019 (the "Sewer System Sale Agreement") between the Settlor and Aqua Pennsylvania Wastewater, Inc. ("Aqua Wastewater"), the Settlor has agreed to sell the Sewer System to Aqua Wastewater;

WHEREAS, the Settlor has agreed to devote a majority of the proceeds which it receives from the sale of the Sewer System (the "Sale Proceeds") to stabilizing the amounts which the DELCORA Customers will pay for access to the Sewer System during a period of years following the closing under the Sewer System Sale Agreement (the "Closing Date");

WHEREAS, the Settlor and the Trustee desire to establish a trust for the benefit of the DELCORA Customers (the "Trust"), and the Trustee agrees to serve as trustee of such trust;

WHEREAS, the Settlor has entered into a Funding Agreement with the Trustee bearing even date herewith (the "Funding Agreement") pursuant to which the Settlor has agreed to contribute to the Trust a majority of the Sale Proceeds on the Closing Date, as well as any amounts which Settlor may receive under Section 9 of the Escrow Agreement;

WHEREAS, the Settlor and Aqua Resources, Inc., will enter into a rate stabilization agreement, of which Aqua Wastewater will be the designated third party Distribution Agent, pursuant to which (a) Aqua Wastewater will bill DELCORA Customers at reduced levels and (b) the Trust will reimburse Aqua Wastewater for such reductions, as and when so directed by the Settlor pursuant to Article 5 below; and

WHEREAS, the Settlor and the Trustee desire that the Sale Proceeds transferred to the Trust pursuant to this Agreement, together with all other funds transferred to the Trustee hereunder, be held and administered as an irrevocable trust for the benefit of the DELCORA Customers pursuant to the provisions of this Trust Agreement;

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants expressed herein, and intending to be legally bound, the Settlor and the Trustee hereby agree as follows:

ARTICLE 1 DEFINITIONS

Section 1.1 Definitions. Except as otherwise specified herein, or as the context otherwise requires, the following terms have the respective meanings set forth below for all purposes of this Agreement, including, without limitation, the recitals hereto.

"Affiliate" means, with respect to any specified person, any other person controlling or controlled by or under common control with such specified person. For the purposes of this definition, "control" when used with respect to any specified person means the power to direct the management and policies of such person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms "controlling" and "controlled" have meanings correlative to the foregoing.

"Agreement" or "Trust Agreement" means this trust agreement between the Settlor and the Trustee, as such document is modified or reformed from time to time.

"Aqua Resources" means Aqua Resources, Inc., a Pennsylvania business corporation which is an Affiliate of Aqua Wastewater, and its successors and assigns.

"Aqua Wastewater" means Aqua Wastewater Pennsylvania, Inc., a Pennsylvania business corporation operating as a wastewater utility company, and its successors and assigns.

"Beneficiaries" shall refer to the DELCORA Customers.

"Calculation Agent" means the company engaged by the Settlor to provide calculation services in connection with the implementation of the Rate Stabilization Agreement.

"Closing Date" means the date of closing under the Sewer System Sale Agreement.

"Code" means the U.S. Internal Revenue Code of 1986, as amended, and all regulations promulgated thereunder. References to such Code shall be taken as references to any corresponding provisions of future law.

"County" means Delaware County, Pennsylvania.

"DELCORA Customers" means the customers connected to the Sewer System.

"Distribution Agent" shall refer to Aqua Wastewater or any successor thereto serving as the entity responsible for allocating rate reductions as provided under the Rate Stabilization Agreement to and among the Beneficiaries.

“Distributions” means distributions made by the Trustee to the Distribution Agent from time to time, as directed by the Settlor, pursuant to Article 4 below.

“Distribution Order” means a written direction delivered by an authorized representative of the Settlor to the Trustee instructing the Trustee to make a Distribution.

“Effective Date” means December 27, 2019.

“Escrow Agreement” means that certain Escrow Agreement among the Settlor, the Trustee (as escrow agent), and Aqua Wastewater dated as of December 27, 2019.

“Fund” or “Trust” means the Delaware County Regional Water Quality Control Authority Rate Stabilization Trust, which is the trust created pursuant to this Trust Agreement.

“Funding Agreement” means that certain agreement between the Settlor and the Trustee bearing even date herewith, pursuant to which the Settlor will be required to transfer a majority of the Sale Proceeds to the Trust on the Closing Date, as well as any amounts which Settlor may receive under Section 9 of the Escrow Agreement.

“Investment Guidelines” means such guidelines for the investment of the Trust assets as shall be provided from time to time by the Settlor to the Trustee.

“Permitted Investments” means investments which an authority constituted under the Pennsylvania Municipal Authorities Act, 42 P.S. 5601 *et seq.* is permitted to make under applicable law.

“Rate Stabilization Agreement” means the agreement to be entered into by and between the Settlor and Aqua Resources, with Aqua Wastewater as a designated third party Distribution Agent, pursuant to which (a) the Distribution Agent will agree to bill the Beneficiaries at reduced levels and (b) the Settlor will agree to direct the Trust to reimburse the Distribution Agent for such reductions, pursuant to Article 4 of this Trust Agreement.

“Settlor” means the Delaware County Regional Water Quality Control Authority and its successors (including the County upon termination of the Settlor).

“Sewer System” means the sewer system which is currently owned and operated by the Settlor and which will be sold by the Settlor to Aqua Wastewater, as improved by Aqua Wastewater subsequent to the Closing Date.

“Trust Assets” means the assets held from time to time by the Trustee in the Trust Fund.

“Trust Expenses” means the trustee compensation and any other expenses of the Trust, including, without limitation, amounts payable out of the Trust Fund pursuant to Section 5.6 below.

"Trustee" means Univest Bank and Trust Co., and its successors and permitted assigns.

"Trust Fund" means the trust estate managed, protected, and conserved pursuant to the terms and conditions of this Trust Agreement, which shall consist of the Sale Proceeds deposited by the Settlor hereunder, and any Additional Contributions made to the Trust under Section 3.3 hereof, together with any and all investment income earned from Permitted Investments made and held by the Trustee pursuant to this Trust Agreement.

Section 1.2 Other Definitional Provisions. (a) All references to Articles, Sections, and subsections are to Articles, Sections, and subsections of this Agreement unless otherwise specified. All terms defined in this Agreement shall have the defined meanings herein when used in any certificate, notice, or other document made or delivered pursuant hereto, unless otherwise defined therein.

(b) In the event of any change in the identity of the Settlor, Distribution Agent or Calculation Agent as defined above, whether by merger, incorporation or cessation of existence, written notice of the identity and contact information for the successor entity shall be provided in writing to the Trustee within ten (10) days of any change in accordance with the notice requirements of Section 9.3 below.

ARTICLE 2 ORGANIZATION

Section 2.1 Declaration of Trust. The name of the Trust shall be "The Delaware County Regional Water Quality Control Authority Rate Stabilization Trust." Effective as of the Effective Date, the Trustee shall have all of the rights, powers and duties set forth herein with respect to accomplishing the purposes of the Trust.

Section 2.2 Purposes of the Trust. The purposes of the Trust are to benefit the Beneficiaries by receiving Sale Proceeds deposited into the Trust Fund by the Settlor and any additional contributions made to the Trust under Section 3.3 hereof, investing and reinvesting such Sale Proceeds and any Additional Contributions, and making Distributions from time to time to the Distribution Agent for the benefit of the Beneficiaries, as directed by the Settlor pursuant to Article 4 below. The Distributions to the Distribution Agent are intended to reimburse the Distribution Agent for rate reductions which the Distribution Agent provides to the Beneficiaries pursuant to the Rate Stabilization Agreement. Neither the Distribution Agent nor any of its Affiliates is an intended beneficiary of the Trust.

Section 2.3 Appointment of Trustee. The Settlor hereby appoints the Trustee of the Trust, effective as of the Effective Date, to have all the rights, powers, and duties and all of the protections, indemnities, and immunities set forth herein. The Trustee hereby accepts such appointment.

Section 2.4 Title to Trust Property. Legal title to all the Trust Assets shall be vested at all times in the Trust as a separate legal entity, except where applicable law in any jurisdiction requires title to any part of the Trust Assets to be vested in the Trustee, in which case title shall

be deemed to be vested in the Trustee or a Trustee, as the case may be, *provided* that the Trustee shall have the power to cause legal title to any Trust Assets to be held by or in the name of the Trust, a custodian, sub-custodian, securities depository, or their respective nominee.

Section 2.5 Situs of Trust. The Trust shall be located in the Commonwealth of Pennsylvania, and questions pertaining to the validity and construction of this Agreement and with respect to the administration of the Trust shall be determined in accordance with the laws of the Commonwealth of Pennsylvania. The Trustee may, however, at any time and from time to time transfer the situs of the Trust to any other jurisdiction that the Trustee may deem appropriate.

Section 2.6 Use of Trust Assets. Trust Assets shall be used solely to carry out the purposes set forth in Section 2.2 above, and shall not be subject (in whole or in part) to voluntary or involuntary assignment, anticipation, legal process, or claims of creditors of the Settlor, the Distribution Agent, the Aqua Parent, any Beneficiary, or any other person or entity.

ARTICLE 3 CONTRIBUTIONS TO THE TRUST

Section 3.1 Initial Contribution. The Settlor shall transfer one thousand dollars (\$1000.00) in cash to the Trust on the Effective Date.

Section 3.2 Contribution of Sale Proceeds. On or as soon as practicable after the Closing Date, the Settlor shall transfer to the Trust (or direct Aqua Wastewater to transfer to the Trust on the Settlor's behalf) that portion of the Sale Proceeds (comprising a majority of the Sale Proceeds) which the Settlor is required to contribute to the Trust pursuant to the Funding Agreement.

Section 3.3 Additional Contributions. In addition to the contributions described in Sections 3.1 and 3.2 above, the Trustee may receive such additional contributions as may be made to it from time to time by the Settlor or any other person in the form of cash, securities, or other property acceptable to the Trustee (the "Additional Contributions"). Such Additional Contributions may include (without limitation) funds released from time to time from one or more escrow accounts created under the Sewer System Sale Agreement. *Provided, however*, that the Trustee shall have no responsibility for collecting any such Additional Contributions.

Section 3.4 Acceptance by the Trustee. The Trustee hereby agrees to accept the contributions described in sections 3.1, 3.2, and 3.3 above for the benefit of the Beneficiaries, and agrees to use such funds pursuant to the terms of this Agreement.

ARTICLE 4 DISTRIBUTIONS FROM THE TRUST

Section 4.1 Distributions. (a) The Settlor shall direct the Trustee to make Distributions to Aqua Wastewater from time to time in accordance with the Rate Stabilization

Agreement. The Trustee shall have no duty to determine whether or not the amounts or timing of such Distributions are proper under the Rate Stabilization Agreement.

(b) The Trustee shall make Distributions to the Distribution Agent from time to time in accordance with written directions received by the Trustee from a duly authorized representative of the Settlor (each a "Distribution Order"). *Provided, however*, that the Trustee shall make such Distribution no later than ten (10) business days after the date on which the Trustee receives the Distribution Order. Such Distributions will be made to the Distribution Agent solely for the purpose of reimbursing the Distribution Agent for rate reductions made pursuant to the Rate Stabilization Agreement. For purposes of this Section 4.1, written notification of the identity and contact information of the duly authorized representative of the Settlor shall be provided to the Trustee in writing at least annually on January 1, or upon any subsequent change in such authorized representative, within five (5) days thereof, in accordance with the requirements of Section 9.3 below.

Section 4.2 No Right of Reversion. Under no circumstances shall the Settlor or any successor thereto have any rights of reversion under this Trust Agreement. All Trust Assets shall be disbursed in furtherance of the purposes set forth in Section 2.2.

ARTICLE 5 TRUSTEE

Section 5.1 Trustee Resignation, Removal, and Succession. (a) Any Trustee serving hereunder shall have the right, upon ninety (90) days' prior written notice delivered to the Settlor, to resign as Trustee of this Trust. At any time after the sixth (6th) anniversary of the Closing Date, the Settlor shall have the right, upon ninety (90) days' prior written notice to the Trustee, and upon payment of all amounts due and owing hereunder, to remove such Trustee as a trustee. Upon notice of such resignation or removal, the Settlor shall appoint a successor Trustee in writing within thirty (30) days of the expiration of the ninety (90) day notice period, such appointment to be accepted in writing by the successor trustee so designated. If the Settlor fails to appoint a successor trustee, the Trustee may secure the appointment of a successor trustee in any manner permitted by law, including by petition or application to the appropriate court of jurisdiction. The resignation or removal of Trustee shall only become effective upon the appointment and qualification of the successor trustee. *Provided, however*, that the entity serving as Trustee hereunder shall at all times be a corporate trustee having assets of no less than one billion dollars (\$1,000,000,000).

(b) Upon the appointment, and timely written acceptance of the appointment of a successor trustee as provided herein, the Trustee shall transfer and convey to the successor Trustee all Trust Assets held by the Trustee. When such transfer and conveyance are completed, the Trustee shall be released and discharged from all liability relating to further administration and investment of the Trust.

(c) No Trustee taking office shall be liable in any way for the acts or omissions of any Trustee prior to such Trustee's assumption of office, or shall have any duty to review the performance of a Trustee prior to that date.

(d) Except as specifically authorized hereunder, all powers of the Trustee shall be exercised by the Trustee alone.

Section 5.2 Duties of Trustee. The Trustee undertakes to perform such duties, and only such duties, as are specifically set forth in this Agreement, subject to and in accordance with the provisions of this Agreement. No implied duties, covenants, or obligations shall be read into this Agreement against the Trustee, the Settlor, or any Affiliate of either the Trustee or the Settlor. The Trustee shall oversee the conduct of the activities of the Trust, make and execute contracts and other instruments on behalf of the Trust, and may sue and be sued on behalf of the Trust in the name of the Trust, subject to the terms of this Agreement.

Section 5.3 Acceptance of Trust and Duties. (a) Except as otherwise provided in this Article 5, in accepting the trust hereby created, the Trustee acts solely as trustee hereunder and not in its individual capacity, and all persons having any claim against the Trustee by reason of the transactions contemplated by this Agreement shall look only to the Trust Assets for payment or satisfaction thereof. The Trustee accepts the trust hereby created and agrees to perform its duties hereunder, but only in accordance with the express terms of this Agreement.

(b) In carrying out its duties hereunder, the Trustee shall exercise the rights and powers vested in it hereunder in good faith, but only on the terms expressly set forth herein. Neither the Trustee nor any of its officers, directors, employees, agents or affiliates shall have any implied duties (including fiduciary duties) or liabilities otherwise existing at law or in equity with respect to the Trust, which implied duties and liabilities are hereby eliminated. No provision of this Agreement shall be construed to relieve the Trustee from liability for its own grossly negligent action, its own grossly negligent failure to act, its own bad faith, its own breach of its representations, warranties or covenants given in its individual capacity or its own willful misconduct. In addition:

(i) The Trustee shall be liable for its willful misconduct or gross negligence in acting or failing to act, except that the Trustee shall not be liable with respect to any action taken, suffered or omitted to be taken by it in accordance with a direction received by it from the Settlor or Calculation Agent pursuant to this Agreement;

(ii) The Trustee shall not be liable for any error of judgment, or for any action taken, suffered or omitted to be taken by it, in good faith, nor for any act or omission of any predecessor and/or successor Trustee;

(iii) The Trustee shall not be deemed to have notice or knowledge of any matter unless written notice thereof is received by the Trustee in accordance with this Agreement;

(iv) The Trustee shall have no duty to monitor or supervise, or be liable for anything done or omitted by any other person, including the Settlor, the Distribution Agent or the Calculation Agent;

(v) The Trustee shall not be liable for the default or misconduct of the Settlor, the Distribution Agent, the Calculation Agent or any other person, and the Trustee shall not be deemed to have knowledge of any default on the part of any such person unless the Trustee receives written notice of such default in accordance with this Agreement; nor shall the Trustee be responsible for performing, monitoring or supervising the performance of any such person's obligations under this Agreement or any related agreement;

(vi) Under no circumstance shall the Trustee be liable for any representation, warranty, covenant, obligation or indebtedness of the Trust, or any other payment or distribution obligations evidenced by or arising under this Agreement;

(vii) The Trustee shall not be liable for or in respect of, and makes no representation with respect to, the validity or sufficiency of any provision of this Agreement, or the due execution hereof or thereof by any person, other than itself, or the value of the Trust Assets, or the efficacy of the Trust or its ability to generate the amounts intended to be distributed for the benefit of the Beneficiaries;

(viii) The Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, consent, entitlement order, approval or other paper or document;

(ix) The Trustee shall not be liable for (x) any special, consequential or punitive damages, however styled, including, without limitation, lost profits, (y) the acts or omissions of any nominee, correspondent, clearing agency or securities depository through which it holds the Trust's securities or assets, or (z) any losses due to forces beyond the reasonable control of the Trustee, as applicable, including, without limitation, strikes, lockouts, riots, work stoppages, acts of war or terrorism, insurrection, revolution, nuclear or natural catastrophes or acts of God and interruptions, loss or malfunctions of utilities, communications or computer (software and hardware) services; it being understood that the Trustee shall use commercially reasonable efforts which are consistent with accepted practices in the banking industry to resume performance as soon as reasonably practicable under the circumstances;

(x) Other than with respect to any report or information that the Trustee has an express duty to review under this Agreement, receipt by the Trustee of any report or other information delivered or otherwise made available to the Trustee pursuant to the terms of this Agreement or any other document related to the Trust shall not be deemed to constitute knowledge by the Trustee of such information, unless the Trustee receives written notice with respect thereto;

(xi) Except as otherwise expressly set forth in this Agreement, knowledge or information acquired by (x) Univest Bank and Trust Co. in any of its

respective capacities hereunder or under any other document related to this transaction shall not be imputed to Univest Bank and Trust Co. in any of its other capacities hereunder or under such other documents, and (y) any Affiliate of Univest Bank and Trust Co. shall not be imputed to Univest Bank and Trust Co. in any of its respective capacities hereunder and vice versa;

(xii) The right of the Trustee to perform any discretionary act enumerated in this Agreement or in any other document to which the Trust is a party shall not be construed as a duty, and the Trustee shall not be answerable for other than its gross negligence or willful misconduct in the performance of any such act; the Trustee shall be under no obligation to exercise any of the discretionary rights or powers vested in it by this Agreement;

(xiii) The Trustee shall have no duty to recompile, recalculate or otherwise verify the accuracy of any information provided to it by the Settlor except as otherwise expressly set forth in this Agreement, and may conclusively rely thereon in good faith;

(xiv) The Trustee may consult with counsel, accountants and other experts, and the Trustee shall not be liable for anything done, suffered or omitted in good faith by it in accordance with the advice or opinion of any such counsel, accountants, or other experts selected by it in good faith, and any opinion of counsel shall be full and complete protection in respect of any action taken or suffered or omitted by it under this Agreement in good faith and in accordance with such opinion of counsel;

(xv) The Trustee shall be under no obligation to institute, conduct or defend any litigation under this Agreement or otherwise in relation to the Trust at the request, order or direction of the Settlor or any other person, unless such requesting person(s) shall have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities that may be incurred therein or thereby;

(xvi) The Trustee may execute any of the trusts or powers under this Agreement, or perform any duties under this Agreement, either directly or by or through agents or attorneys or one or more custodians (any of which may be Affiliates of the Trustee) and the Trustee shall not be liable for the acts or omissions of any agent, attorney or custodian selected by such Trustee in good faith;

(xvii) The Trustee shall have no duty or obligation to manage, make any payment in respect of, register, record, sell, dispose of or otherwise deal with the Trust Assets, or to otherwise take or refrain from taking any action under, or in connection with, any document contemplated hereby to which the Trustee is a party, except as expressly provided by the terms of this Agreement; and

(xviii) The Trustee shall have no responsibility to record this Agreement, to prepare or file any financing or continuation statement in any public office at any time or otherwise to perfect or maintain the perfection of any ownership or security interest or

lien or to prepare or file any tax, qualification to do business or securities law filing or report except as expressly provided by the terms of this Agreement.

(c) Notwithstanding anything to the contrary in this Agreement, the Trustee shall not be required to expend or risk its own funds or otherwise incur financial liability in the performance of any of its duties under this Agreement, or in the exercise of any of its rights or powers, if there shall be reasonable grounds for believing that the repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it, and none of the provisions contained in this Agreement or any other document to which the Trust is a party, shall in any event require the Trustee, to perform, or be responsible for the manner or omission of performance of, any of the duties or obligations of the Settlor under any other agreement or document.

(d) Each of the parties hereto hereby agrees, and each Beneficiary, as evidenced by its acceptance of any benefits hereunder, understands and agrees, that the Trustee, in any capacity, has not provided and will not in the future provide, any advice, counsel or opinion regarding the tax, financial, investment, securities law or insurance implications and consequences of the formation, funding and ongoing administration of the Trust.

(e) Each of the parties hereto hereby agrees, and each Beneficiary, as evidenced by its acceptance of any benefits hereunder, understands and agrees, that that the Trustee, in any capacity, has not (i) made any investigation as to the accuracy of any representations, warranties or other obligations of the Trust under this Agreement or any other document contemplated hereby, and shall have no liability in connection therewith and (ii) prepared or verified, and shall have no liability for, any information, disclosure or other statement made in any document issued or delivered in connection with the transactions contemplated by this Agreement or any related document or agreement.

Section 5.4 Refrain from Certain Actions. The Trustee shall not be required to take any action under this Agreement if the Trustee shall have reasonably determined, or shall have been advised by counsel, that such action is likely to result in liability on the part of the Trustee, is contrary to the terms of this Agreement, or is otherwise contrary to applicable law.

Section 5.5 Reliance. The Trustee shall not incur any liability to anyone in acting upon any signature, instrument, notice, resolution, request, consent, order, certificate, report, opinion, bond, facsimile transmission, or other document or paper reasonably believed by it to be genuine and reasonably believed by it to be signed by an authorized representative of the proper party or parties, and need not investigate any fact or matter in any such document. As to any fact or matter the method of the determination of which is not specifically prescribed herein, the Trustee may for all purposes hereof rely on a certificate signed by an authorized officer of the Settlor, as to such fact or matter, and such certificate shall constitute full protection to the Trustee for any action taken or omitted to be taken by it in good faith in reliance thereon.

Section 5.6 Compensation and Expenses. (a) The Trustee shall be entitled to compensation and reimbursement from Trust Assets for all expenses incurred in the course of discharging its duties thereunder, as provided in the schedule attached hereto as Exhibit A.

(b) Trust Assets may be used to pay compensation and expenses of the Calculation Agent, upon receipt by the Trustee of written directions to this effect from the Settlor.

Section 5.7 Investment of Trust Assets. (a) The Trustee shall invest and reinvest the principal and income of the Trust Fund and keep the Trust Assets invested, without distinction between principal and income, in Permitted Investments that comply with the Investment Guidelines. The Trustee may, however, reserve from investment and keep, either as uninvested contributions or the proceeds of sale of investments, such amounts as it may from time to time it deems advisable in order to provide for anticipated Distributions or other expenditures from the Trust Fund, notwithstanding the provisions of 20 Pa. C.S. §7207. The Trustee does not guaranty any positive return on any such investment and the Trustee shall not be liable for any loss, including without limitation any loss of principal or interest, or for any breakage fees or penalties, in connection with the purchase or liquidation of any investment made hereunder.

(b) The Settlor shall provide a draft set of Investment Guidelines to the Trustee no later than February 28, 2020, and the parties shall mutually agree in writing on final Investment Guidelines no later than the Closing Date. Such final Investment Guidelines may be subsequently revised by mutual written agreement of the Settlor and the Trustee, but only with the written approval of Aqua Wastewater.

Section 5.8 Trustee Powers. Except as otherwise specifically provided in this Trust Agreement, the Trustee shall have authority; in addition to and not in limitation of any authority given it by law, but shall have no obligation to exercise the following powers:

(a) To acquire or dispose of Permitted Investments which may from time to time or at any time constitute the Trust Fund for such prices and on such terms as the Trustee may deem proper, and to make, execute, and deliver to the purchasers thereof good and sufficient deeds of conveyance therefor and all assignments, transfers, and other legal instruments, either necessary or convenient for passing the title and ownership thereto, free and discharged of all trusts and without liability on the part of such purchasers to see to the application of the purchase money.

(b) To cause any Permitted Investment to be registered in or transferred into (i) its name as the Trustee, (ii) the name of the Trust, or (iii) the name or names of their nominee or nominees or to retain same unregistered or in form permitting transfer by delivery, and to maintain all such investments through such agents, custodians, and other means as it deems appropriate, *provided* that the books and records of the Trustee at all times shall show that all such investments are part of the Trust Fund.

(c) To vote upon any stocks, bonds, or other securities, and to give general or special proxies or powers of attorney with or without power of substitution; provided that the Trustee shall vote in favor of management or recommended proposals in all instances unless otherwise directed in writing by the Settlor.

(d) To exercise any option, to accept in exchange or to subscribe for additional securities, to exercise any conversion privileges, and to make any necessary payments therefor.

(e) To keep such portion of the Trust Fund in cash or cash balances as the Trustee may, from time to time, deem to be in the best interests of the Trust, without liability for interest thereon.

(f) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted.

(g) To determine what is principal and what is income hereunder, and, in its sole discretion, to allocate or apportion gains and losses realized from the sale or other disposition of any assets between principal and income.

(h) Generally to exercise all rights of ownership and disposition over the Trust Fund and to do all acts and things which the Trustee may consider in the best interests of the Trust Fund.

Section 5.9 Indemnity of Trustee.

To the fullest extent permitted by applicable law, the Trustee and each of its directors, officers, employees, agents, affiliates, successors, assigns and legal representatives, (each an “Indemnified Person”) shall be indemnified, defended and held harmless by, and entitled to reimbursement from, the Trust out of Trust Assets with respect to any loss, liability, obligation, damages, penalty, tax, claim, action, investigation, proceeding, cost, expense or disbursement, including reasonable attorneys’, experts’ and other professionals’ fees and expenses of any kind or nature whatsoever (collectively “Costs”), arising out of or incurred in connection with this Agreement, the Trust Fund, the Trust Assets, the administration of the Trust Fund and the Trust Assets or any action or inaction of the Trustee hereunder, except to the extent that such Costs arise out of or result from the Trustee’s own willful misconduct, bad faith or gross negligence. The indemnities contained in this Section 5.9 shall survive the resignation or removal of the Trustee or the termination of this Agreement.

Section 5.10 Interpretation and Direction.

To the extent the Trustee determines that any substantial ambiguity exists in the interpretation of any definition, provision or term contained in this Agreement pertaining to the performance of its duties hereunder, or to the extent more than one methodology can be used to make any of the determinations or calculations to be performed by any Trustee hereunder, the Trustee may request written direction from the Settlor as to the interpretation or methodology it should adopt with respect thereto. The Settlor shall promptly provide such written direction, and the Trustee shall be entitled conclusively to rely upon, and shall be protected and held harmless in acting upon, such written direction.

Section 5.11 Books and Records. (a) The Trustee shall direct the preparation and maintenance of full and accurate accounts of all receipts, investments, disbursements, and other transactions of the Trust Fund. All such accounts, books, and records shall be open to inspection and audit at all reasonable times by any authorized representative of the Settlor.

(b) The Trustee shall retain records relating to the Trust Fund for as long as necessary for the proper administration thereof, and at least for any period required by applicable law.

Section 5.12 Accounting and Reports. (a) The Trustee shall provide to the Settlor customary quarterly or monthly written reports of all receipts and expenditures made from the Trust Fund during the month, in such detail and format as may be agreed upon by the Trustee and the Settlor from time to time. Unless otherwise determined by the Trustee, the Trustee shall (a) maintain (or cause to be maintained) the books of the Trust on a calendar-year basis and on the cash method of accounting. The financial records of the Trust shall be kept in conformity with generally accepted accounting principles applied on a consistent basis, and with such other requirements as may reasonably be required by the Trustee or the Settlor.

(b) The Trustee shall as soon as practicable, but in no event later than three (3) months after the end of each fiscal year of the Trust, provide to the Settlor or its designee (i) the Trust's revenue and expense statement for such fiscal year and (ii) the Trust's balance sheet as of the end of such fiscal year, each accompanied by the certificate or opinion of a firm of independent certified public accountants selected by the Trustee and approved by the Settlor.

(c) Within ninety (90) days after termination of the duties of the Trustee, and at such other times (if any) as the Settlor may determine in its discretion, the Trustee shall render to the Settlor or its designee a written account setting forth all transactions effected by the Trustee since the period covered by its last such preceding account and showing at its then fair market value all property held at the end of the accounting period. Upon the expiration of ninety (90) days from the date such account is rendered, the Trustee shall be released and discharged from accountability to the Settlor as respects the same, unless the Settlor shall have filed with the Trustee a written statement claiming gross negligence, willful misconduct, or lack of good faith by the Trustee with respect thereto. If any such objection is filed and is not satisfactorily adjusted by the parties, the Trustee shall have the right to apply to a court of competent jurisdiction for judicial settlement of such account at the sole cost and expense of the Trust. Neither the Settlor nor any other person shall have the right to demand or be entitled to any further or different accounting by the Trustee, except as may otherwise be required by law.

(d) The Trustee shall also furnish to the Settlor or its designee such other reports as may be reasonably requested by the Settlor; provided that any costs or expenses incurred by the Trustee in preparing, directly or through a third party subcontractor, any reports that are outside of the scope of the trustee's usual and customary reporting shall be borne solely by the Trust.

Section 5.13 Third Party Reliance. (a) No person having any dealing with the Trust Fund or the Trustee shall be bound to inquire of the duty, authority, or power of the Trustee to perform any act which it undertakes to perform. No person purchasing or acquiring property or lending money to the Trustee shall be bound to see to the application of the purchase money or other property transferred or loaned to the Trustee, or to inquire into the propriety or validity of the said sale, disposition, or loan by the Trustee.

(b) Every instrument executed by the Trustee shall be conclusive in favor of any person, partnership, corporation relying thereon that (a) at the time of the delivery of the instrument the

Trust was in full force and effect, (b) the instrument was effected in accordance with the terms and conditions of this Agreement, and (c) the Trustee was duly authorized and empowered to execute the instrument.

Section 5.14 Interpretation; Rules. The Trustee shall have the power to construe the provisions of this Agreement and the terms used in this Agreement, and any construction adopted by the Trustee in good faith consistent with the purpose of the Trust shall be binding upon all persons.

ARTICLE 6 POWER OF SUBSTITUTION

Section 6.1 Power of Substitution. (a) The Settlor shall have the right to acquire any asset of the Trust (an "*Acquired Asset*") by transferring to the Trustee in exchange for the Acquired Asset one or more other assets (collectively the "*Substituted Asset*") having a fair market value that is no less than the fair market value of the Acquired Asset.

(b) To the extent (if any) that the fair market value of the Substituted Asset exceeds the fair market value of the Acquired Asset, the Settlor shall be deemed to have made an Additional Contribution to the Trust under Section 3.3 above.

Section 6.2 Confirmations. (a) The Trustee shall take such reasonable steps as may be necessary in order to confirm, prior to the exchange of assets, that the fair market value of the Acquired Asset is no greater than the fair market value of the Substituted Asset. If the Trustee determines that the fair market value of the Acquired Asset is greater than the fair market value of the Substituted Asset, the Trustee shall not transfer the Acquired Asset to the Settlor or accept the Substituted Asset from the Settlor.

(b) The Trustee shall not accept any Acquired Asset in substitution for a Substituted Asset unless it has previously received written confirmation from the Calculation Agent that such substitution will not adversely affect the ability of the Settlor to fund Distributions (*e.g.*, due to a reduction in the liquidity of the Trust).

ARTICLE 7 TERMINATION

Section 7.1 Termination. The Trust shall terminate when all of the assets of the Trust have been exhausted in furtherance of the purposes set forth in Section 2.2 above.

Section 7.2 Trust Irrevocable. Neither the Settlor nor any other person is entitled to revoke or terminate the Trust.

ARTICLE 8 AMENDMENTS

Section 8.1 Amendment of Agreement. Notwithstanding the irrevocability of the Trust, the Trustee is authorized to institute a judicial proceeding in a court of competent jurisdiction to reform this Trust for the sole purpose of meeting any and all federal statutory or regulatory requirements which may affect the taxability of the Trust and which were enacted or instituted subsequent to the inception of the Trust. *Provided, however,* that this provision shall not apply if its existence would result in the overall loss of favorable tax treatment, thereby defeating the purpose of this right of reformation.

ARTICLE 9 MISCELLANEOUS

Section 9.1 No Legal Title to Trust Property. No transfer, by operation of law or otherwise, of any right, title, or interest in the Trust assets shall operate to terminate this Agreement or the Trust, or shall entitle any transferee to an accounting or to the transfer to it of legal title to any part of the Trust Assets.

Section 9.2 Limitations on Rights of Others. The provisions of this Agreement are solely for the benefit of the Settlor, the Trustee, and the Beneficiaries, and nothing in this Agreement, whether express or implied, shall be construed to give to the Distribution Agent, any Affiliate of the Distribution Agent, any other person any legal or equitable right, remedy, or claim in the Trust Assets or under or in respect of this Agreement or any covenants, conditions, or provisions contained herein.

Section 9.3 Notices. All demands, notices and communications upon or to the Settlor or the Trustee under this Agreement (including Distribution Orders) shall be in writing, personally delivered, sent by electronic facsimile (with hard copy to follow via first class mail), sent by email (with hard copy to follow via first class mail), or mailed by certified mail return receipt requested, and shall be deemed to have been duly given upon receipt, to the following address (or to such other address as the notice party may direct):

To the Settlor:

DELCORA
100 East Fifth Street
Chester, PA 19013
Attention: Executive Director

with copies to:

DELCORA
100 East Fifth Street
Chester, PA 19013

Attention: Solicitor

and

AQUA WASTEWATER PENNSYLVANIA, INC.
762 Lancaster Avenue
Bryn Mawr, PA 19010
Attention: General Counsel

To the Trustee:

Univest Bank and Trust Co.
14 North Main Street
PO Box 559
Souderton, PA 18964
Attention: John C. Kazary, Esq., CTFA – Vice President and Wealth Trust Advisor

with a copy to:

Univest Bank and Trust Co.
14 North Main Street
PO Box 64197
Souderton, PA 18964
Attention: Megan Duryea Santana, General Counsel

Section 9.4 Counterparts. This Agreement may be executed by the parties hereto in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument.

Section 9.5 Successors and Assigns. (a) Neither party hereto may assign any of its obligations or rights under this Agreement without the prior written consent of the other party except for obligations and rights delegated under 20 Pa. C.S. Section 7206.

(b) All covenants and agreements contained herein shall be binding upon and inure to the benefit of the Settlor, the Trustee, and their respective successors and permitted assigns.

Section 9.6 Headings, etc. Titles for sections are for general information only, and this Agreement shall not be construed by reference to such titles. Wherever required by context, the singular of any word used in this Agreement shall include the plural and the plural may be read in the singular. Words used in the masculine shall be read and construed in the feminine where they would so apply.

Section 9.7 Governing Law. This agreement shall in all respects be governed by, and construed in accordance with, the laws of the Commonwealth of Pennsylvania, including all matters of construction, validity, and performance.

Section 9.8 Consent to Jurisdiction and Service of Process. Each of the parties to this Agreement hereby irrevocably submits to the jurisdiction of any Pennsylvania state court sitting in Delaware County, Pennsylvania or the U.S. District Court for the Eastern District of Pennsylvania, and any appellate courts thereof, in any action or proceeding arising out of or relating to this Agreement, and each of the parties hereby irrevocably agrees, to the extent permitted by law, that all claims in respect of such action or proceeding may be heard and determined in such Pennsylvania state or U.S. federal court. Each of the parties hereby irrevocably waives, to the fullest extent it may effectively do so, the defense of an inconvenient forum to the maintenance of such action or proceeding and any right of jurisdiction in such action or proceeding on account of the place of residence or domicile of such party. A final judgment in any such action or proceeding shall, to the extent permitted by law, be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Each of the parties consents to the service of process by mail. Nothing herein shall affect the right of any party to serve legal process in any manner permitted by law or affect its right to bring any action in any other court.

Section 9.9 Tax Status of the Trust. The Trust is intended to be a “grantor trust” of which the Settlor is treated as the owner for federal income-tax purposes under Code Sections 671 *et seq.* The Trust is intended to qualify as a governmental entity for state and local tax purposes.

Section 9.10 Entire Agreement. This Trust Agreement shall not be deemed to be varied, altered or amended by any other statement, representation or agreement by or between any person or persons whomsoever, whether written, oral or implied in any way, except as provided in this Agreement.

Section 9.11 Reliance on Trust Agreement. Any person dealing with the Trustee may rely upon a copy of this Agreement and any amendments thereto certified to be true and correct.

[Signature page follows]

IN WITNESS WHEREOF, the parties hereto have duly executed and delivered this Agreement as of Effective Date.

SETTLOR:

DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY

By: Robert J. Willmet

Name: Robert J. Willmet

Title: Executive Director

TRUSTEE:

UNIVEST BANK AND TRUST CO.

By: Matthew Holliday

Name: J. Matthew Holliday

Title: Sr. V.P. and Sr. Trust Officer

EXHIBIT A**TRUSTEE COMPENSATION AND REIMBURSEMENT**

The Trustee shall be entitled to receive a monthly fee in an amount equal to one-twelfth of the product obtained by multiplying (a) 0.0006 by (b) the aggregate value of Trust Assets. The aggregate value of Trust Assets for any calendar month shall be equal to the sum of the average daily valuations of all Trust Assets for such month. The Trustee shall be permitted to deduct its fees and expenses from the Trust Assets.

The Trustee shall be reimbursed from the Trust Assets for third party tax preparation and filing fees and costs. Any and all taxes due shall be paid by the Settlor, provided, however, that in the event that the Trust is responsible for the payment of any taxes, such taxes shall be paid from the Trust Assets.

The Trustee shall be entitled to reimbursement for any and all Costs and other indemnity amounts from the Trust out of Trust Assets.

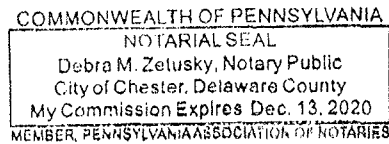
In addition, the Trustee shall have the right to be reimbursed from the Trust Assets for fees for extraordinary/administrative services, including, without limitation:

- Managing, selling or liquidating real estate
- Ascertaining the cost basis of securities for tax purposes
- Handling any assets outside the continental United States
- Assisting counsel with litigation
- Transferring securities from another account
- Preparation of court accountings and filings
- Preparation of any reports other than customary quarterly or monthly written reports

COMMONWEALTH OF PENNSYLVANIA :
 :
 : ss.
 COUNTY OF :

On this, the 20th day of December 2019, before me, the undersigned officer, personally appeared Robert J. Willert, known to me, or satisfactorily proven, to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same on behalf of the Delaware County Regional Water Quality Control Authority for the purposes therein contained.

I have signed my name and affixed my seal.



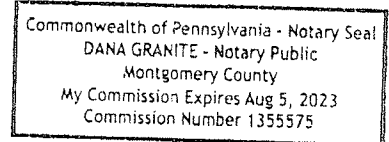
Debra M. Zelusky
 Notary Public
 My Commission expires:

COMMONWEALTH OF PENNSYLVANIA :
 :
 COUNTY OF : ss.

On this, the 27th day of December 2019, before me, the undersigned officer,
 personally appeared J. Matthew Holiday who acknowledged himself to be a
~~Senior Trust officer~~ Univest Bank, and that he as such ~~Senior Trust officer~~ being
 authorized to do so, executed the foregoing instrument for the purposes therein contained by
 signing the name of the corporation by himself as trustee.

I have signed my name and affixed my seal.

Dana Granite
 Notary Public





REDACTED PUBLIC VERSION

Redacted To
Western Retail
123 DRIVE
CHESTER, PA 17985

Account Number
Page 1 of 2
000000000 0000000
Aqua Pennsylvania Wastewater
2150630 PWSID # PA3540071

Aqua Pennsylvania Wastewater	Toll Free: 877.987.2782	Questions about your sewer service?... Contact us before the due date.	
762 W. Lancaster Avenue	Fax: 866.780.8292	Bill Date	Total Amount Due
Bryn Mawr, PA 19010-3489	www.aquaamerica.com	July 28, 2020	\$ 40.33
			Current Charges Due Date
			August 19, 2020

Billing Detail

For period
beginning June 24, 2020 and ending July 27, 2020

Amount Owed from Last Bill	\$ 68.40
Total Payments Received	68.40
Remaining Balance	0.00
Sewer Charges 6,810 gals @.006472.....	44.07
Total Current Sewer Charges	44.07
DELCORA Customer Assistance Payment	-3.74
Amount Due	\$ 40.33

Message Center (see reverse side for other information)

- Effective July 1, 2020 the allowable wastewater DSIC is 1.18%. The PA Public Utility Commission permits a maximum wastewater DSIC of 5%.
- The due date refers to current charges and any deferred payment amount only. If you do not pay your bill on time, your service could be subject to interruption. To ensure proper credit, please remember to provide your full 16-digit account number when paying your bill.

RETURN THIS PORTION WITH YOUR PAYMENT



Aqua Pennsylvania Wastewater
762 W. Lancaster Avenue • Bryn Mawr, PA 19010-3489

MAKE CHECK PAYABLE TO:
Aqua PA WW

Account Number
000000000 0000000

DUE DATE	▶	TOTAL AMOUNT DUE
08/19/2020		\$40.33

Please Do Not Remit Payment To The Above Address

Cyc=15CK 1up=2517866 EC: P745 BC: P745

Seq=16344

Amount Enclosed \$.



Western Retail
123 DRIVE
CHESTER, PA 17985

AQUA PA WW
PO BOX 70279
PHILADELPHIA PA 19176-0279



00157811610999420000000069219



View your account, pay your current bill, check your daily balance, sign up for paperless billing, make a one-time payment.

[Get Started >](#)

[More Ways To Pay](#)

Save time and cut clutter with paperless billing!

Enroll today in WaterSmart e-Billing. You can cut the clutter of a paper bill, and we'll notify you by email when your bill is available to view online. It's simple, secure, and no additional fees.

Visit – AquaAmerica.com for more details.

Respondent: John Pileggi

Date: August 12, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

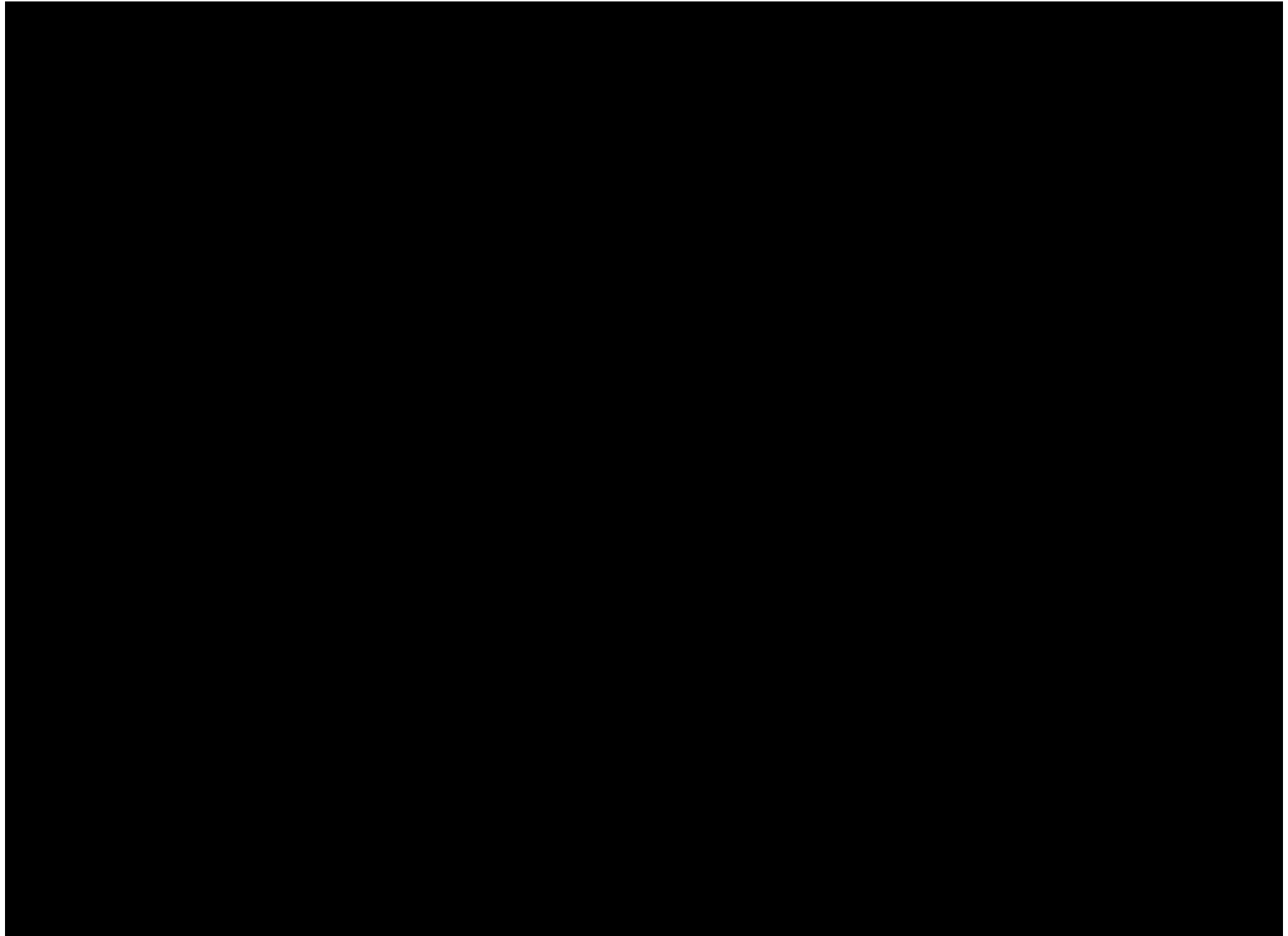
THE COUNTY OF DELAWARE, PENNSYLVANIA

SET I INTERROGATORIES

- COUNTY-I-4** Reference the response to OCA-1-36(c); please confirm the following:
- a. Will the payments due from the Trust be applied to offset DSIC charges?
 - b. If the response to 3(a) is yes, please confirm whether the current DELCORA customers, including wholesale customers and retail customers, would be subject to the DSIC following a transfer of the system to Aqua.
 - c. DELCORA states: "DELCORA will not directly make any payments to Aqua." Will DELCORA make any payments to Aqua that Aqua retains (and does not transfer back to customers in the form of bill credits)? If yes, please explain.

RESPONSE:

- a. Yes, however DSIC will not be applied until Aqua updates its Long-Term Infrastructure Improvement Plan per Section 1329 of the Public Utility Code.
- b. Yes. Please see the response to part a., above.
- c. No. Please also see the response to OCA-I-36(f).



{*A7676991:1}

Respondent: Robert Willert

Date: 8/07/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET III INTERROGATORIES DIRECTED TO DELCORA

OCA-III-9 If the DELCORA-proposed rate stabilization trust cannot be established due to the actions by Delaware County or for some other reason, is the sale of the DELCORA wastewater assets to Aqua considered by DELCORA to be in the public interest? If not, explain fully why not. If so, explain in detail why.

RESPONSE:

Yes, the DELCORA Customer Trust is just one of the significant benefits of this transaction. As discussed in the testimony of Robert Willert, in addition to the Trust, Aqua already has an operational presence in the areas currently served by DELCORA. By merging its existing operations with DELCORA's System, Aqua will be able to create a larger-scale, efficiently operated wastewater utility, as well as a larger team of local utility professionals that are available for daily issues as well as emergencies. This larger scale utility will also provide benefits such as, larger scale buying power that will reduce costs for shared products and services like power, chemicals, personnel training, fleet purchases and maintenance.

Also, Aqua is uniquely qualified to address needed capital improvements and build the infrastructure needed to disconnect from PWD in 2028. Aqua has significant experience in large capital expenditures including, complex projects, such as what needs to be completed to disconnect from PWD. DELCORA's customers and the environment will benefit from Aqua's experience and fitness in deploying resources to complete capital improvements, as well as its experience in improving and correcting systems with compliance issues.

DELCORA's customers will also receive enhanced customer service from Aqua, including additional call center capacity and convenient on-line bill payment, as well as protections provided by the Commission's regulations including access to Aqua's Helping Hand program for customers who need assistance with paying their utility bills.

With respect to employees, Aqua has made a commitment to preserving jobs by offering employment to all of DELCORA employees. It is of critical importance to us to be able to proceed in a way that is in the best interest of our customers while, at the same time, avoiding employment disruption for our employees to the greatest extent possible.

Lastly, the transaction has environmental benefits, as disconnecting from PWD and partnership with Aqua will provide for water discharge into the Delaware River at a location that is less environmentally sensitive.

Respondent: William C. Packer
Date: 9/09/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

COUNTY OF DELAWARE, PENNSYLVANIA

SET V INTERROGATORIES

COUNTY-V-1

Please refer to the spreadsheet provided in response to OCA Interrogatory Set III-12, specifically in regard to the individual sheet named "Stay w PWD-Sum of Pro Rev - PFM". On the right hand side of the sheet "Stay w PWD-Sum of Pro Rev - PFM" is a table and graph. The table is labelled "COMPARISON" and the chart is labelled "Aqua – TOTAL SYSTEM PROJECTED REVENUE."

- (a) With regard to the table and chart, identify the author(s) by name and company;
- (b) State whether Column V relates to the table "COMPARISON" and, if yes, explain how;
- (c) Please provide the worksheets and source of each entry contained in the column with the heading "Aqua Revenue Requirement"
- (d) State whether the amounts contained in the column with the heading "Aqua Revenue Requirement" reflect or do not reflect the application of an allocation of sewer costs to water customer under Section 1311(c) of the Public Utility Code.
 - i. If the amounts do reflect an allocation of sewer costs to water customers, provide the allocation factor used for each year through 2038.
 - ii. If the amounts do not reflect an allocation of sewer costs to water customers pursuant to Section 1311(c) of the Public Utility Code, please provide the projected allocation of sewer costs to water customers to be used for each year, including the first post-acquisition rate case pursuant to Section 7.06(b) of the Asset Purchase Agreement.

RESPONSE

- a. Daniel Eshbach, Essential Utilities, Inc.
- b. Column V is the sum of the Wholesale EDU and Retail customers. It does not relate to the Comparison table.
- c. The Column AA “Aqua Revenue Requirement” contains information that was point in time and is not used subsequent tabs in the spreadsheet. The Revenue Requirement Column AA in “Stay w PDW-Sum of Pro Rev – PFM” along with the Revenue Requirement rows in each of the tabs which creates the charts, were based on 2019 budgeted wastewater revenue, and is therefore outdated. Included in this response titled as “CONFIDENTIAL COUNTY-V-1 Attachment 1” in excel format is the Company’s 10 year projections of revenue requirement based on the most current information, including 2020 actual revenues being billed.
- d. Please see the response to c., above. The data referenced, while outdated, assumed 20% allocation under Act 11 in 2028. Section 7.06(b) of the APA requires the Company to request the use of Act 11 which the Company intends to do. However, for the purpose of the analysis the Company did not assume any the use of Act 11 until 2028.



100 Pine Street • PO Box 1166 • Harrisburg, PA 17108-1166
Tel: 717.232.8000 • Fax: 717.237.5300

Kenneth R. Stark
Direct Dial: 717.237.5378
Fax: 717.237.5300
kstark@mcneeslaw.com

October 20, 2020

The Honorable Angela T. Jones
Administrative Law Judge
Pennsylvania Public Utility Commission
801 Market Street
Philadelphia, PA 19107

Via E-Mail Only

RE: Application of Aqua Pennsylvania Wastewater, Inc. Pursuant to Sections 1102, 1329, and 507 of the Public Utility Code for Approval of its Acquisition of the Wastewater System Assets of the Delaware County Regional Water Quality Control Authority; Docket No. A-2019-3015173

Dear Judge Jones:

Attached please find the following Rebuttal Testimony on behalf of the County of Delaware, Pennsylvania, in the above-referenced proceedings:

- Delaware County Statement No. 1-R - Rebuttal Testimony of Stan Faryniarz

As shown by the attached Certificate of Service and per the Commission's March 20, 2020, Emergency Order, all parties to this proceeding are being duly served via email only due to the current COVID-19 pandemic. Upon lifting of the aforementioned Emergency Order, we can provide parties with a hard copy of this document upon request.

Sincerely,

McNEES WALLACE & NURICK LLC

By 

Kenneth R. Stark

Counsel to County of Delaware, Pennsylvania

KRS/ams

Enclosure

- c: Rosemary Chiavetta, Secretary (via Electronic Filing - Letter and Certificate of Service only)
Pamela McNeal, Legal Assistant to ALJ (via email only)
Certificate of Service (via email only)

www.McNeesLaw.com

HARRISBURG, PA • LANCASTER, PA • SCRANTON, PA • STATE COLLEGE, PA • YORK, PA • COLUMBUS, OH • FREDERICK, MD • WASHINGTON, DC

CERTIFICATE OF SERVICE

I hereby certify that I am this day serving a true copy of the foregoing document upon the participants listed below in accordance with the requirements of Section 1.54 (relating to service by a participant).

VIA E-MAIL

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tniesen@tntlawfirm.com
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Municipal Authority*

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Certificate of Service

Page 2

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susie01213@aol.com



Kenneth R. Stark
Counsel to the County of Delaware,
Pennsylvania

Dated this 20th day of October, 2020, in Harrisburg, Pennsylvania

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania	:	
Wastewater, Inc. pursuant to Sections 507,	:	
1102 and 1329 of the Public Utility Code	:	
For, inter alia, approval of the acquisition of	:	Docket No. A-2019-3015173
The wastewater system assets of the	:	
Delaware County Regional Water Quality	:	
Control Authority	:	

REBUTTAL TESTIMONY

OF

STAN FARYNIARZ

OF DAYMARK ENERGY ADVISORS

ON BEHALF OF

THE COUNTY OF DELAWARE, PENNSYLVANIA

OCTOBER 20, 2020

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania	:	
Wastewater, Inc. pursuant to Sections 507,	:	
1102 and 1329 of the Public Utility Code	:	
For, inter alia, approval of the acquisition of	:	Docket No. A-2019-3015173
The wastewater system assets of the	:	
Delaware County Regional Water Quality	:	
Control Authority	:	

**REBUTTAL TESTIMONY OF STAN FARYNIARZ
OF DAYMARK ENERGY ADVISORS
ON BEHALF OF
THE COUNTY OF DELAWARE, PENNSYLVANIA**

1 **Q. Please state your name and business address.**

2 A. My name is Stan Faryniarz. My business address is 370 Main Street, Suite 325,
3 Worcester, MA 01608.

4 **Q. On whose behalf do you appear before this Pennsylvania Public Utility**
5 **Commission (“PUC” or “Commission”)?**

6 A. I am appearing here on behalf of the County of Delaware, Pennsylvania (“the
7 County” or “Delaware County”).

8 **Q. Are you the same Stan Faryniarz who testified previously in this case?**

9 A. Yes. I submitted testimony in this case on September 29, 2020.

10 **Q. What is the purpose of your rebuttal testimony?**

11 A. My rebuttal testimony addresses certain adjustments made by Ralph C. Smith on
12 behalf of the Pennsylvania Office of Consumer Advocate (“OCA”) to the
13 valuations by the two utility valuation experts (“UVEs”), specifically the
14 adjustments made to the ScottMadden valuation performed on behalf of Delaware

1 County Regional Water Quality Control Authority (“DELCORA”). If the
2 Commission does not outright deny Aqua’s application and instead grants the
3 application under certain conditions and accepts OCA’s adjustments to the
4 valuations, then I recommend certain changes to how OCA weights the cost,
5 income, and market approaches used for valuing the DELCORA System assets.

6 **Q. What were the adjustments Mr. Smith recommended for the Gannett**
7 **Fleming valuation?**

8 A. On Gannett Fleming’s cost approach, Mr. Smith adjusted the depreciation rate to
9 match the rate used in the most recent rate filing by Aqua. This decreased the cost
10 approach value by \$100 million. Mr. Smith also adjusted Gannett Fleming’s
11 market approach cost by eliminating some of the selected comparison
12 transactions. He also suggested that Gannett Fleming use fair market value instead
13 of purchase price in the comparisons, because the purchase prices were higher.
14 These changes resulted in a \$16 million decrease in Gannett Fleming’s market
15 approach. Finally, Mr. Smith adjusted Gannett Fleming’s income approach by
16 using a different terminal value. He argues that since the utility will be regulated,
17 it is not realistic to expect steady growth in perpetuity, such as could be assumed
18 in a private, nonregulated corporation. These adjustments lowered the income
19 approach value by \$83 million, resulting in an overall average valuation of
20 \$343,140,129.

21 **Q: What were the adjustments Mr. Smith recommended for the ScottMadden**
22 **valuation?**

1 A: Mr. Smith made similar adjustments to ScottMadden's income approach as he did
2 with Gannett Fleming. He calculated a different terminal value, which lowered
3 ScottMadden's income approach by \$129 million. In ScottMadden's cost
4 approach, Mr. Smith also adjusted the depreciation rate to match Aqua's most
5 recent rate case filing. This reduces ScottMadden's cost approach by \$35 million.
6 Finally, Mr. Smith removed the Comparable Sales Method from ScottMadden's
7 market approach to reduce the value by \$198 million, as shown in OCA Exhibit
8 RCS-7, and resulting in an overall weighted average valuation amount of
9 \$218,170,000 shown in OCA Exhibit RCS-1.

10 **Q. Which adjustments made by Mr. Smith are you contesting?**

11 A. Generally speaking, I am neither contesting Mr. Smith's various adjustments to
12 the valuations nor am I supporting his adjustments. Rather, I am recommending
13 one change to the weighting of OCA's valuation adjustments in the event that the
14 Commission does not deny Aqua's application and accepts Mr. Smith's proposed
15 adjustments.

16 **Q. What is the change you are recommending if the Commission accepts Mr.**
17 **Smith's proposed adjustments?**

18 A. Mr. Smith reduced the market approach price of the ScottMadden valuation
19 estimate from \$613,520,480 to \$415,589,365. He then applied the same weighting
20 of the three approaches that ScottMadden applied to come up with a new, adjusted
21 valuation estimate for ScottMadden. See Figure 1 below.

22

Figure 1: OCA-Adjusted ScottMadden Valuation¹.

	ScottMadden			Exhibit	
	Individual Results	Weight	Weighted Result	Reference	
Cost Approach	\$ 257,394,266	45%	\$ 115,827,420	RCS-5	
Income Approach	\$ 163,125,306	50%	\$ 81,562,653	RCS-6	
Market Approach	\$ 415,589,365	5%	\$ 20,779,468	RCS-7	
Total			<u>\$ 218,169,541</u>		
Conclusion			<u>\$ 218,170,000</u>		

Mr. Smith kept the low weighting of 5 percent for the market approach. Instead, I recommend an equal weighting for each approach, similar to the Gannet Fleming valuation completed on behalf of Aqua Pennsylvania.

Q. How do the weightings used by Gannet Fleming and ScottMadden differ?

A. In Gannett Fleming's valuation, all three approaches (cost, income, and market) were given equal weight. In ScottMadden's original valuation, as explained in the testimony of ScottMadden's Dylan D'Ascendis, because the market approach number was so much higher than the other two approaches, it was deemed an "outlier" from the other two approaches and therefore given a minimal weighting.

Q. What is your reasoning for an equal weighting for each approach?

A. In Mr. Smith's analysis, he removed the Comparable Sales Method from ScottMadden's market calculation. This drove the valuation estimate of ScottMadden's market approach down by \$197,931,115. Mr. Smith's new market approach valuation estimate for ScottMadden of \$415,589,365 is much less of an outlier when compared to the other two approaches. Since the market approach

¹ Direct Testimony of Ralph C. Smith, OCA Statement No. 1, Exhibit RSC-1 (Summary of the buyer's and seller's appraisals and the OCA adjusted results).

1 price is no longer an outlier, an equal weighting for all three approaches is
2 appropriate. This results in a valuation of \$280,071,843.

Figure 2: Equal Weighting of Adjusted ScottMadden Valuation

	Results	Weight	Weighted Result
Cost	\$ 257,394,266	33%	\$ 84,940,108
Income	\$ 163,125,306	33%	\$ 53,831,351
Market	\$ 415,589,365	34%	\$ 141,300,384
			\$ 280,071,843

3 **Q. Are you aware of any other proceedings where OCA relied on an equal**
4 **weighting of valuation methods?**

5 A. Yes, I am. In Docket A-2019-3009052, Aqua's application to acquire the
6 wastewater system assets of East Norriton Township, the OCA's witness stated:

7 "As part of OCA's proposed adjustments, the OCA recommends applying
8 equal weighting (33.3%) to the results of each valuation approach."²

9 **Q. In this other proceeding was OCA recommending that equal weighting**
10 **should always be used in fair market valuations as a matter of policy?**

11 A. No. Instead, the OCA witness stressed that if equal weighting is not used, then it
12 should be "supported with sufficient reasoning."³ In this proceeding, the OCA
13 does not comment on its reason for retaining the low weight for the market
14 valuation estimate after previously eliminating the Comparable Sales Method
15 results.

² Docket A-2019-3009052, OCA Statement 1, Direct Testimony of David Garrett, Jan 3, 2020, p. 9 at 7-8.

³ Id. at 1-4.

1 **Q. Is there a reason why an equal weighting may prove to be a superior**
2 **approach when developing probability-weighted averages, whether it**
3 **concerns a valuation or any other mathematical exercise?**

4 A. While I am neither a professional appraiser nor do I understand all of the
5 reasoning behind the OCA's recommendation in the East Norriton acquisition, I
6 can think of at least one reason why an equal weighting makes sense. Statistically
7 speaking, an equal weighting would not produce as biased a result in a situation
8 where there is no reason to believe that a particular approach is superior to
9 another when, in this case, estimating the fair market value of an ongoing
10 enterprise. In other words, an equal weighting, absent any other reason to prefer a
11 particular method over another, would be more likely to minimize the error in the
12 estimate. Departure from this simple statistical principle has the potential to bias
13 the result, especially the further apart the weightings become from each other.
14 In other words, unless there is "sufficient reasoning"⁴ as to why different
15 weightings should be used, the more balanced technique in averaging would be to
16 apply an equal weighting of estimation approaches in order to minimize bias.

17 **Q. With an equal weighting of approaches, what is the resulting average of the**
18 **two valuations, after OCA adjustments?**

19 A. Mr. Smith's adjusted Gannett Fleming valuation resulted in a valuation of
20 \$343,140,129. When averaged with Mr. Smith's adjusted ScottMadden valuation,
21 after an equal weighting of approaches, the simple, unweighted average of both
22 valuations is \$311,605,986.

⁴ Id.

1 **Q. Does this conclude your rebuttal testimony at this time?**

2 A. Yes, at this time it does. However, I reserve the right to amend my testimony
3 should new information become available in this proceeding.



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November 2, 2020

The Honorable Angela T. Jones
Administrative Law Judge
Pennsylvania Public Utility Commission
801 Market Street
Philadelphia, PA 19107

Via E-Mail Only

**RE: Application of Aqua Pennsylvania Wastewater, Inc. Pursuant to Sections 1102, 1329, and 507 of the Public Utility Code for Approval of its Acquisition of the Wastewater System Assets of the Delaware County Regional Water Quality Control Authority
Docket No. A-2019-3015173**

Dear Judge Jones:

Attached please find the Surrebuttal Testimony of Stan Faryniarz on behalf of the County of Delaware, Pennsylvania, in the above-referenced proceedings.

As shown by the attached Certificate of Service and per the Commission's March 20, 2020, Emergency Order, all parties to this proceeding are being duly served via email only due to the current COVID-19 pandemic. Upon lifting of the aforementioned Emergency Order, we can provide parties with a hard copy of this document upon request.

Sincerely,

McNEES WALLACE & NURICK LLC

By 
Kenneth R. Stark

Counsel to County of Delaware, Pennsylvania

KRS/ams

Enclosure

c: Rosemary Chiavetta, Secretary (via Electronic Filing - Letter and Certificate of Service only)
Pamela McNeal, Legal Assistant to ALJ (via email only)
Certificate of Service (via email only)

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CERTIFICATE OF SERVICE

I hereby certify that I am this day serving a true copy of the foregoing document upon the participants listed below in accordance with the requirements of Section 1.54 (relating to service by a participant).

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Certificate of Service

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Kenneth R. Stark
Counsel to the County of Delaware,
Pennsylvania

Dated this 2nd day of November, 2020, in Harrisburg, Pennsylvania

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania	:	
Wastewater, Inc. pursuant to Sections 507,	:	
1102 and 1329 of the Public Utility Code	:	
For, inter alia, approval of the acquisition of	:	Docket No. A-2019-3015173
The wastewater system assets of the	:	
Delaware County Regional Water Quality	:	
Control Authority	:	

SURREBUTTAL TESTIMONY

OF

STAN FARYNIARZ

OF DAYMARK ENERGY ADVISORS

ON BEHALF OF

THE COUNTY OF DELAWARE, PENNSYLVANIA

NOVEMBER 2, 2020

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania	:	
Wastewater, Inc. pursuant to Sections 507,	:	
1102 and 1329 of the Public Utility Code	:	
For, inter alia, approval of the acquisition of	:	Docket No. A-2019-3015173
The wastewater system assets of the	:	
Delaware County Regional Water Quality	:	
Control Authority	:	

**SURREBUTTAL TESTIMONY OF STAN FARYNIARZ
OF DAYMARK ENERGY ADVISORS
ON BEHALF OF
THE COUNTY OF DELAWARE, PENNSYLVANIA**

1 **Q. Please state your name and business address.**

2 A. My name is Stan Faryniarz. My business address is 370 Main Street, Suite 325,
3 Worcester, MA 01608.

4 **Q. On whose behalf do you appear before this Pennsylvania Public Utility**
5 **Commission (“PUC” or “Commission”)?**

6 A. I am appearing here on behalf of the County of Delaware, Pennsylvania (“the
7 County” or “Delaware County”).

8 **Q. Are you the same Stan Faryniarz who testified previously in this case?**

9 A. Yes. I submitted testimony in this case on September 29, 2020 and rebuttal
10 testimony on October 20, 2020.

11 **Q. What is the purpose of your rebuttal testimony?**

12 A. My surrebuttal testimony addresses certain statements made by Aqua
13 Pennsylvania Wastewater, Inc. (“Aqua PA”) witness Packer and Delaware

1 County Regional Water Quality Control Authority (“DELCORA”) witness
2 Pileggi. My surrebuttal testimony is organized in the following manner:

3 I. Response to Packer Rebuttal Testimony

- 4 a. Economies of scale
5 b. Under-investment in infrastructure
6 c. Single tariff pricing/Cost sharing

7 II. Response to Pileggi Rebuttal Testimony

- 8 a. DELCORA revenue projections

9 III. Summary and Conclusion

10 **Q. Are you sponsoring in exhibits in your surrebuttal testimony?**

11 **A.** Yes. I am sponsoring the following exhibit:

12 COUNTY Exhibit No. SCF-3, Second Compilation of Discovery
13 Responses.

14 **I. RESPONSE TO PACKER REBUTTAL TESTIMONY**

15 **Q. Will economies of scale be achieved if the proposed acquisition of DELCORA**
16 **by Aqua PA (“Proposed Transaction”) is approved by the Commission.**

17 **A.** Similar to his direct testimony in this proceeding, Mr. Packer again makes the
18 claim that economies of scale will be achieved if the Proposed Transaction is
19 approved by the Commission, but provides no supporting evidence, only
20 speculation. While I understand on advice from counsel that the Commission can
21 consider unquantified benefits, I believe this particular transaction should be
22 viewed with a higher degree of scrutiny because Aqua PA proposes to acquire a
23 system that is considerably larger than Aqua PA’s existing wastewater operations.

1 I stated in my Direct Testimony that DELCORA has approximately 16,000 retail
2 customer connections. However, as discussed in Mr. Packer's direct testimony,
3 retail sales only amount to \$9.34 million of DELCORA's \$70.9 million annual
4 revenue.¹ Most of the customer base and revenue is associated with wholesale
5 customers. When acquiring a system this large relative to the acquiring entity,
6 claims of economies of scale should be supported with greater specificity, in
7 comparison to smaller sales where either the efficiencies are more obvious or the
8 impacts to existing customers are less severe. At this point, Aqua PA offers an
9 insufficient record with regard to impacts, in particular, to existing DELCORA
10 customers.

11 When asked directly about quantifying any public benefits in Interrogatory
12 COUNTY-III-1, Aqua responded that "numerous public benefits are set forth in
13 the Application and Testimony, however, they have not all been quantified."²
14 Aqua has not provided credible evidence showing how this acquisition will
15 generate efficiencies over and above current operations for the DELCORA
16 system.

17 **Q. Did Mr. Packer attempt to quantify benefits?**

18 **A.** Yes. Mr. Packer stated:

19 Aqua water and wastewater utilities ("Aqua") invested \$2.2 billion in
20 capital from 2012 to 2019. In Aqua's last base rate case, in 2018, the
21 authorized increase in revenues was approximately \$47 million or about

¹ Aqua Statement No. 2, Direct Testimony of William C. Packer at 10:1-22.

² See COUNTY Exhibit No. SCF-3 (Second Compilation of Discovery Responses).

1 10% increase in rates. If you were to assume the same level of capital
2 investment financed by a municipal system, the interest alone at 4% would
3 cost \$92 million. Aqua is able to lower its cost of service due to its size,
4 economies of scale, and proactive investment approach as demonstrated in
5 that 2018 rate case.³

6 Mr. Packer is trying to convince the reader that a \$2.2 billion capital investment
7 resulted in a revenue requirement increase of \$47 million under Aqua ownership,
8 but would require a \$92 million increase under DELCORA ownership. This is a
9 misleading comparison because Mr. Packer: (1) conflates Aqua's water and
10 wastewater operations; (2) omits that Aqua's 2018 10% rate increase does not
11 include the Distribution System Improvement Charge revenues collected from
12 2012 – 2018; and (3) fails to provide details on the calculation of the \$47 million
13 revenue.⁴

14 **Q. How do you respond to witness Packer's discussion regarding the state of the**
15 **nation's water/wastewater infrastructure?**

16 **A.** Mr. Packer states that according to the American Society of Civil Engineers, the
17 nationwide average of water/wastewater infrastructure is a D+.⁵ He further
18 implies that this underinvested infrastructure is driving small municipalities to sell
19 their assets to larger public utilities. While I do not dispute this statement, the
20 infrastructure of other water/wastewater utilities is irrelevant in this proceeding.

³ Aqua Statement No. 2-R (Rebuttal Testimony of William C. Packer) at 28:20-22 and 29:1-4.

⁴ Response of Aqua to County Interrogatory Set IX-3. *See* COUNTY Exhibit No. SCF-3 (Second Compilation of Discovery Responses).

⁵ Aqua Statement No. 2-R at 28:7-11.

1 Generally applying nationwide average ratings to the DELCORA system does not
2 demonstrate that the DELCORA system is underinvested or reflects average
3 nationwide ratings.

4 The DELCORA system is the only system that should be considered unless, of
5 course, the current Aqua water and wastewater systems are in such disrepair that
6 the level of required investment would lead to higher rates for current DELCORA
7 customers under a single tariff pricing system. I discuss this scenario later in my
8 surrebuttal testimony.

9 In any case, even Mr. Packer seems to agree that DELCORA has not
10 underinvested in infrastructure when he states that he would not categorize
11 DELCORA as being underinvested.⁶

12 **Q. How do you respond to Mr. Packer's statements claiming Aqua can provide**
13 **lower rates for DELCORA customers?**

14 A. Mr. Packer states a few times that Aqua has tools it can use to further lower rates
15 for DELCORA customers. He mentions both single tariff pricing and cost-sharing
16 as ways Aqua can mitigate rate increases for DELCORA.

17 It may be that Mr. Packer's intent is to argue that in the future, Aqua PA has the
18 ability to combine its various water and wastewater utilities throughout the state
19 into one utility with a single set of tariffs applicable to all customers based on
20 class of service, not location. Mr. Packer states that my analysis of future revenue
21 requirements and therefore rate increases is not accurate because we do not rely
22 on these assumptions.

⁶ Aqua Statement No. 2-R at 49:10.

1 My omission of these assumptions was not unintentional as I clearly explained in
2 my direct testimony.⁷ The Commission will decide whether or not single tariff
3 rates should be approved, but this hypothetical regulatory approval, which may or
4 may not be granted, should not be used to help justify the proposed acquisition of
5 the DELCORA system.

6 Absent such cost sharing subsidies, the revenue requirements for an Aqua-owned
7 DELCORA system are going to be higher than the current municipally-owned
8 structure as I have demonstrated. And even if these mechanisms are ultimately
9 approved following the sale of the DELCORA assets to Aqua, all that means is
10 that other Aqua customers will be subsidizing the higher post-sale revenue
11 requirements. While use of these rate mechanisms may be appropriate under other
12 circumstances, Aqua has not demonstrated public benefits justifying imposing
13 such additional costs on its current ratepayers.

14 **Q. Why did you not include Single Tariff Pricing in your analysis?**

15 A. Currently, as shown on Appendix A to Mr. Packer's direct testimony, Aqua PA
16 charges separate rates for similar services, based on a customer's geographic
17 location.⁸ Further, it is my understanding that the transition to single tariff pricing
18 remains discretionary, and it would require Commission approval. For this reason,
19 we have analyzed the acquisition based on the proposal to adopt the current
20 DELCORA tariff as a separate rate schedule subject to the Aqua PA rate case path
21 thereafter.

⁷ Delaware County Statement No. 1 (Direct Testimony of Stan Faryniarz) at 41:6 -42:3.

⁸ Aqua Statement No. 2 at Appendix A, p. 2 of 11.

1 Most importantly, Mr. Packer's claim in rebuttal of an ability to cost share
2 actually weakens his case that the proposed acquisition is a benefit to DELCORA
3 customers. In a single tariff pricing scenario, there is no guarantee that this would
4 result in a rate decrease or lower revenue requirements for DELCORA customers.
5 On the contrary, Mr. Packer's own testimony suggests DELCORA customers
6 would subsidize the existing Aqua PA wastewater customers.

7 **Q. How does Mr. Packer's own prior testimony suggest DELCORA customers**
8 **would subsidize existing Aqua PA wastewater customers?**

9 A. Mr. Packer makes the following statement in his direct testimony:

10 The Company's current rate base per customer for its
11 existing systems included in its most recent rate case is \$7,750. As
12 calculated above, the approximate purchase price per connection of
13 DELCORA's retail customers is \$2,250. Therefore, the Company is
14 acquiring these customers at less rate base per customer than its existing
15 systems, which indicates there are economies of scale that will be realized
16 from this Proposed Transaction.⁹

17 In my direct testimony, I highlighted this statement from Mr. Packer to explain
18 how an increasing rate path was inevitable.¹⁰ His rebuttal testimony argument that
19 single tariff pricing will be utilized in the future supports that position. If the
20 current proposed sales price of \$276.5 million results in a rate base per
21 DELCORA customer of \$2,250, but the current rate base per customer of existing
22 Aqua PA wastewater customers is \$7,750, a blended rate would result in an
23 average rate base per customer of \$5,000 for a combined, single wastewater

⁹ Aqua Statement No. 2 at 12:14-19.

¹⁰ Delaware County Statement No. 1 at 39:9-13.

1 utility, assuming in this example an equal total rate base for the DELCORA stand-
2 alone portion and the current Aqua PA portion. This more than doubles the rate
3 base per customer amount for DELCORA customers. Single tariff pricing in this
4 case would not benefit DELCORA customers, all else being equal.

5 **Q. Are you projecting a doubling of rate base per customer and an increase to**
6 **rates for current DELCORA customers caused by a combined Aqua PA**
7 **wastewater utility served by single tariff pricing?**

8 A. No. My point is merely an illustrative example to display how neither Mr.
9 Packer's rate base per customer argument in his direct testimony nor his single
10 tariff pricing argument in his rebuttal testimony supports the conclusion that the
11 proposed acquisition benefits DELCORA customers.

12 Given the evidence he provided in direct and rebuttal testimony, Mr. Packer's
13 own assumptions create open questions and do not enable the Commission to
14 determine whether the proposed acquisition is actually beneficial to DELCORA
15 customers.

16 **Q. Are there any other statements in Mr. Packer's testimony you would like to**
17 **address?**

18 A. Yes. Mr. Packer alleges that I argue that regulation of utilities is harmful. I have
19 made no such claim. My projections of revenue requirements under a
20 municipally-owned utility versus an investor-owned ("IOU") utility were meant
21 to allow the Commission to determine whether the claimed public benefits by Mr.
22 Packer under Aqua PA ownership outweighed the increased costs to ratepayers in
23 this case only.

1 Further, I made it clear that there are benefits of IOU ownership by stating, “It is
2 generally true that IOU ownership under certain circumstances can provide
3 efficiencies compared to municipal ownership, such as economies of scale and
4 improved customer service, and early adoption of technology advancements.”¹¹
5 Here, I want to make it clear that I am not making claims that one ownership
6 model is generally preferable to another. Instead, I am pointing out the differences
7 between the two ownership models and I am concluding that the facts in this case
8 demonstrate that municipal ownership of the DELCORA system is preferable to
9 Aqua PA ownership of the DELCORA system due to, among other things, the
10 projected revenue requirements under each ownership model, driven by
11 differences in cost of capital.

12 **II. RESPONSE TO PILEGGI REBUTTAL TESTIMONY**

13 **Q. What statements would you like to address made by DELCORA witness**
14 **Pileggi?**

15 **A.** I would like to address the issue of capital funding discussed in Mr. Pileggi’s
16 rebuttal testimony.

17 Mr. Pileggi, in discussing DELCORA’s borrowing history, states that DELCORA
18 has previously tried to avoid borrowing to fund capital projects.¹² Nevertheless, in
19 recent years, Mr. Pileggi acknowledges that DELCORA has had to take out loans
20 for major projects. In response to discovery, DELCORA acknowledges that it
21 continued to fund a majority of its capital spending through debt over the last ten

¹¹ Delaware County Statement No. 1 at 29:4-7.

¹² Aqua Statement No. 6-R (Rebuttal Testimony of John Pileggi) at 5:6-10.

1 years.¹³ For this reason, it is unclear why Mr. Pileggi seems to imply that
2 DELCORA will continue to fund most of its projects with cash instead of loans,
3 as that is their preferred “strategy.”¹⁴

4 To be sure, Aqua PA has indicated that DELCORA has over \$1 billion dollars of
5 investments planned in the next 20 years.¹⁵ Recognizing that DELCORA had to
6 borrow in the past to finance projects that were nowhere near the size of this
7 upcoming investment, it seems highly unlikely that DELCORA will be able to
8 avoid borrowing for a projected \$1 billion of planned new projects.

9 Mr. Pileggi alleged that because I assumed DELCORA would have to borrow to
10 finance these upcoming projects, I understated future costs and therefore my
11 calculated revenue requirements for DELCORA as a stand-alone authority were
12 too low. I do not think it is reasonable to assume that DELCORA would not
13 borrow to finance these large projects.

14 **Q. Please explain why financing such a significant infrastructure with debt**
15 **makes the most sense.**

16 A. It simply would not be prudent to increase rates to customers in order to generate
17 the cash necessary to finance these projects. Financing these projects with cash
18 mismatches the life of these investments (which will benefit a generation of
19 customers), and places the onus on existing ratepayers. Instead, classic,

¹³ Response to County Interrogatory Set IX-6. *See* COUNTY Exhibit No. SCF-3 (Second Compilation of Discovery Responses).

¹⁴ Aqua Statement No. 6-R at 5:44-6:4

¹⁵ Aqua Statement No. 4 (Direct Testimony of Mark J. Bubel, Sr.) at Appendix A, p. 4. Appendix A contains DELCORA’s capital plan that Aqua would plan to implement. *See id.* at 2:13-14.

1 longstanding ratemaking principles suggest spreading out and recovering the costs
2 of such significant investments over the life of the assets.

3 **Q. Are there any other reasons why debt financing is more likely?**

4 A. Yes, in the current low interest rate environment, DELCORA would have a strong
5 incentive to borrow to meet its capital investment objectives.

6 **Q. Did Mr. Pileggi raise other issues with your analysis?**

7 A. Mr. Pileggi states that DELCORA must calculate a debt service reserve fund for
8 any loan that it takes out. He states that this adds costs to borrowing, and implies
9 that I did not include this in my analysis.

10 However, as a matter of fact, I did model the 110% debt coverage ratio covenant
11 that was in DELCORA's previous 2015, 2016, and 2017 loans and used that to
12 calculate a debt service coverage amount. In doing so, I did consider additional
13 borrowing costs in my analysis. It does not change my assertion that
14 DELCORA's stand-alone revenue requirement would still be less than the
15 revenue requirement of DELCORA under Aqua PA ownership.

16 **Q. What other statements from Mr. Pileggi would you like to address?**

17 A. Mr. Pileggi states that I did not include an additional \$86 million of additional
18 costs due to the Philadelphia Water Department's ("PWD") Long Term Control
19 Plan ("LTCP") from 2020-2028.¹⁶

20 While I was aware that costs paid by DELCORA to PWD were treated as
21 Operations and Maintenance ("O&M"), to my knowledge, none of the O&M
22 projections provided by either DELCORA or Aqua PA included this \$86 million.

¹⁶ Aqua Statement No. 6-R at 3:10-12.

1 **Q. Do you agree such expenses are likely?**

2 A. Yes. It is reasonable to expect an increase of O&M costs from 2020-2028 while
3 either DELCORA or Aqua PA makes investments to allow it to divert flow from
4 PWD to the DELCORA-owned treatment plant.

5 However, Mr. Pileggi fails to note the circumstances driving any such increase of
6 O&M that would impact both a DELCORA stand-alone system or an Aqua-
7 owned system. Consequently, it is reasonable to assume that revenue
8 requirements in both scenarios would increase by roughly the same amount. In
9 other words, it does not change the relative comparison between the DELCORA
10 stand-alone system and Aqua-owned revenue requirements. Nor does it change
11 my assertion that an Aqua-owned system would be more expensive to DELCORA
12 customers.

13 **Q. Why did you choose not to rely on Mr. Pileggi's estimates of DELCORA's**
14 **future revenue requirements as contained in OCA-III-11?**

15 A. Mr. Pileggi asserts that I ignored information he provided in response to OCA-III-
16 11. I did not ignore this information; rather I chose not to use it because it
17 included limited supporting information on how his projected increases were
18 calculated. Instead, I decided it was more appropriate to use a spreadsheet
19 received from DELCORA in response to County-II-11 since that was developed
20 using DELCORA's own model for projecting future revenues.¹⁷

¹⁷ See COUNTY Exhibit No. SCF-2 (Compilation of Discovery Responses).

1 **Q. Mr. Pileggi states that he supports the revenue projections provided in Mr.**
2 **Packer’s rebuttal testimony. Have these revenue projections been properly**
3 **supported?**

4 A. No. Aqua PA provided a spreadsheet in County-IX-2 Attachment 1¹⁸ that includes
5 hardcoded percentage increases from 2019 through 2042 based on a variety of
6 borrowing assumptions made by Mr. Pileggi, which I dispute. In Mr. Packer’s
7 WCP-2R Schedule A, he uses Mr. Pileggi’s projected increases to project
8 DELCORA revenue requirements for 2021-2025.¹⁹ Next Mr. Packer uses the
9 average annual increase from 2021-2025 to project revenue requirements for
10 2026-2028.²⁰ From 2029 onwards, Mr. Packer increases annual revenue
11 requirements by two percent, with no explanation supporting this two percent
12 increase.²¹

13 Mr. Pileggi then states that he supports Mr. Packer’s projections. This entire
14 circular reasoning appears to be based on Mr. Pileggi’s assumption that a
15 DELCORA owned system will continue under a mechanism that requires a large
16 amount of upfront cash to fund large capital investments. Part of Mr. Pileggi’s
17 revenue requirement increases from 2021 to 2025 include these unrealistic front-
18 loaded costs. Additionally, Mr. Pileggi has included hardcoded percent increases
19 in his overall projection. This is seen in County-IX-2, Attachment 1. In year 2020,
20 Mr. Pileggi includes a hardcoded seven percent “Base rate increase” with no

¹⁸ See COUNTY Exhibit No. SCF-3 (Second Compilation of Discovery Responses).

¹⁹ Aqua Statement No. 2-R, Schedule A.

²⁰ Aqua Statement No. 2-R, Schedule A.

²¹ Aqua Statement No. 2-R, Schedule A.

1 underlying evidence as to why this is needed. Years 2021-2025 include a three
2 percent base rate increase. Mr. Packer uses those percentage increases to calculate
3 2026-2028 revenue requirements. In using these percentages Mr. Packer is
4 providing an unrealistic projection of a stand-alone DELCORA system that is
5 based on unrealistic and unclear assumptions.

6 **Q. Do you have additional concerns with the DELCORA no-sale scenario**
7 **revenue projections provided by Mr. Packer?**

8 A. Yes. Mr. Packer has introduced a new comparison of revenue requirements in
9 response to my direct testimony. This appears to be an effort to support Aqua
10 revenue projections in the scenario where DELCORA is not sold to Aqua.

11 Mr. Pileggi and Mr. Packer make assumptions about front loaded costs in a
12 DELCORA no-sale scenario to cause that scenario to appear unfavorable. Those
13 assumptions are unreasonable because they assume DELCORA will fund a large
14 proportion of future infrastructure investments with cash, although it is not clear
15 on the exact proportion of cash versus borrowing because projected base rate
16 increases were hardcoded in a hidden column in discovery response OCA-III
17 Attachment 1 as opposed to being calculated based on the various debt service
18 data included in the spreadsheet.²² These hardcoded rate increases were then used
19 to calculate yearly percentage increases used in Mr. Pileggi's attachment to his
20 surrebuttal testimony.²³ The non-rounded numbers in Mr. Pileggi's attachment

²² Aqua Statement No. 6-R, Exhibit No. JP-6R Schedule A (Response to OCA Interrogatory Set III-11 Attachment 1, "Retail Billed By Consumption" tab, Column AC).

²³ Aqua Statement No. 6-R, Exhibit No. JP-6R Schedule A.

1 may give the reader the perception of precision, but they can be traced back to
2 hardcoded data that has not been supported.

3 Finally, it is worth noting at this late stage that if DELCORA and Aqua PA were
4 confident that from 2020-2040 DELCORA customers would be better off in an
5 Aqua PA owned system, they would have provided this evidence in their direct
6 testimony as opposed to in response to my testimony.

7 **III. SUMMARY AND CONCLUSION**

8 **Q. Please summarize your surrebuttal testimony.**

9 **A.** My surrebuttal responds to the criticisms of my direct testimony raised in the
10 rebuttal testimony of Aqua PA witness Packer and DELCORA witness Pileggi. I
11 first address three points made by Mr. Packer and then respond to a single
12 criticism made by Mr. Pileggi.

13 Mr. Packer responds to my conclusion that the Proposed Transaction lacks
14 quantifiable and demonstrable benefits by simply repeating that economies of
15 scale will be achieved. As in his direct testimony, Mr. Packer fails to provide
16 supporting evidence for this claim. Instead, and perhaps in lieu of such
17 quantifiable and demonstrable evidence, he supplements his rebuttal testimony by
18 referencing an overbroad assessment that the nation is beset with poor
19 infrastructure in the water and wastewater industry. A generalization about
20 infrastructure nationwide does not provide any justification for Aqua PA to
21 acquire the DELCORA system. Yet, importantly, Mr. Packer then observes that
22 DELCORA has not under-invested in its own system, which renders his previous
23 point irrelevant. Finally, Mr. Packer introduces a new approach for cost sharing

1 that could very well result in DELCORA customers subsidizing the rest of the
2 Aqua PA system. In introducing that new approach, Mr. Packer incorrectly
3 assumes that approach will reduce costs to DELCORA customers.

4 Mr. Pileggi claims that my revenue projections for a scenario where DELCORA
5 is not sold to Aqua PA (*i.e.*, a DELCORA no-sale scenario) are incorrect because
6 I did not use his revenue increase projections. However, the revenue projections
7 Mr. Pileggi argues should have been used were not sufficiently supported and
8 were in conflict with previous DELCORA projections (that were uncovered in
9 discovery). As I noted herein, instead I opted to use DELCORA's own revenue
10 projections model and I assumed their recent borrowing approach for large
11 investments was continued.

12 **Q. What is your conclusion based on your response to the criticisms raised by**
13 **Aqua PA?**

14 **A.** I conclude that the revenue comparison I provided in my direct testimony should
15 be used by the Commission to make the determination of whether or not the
16 Proposed Transaction is in the public interest. The assertions in Aqua PA's
17 rebuttal do not change my view that DELCORA customers would not benefit
18 from the Proposed Transaction.

19 For these reasons, I continue to believe that this acquisition is not in the public
20 interest based on the higher Present Value of Revenue Requirement for
21 DELCORA, which its customers must recover, under an Aqua PA ownership
22 model. Therefore, I respectfully recommend that the Commission deny the
23 Proposed Transaction.

1 **Q. Does this conclude your testimony at this time?**

2 A. Yes, at this time it does. However, I reserve the right to amend my testimony
3 should new information become available in this proceeding.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania	:	
Wastewater, Inc. pursuant to Sections 507,	:	
1102 and 1329 of the Public Utility Code	:	
For, inter alia, approval of the acquisition of	:	Docket No. A-2019-3015173
The wastewater system assets of the	:	
Delaware County Regional Water Quality	:	
Control Authority	:	

<p style="text-align:center">EXHIBITS</p> <p style="text-align:center">OF</p> <p style="text-align:center">STAN FARYNIARZ</p>
--

OF DAYMARK ENERGY ADVISORS

ON BEHALF OF

THE COUNTY OF DELAWARE, PENNSYLVANIA

NOVEMBER 2, 2020

County Exhibit No. SCF – 3
(Second Compilation of Discovery Responses)

Respondent: Robert Willert
Date: September 8, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

THE COUNTY OF DELAWARE, PENNSYLVANIA

SET III INTERROGATORIES

COUNTY-III-1 Testimonies in Exhibits U1, U2, and W1 discuss potential public interest benefits due to the acquisition of DELCORA. Have these benefits been quantified? If so, please provide all spreadsheet workpapers, with formulae and links intact, including feeder models.

RESPONSE:

There are numerous public benefits set forth in the Application and testimony; however, they have not all been quantified.

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

COUNTY OF DELAWARE, PENNSYLVANIA

SET IX TO AQUA INTERROGATORIES

COUNTY-IX-3 Please reference p. 28 lines 20-22 and p. 29 lines 1-5 of Aqua Statement 2-R. Provide the calculations used to support the referenced total increase in revenue requirements for Aqua from 2012 to 2019 corresponding to the \$2.2 billion of investments made during that time period, supplemented by a detailed explanation of all inputs, including cost of debt and equity financing.

RESPONSE

Please refer to the Company's last two and most recent base rate cases filed before the PAPUC, Docket No's. R-2011-2267958 and R-2018-3003558, specifically referencing the Utility Plant in Service from the Schedule of Rate base, whereby the following claims were made:

Exhibit 1A(a) & 1B(b) - Schedule G.2 - Line UPIS =>	\$4,946,661,678
Exhibit 1A(a) - Page 81 (Rate Base) - Line UPIS =>	<u>\$2,764,958,203</u>
Total Change in UPIS =>	\$2,181,703,475

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

COUNTY OF DELAWARE, PENNSYLVANIA

SET IX TO AQUA INTERROGATORIES

COUNTY-IX-6 In the past five years at DELCORA, what percentage of capital investments have been funded with cash (cash vs. overall investment dollar amount)?

RESPONSE

Thirty-one percent (31%) of capital investments have been funded with cash from 2009 through 2020 with a high of ninety-five percent (95%) in 2010 and a low of approximately nine (9%) in 2017.

Given that DELCORA issued bonds in 2009 (Penn Vest), 2013, 2015, 2016 and 2017, calculating the allocation for only the last five years would skew the percentages towards bond funding. Also, it would not take into account the absence of funding of capital projects from bond issuances from 2004 – 2013. The bond issue in 2007 was a re-financing. The 2009 Penn Vest issuance was for a specific project.

Respondent: John Pileggi
Date: 10/28/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

COUNTY OF DELAWARE, PENNSYLVANIA

SET IX TO AQUA INTERROGATORIES

COUNTY-IX-2 Please provide a working model with all associated feeder models and links to the revenue requirements that Mr. Pileggi calculated and are shown in OCA-III-12 Attachment 1, tab Stay w/ PWD-Sum of Pro Rev – PFM.

RESPONSE

Please see Excel spreadsheet attached as COUNTY-IX-2 Attachment 1.

Annual Flow By Customer '000 Gallons							2019 MGD 9/25/2019
	Actual 2015	Actual 2016	Actual 2017	Actual 2018	4 year average	Estimated 2019	
WESTERN							
Retail							2019 Based On
Chester City	828,789	864,301	831,687	823,028	836,951	859,109	First three quarters billing prorated for 4 quarters
Parkside	43,409	44,225	43,033	43,296	43,491	41,875	
Upland	133,793	131,451	139,838	133,520	134,651	133,361	
Chester Twp.	41,196	34,260	35,353	35,612	36,605	37,743	
Trainer	37,605	39,533	36,836	39,982	38,489	39,561	
Marcus Hook	54,980	44,626	45,260	44,799	47,416	41,761	
Total Retail	1,139,772	1,158,396	1,132,007	1,120,237	1,137,603	1,153,410	
Wholesale							
Southern	753,819	703,250	677,204	829,693	740,992	891,330	2.442 Actual MGD thru 9/25 prorated for full year
Soccer Stadium	3,000	4,775	5,247	6,634	4,914	9,016	0.0247 Actual MGD as of 7/31 prorated for full year
Eddystone	139,420	127,980	125,810	157,530	137,685	164,250	0.45 Actual MGD thru 9/25 prorated for full year
Boeing	60,000	50,000	44,099	45,625	49,931	45,000	Best estimate based on prior year
Harrah's Racino	21,500	16,450	15,600	21,000	18,638	21,000	Best estimate based on prior year
Lower Chichester Twp.	192,411	157,827	156,883	209,061	179,046	216,810	0.594 Actual MGD thru 9/25 prorated for full year
Total Wholesale	1,170,150	1,060,282	1,024,843	1,269,543	1,131,205	1,347,406	
EDU Wholesale							
Brookhaven	316,951	242,192	248,577	252,915	265,159	332,553	Flow from Setpember 2018 thru August 2019
Nether-Providence	367,693	355,693	373,260	340,918	359,391	400,666	Flow from Setpember 2018 thru August 2019
Total EDU Wholesale	684,644	597,885	621,837	593,833	624,550	733,219	
Outside Industrial							
Kimberly Clark	1,411,018	1,554,663	1,383,556	1,530,447	1,469,921	1,461,059	4.0029 Actual MGD as of 7/31 prorated for full year
Sunoco	951,907	901,367	904,661	1,150,067	977,001	1,209,610	3.314 Actual MGD as of 7/31 prorated for full year
Epsilon - Braskem	61,660	71,165	71,555	80,704	71,271	84,242	0.2308 Actual MGD as of 7/31 prorated for full year
Liberty/Dynegy	139,886	134,065	122,221	110,155	126,582	100,631	0.2757 Actual MGD as of 7/31 prorated for full year
Monroe Energy (Process)	46,725	42,559	49,360	46,828	46,368	61,685	0.169 Actual MGD as of 7/31 prorated for full year
FPL/Marcus Hook Energy	90,261	100,107	110,353	99,690	100,103	73,511	0.2014 Actual MGD as of 7/31 prorated for full year
Total Outside Industrial	2,701,457	2,803,926	2,641,706	3,017,891	2,791,245	2,990,737	
Inside Industrial							
Exelon	1,391	1,224	845	1,135	1,149	1,132	0.0031 Actual MGD as of 7/31 prorated for full year
Ace Linen\C&R Linen	15,637	18,826	22,687	19,424	19,144	27,521	0.0754 Actual MGD as of 7/31 prorated for full year
Delco Linen	7,724	8,750	10,478	4,748	7,925	4,709	0.0129 Actual MGD as of 7/31 prorated for full year
PQ	17,869	19,413	20,936	17,841	19,015	21,754	0.0596 Actual MGD as of 7/31 prorated for full year
Congoleum	4,510	4,282	3,949	4,919	4,415	4,818	0.0132 Actual MGD as of 7/31 prorated for full year
Monroe Energy (Sanitary)	7,500	8,314	7,916	5,696	7,357	6,000	Estimate Based on 6/30 Actual Prorated
Covanta	680	537	435	403	514	438	0.0012 Actual MGD as of 7/31 prorated for full year
Total Inside Industrial	55,311	61,346	67,246	54,166	59,517	66,371	
Chester Ridley Creek							
Southwest Authority	876,834	792,666	746,469	1,002,631	854,650	1,189,170	3.258 Actual MGD thru 9/25 prorated for full year
Middletown	569,082	553,962	556,515	638,026	579,396	698,245	1.913 Actual MGD thru 9/25 prorated for full year
Total Chester Ridley Creek	1,445,916	1,346,628	1,302,984	1,640,657	1,434,046	1,887,415	
TOTAL WESTERN BILLED VOLUME	7,197,250	7,028,463	6,790,623	7,696,327	7,178,166	8,178,558	
EASTERN							
Wholesale							
Central	3,445,110	3,227,310	3,132,930	4,049,600	3,463,738	4,230,350	11.59 Actual MGD thru 9/25 prorated for full year
Darby Creek	6,619,460	6,144,050	5,839,260	7,654,720	6,564,373	7,869,400	21.56 Actual MGD thru 9/25 prorated for full year
Muckinipates	1,576,620	1,387,900	1,359,050	1,741,950	1,516,380	1,792,150	4.91 Actual MGD thru 9/25 prorated for full year
Total Eastern Wholesale	11,641,190	10,759,260	10,331,240	13,446,270	11,544,490	13,891,900	
TOTAL BILLED VOLUME	18,838,440	17,787,723	17,121,863	21,142,597	18,722,656	22,070,458	

Second half of 2018 and 2019 thru July were very high Rain months

August and September 2019 have been drier and we have experienced lower flows

For this reason pro rating 2019 from September 25 Actual is most likely overstating 2019 flow
Industrial customers are not affected by Rainfall.

FLOW ALLOCATIONS

Customer Class	2015-2018	
	Average Flow (1,000 gal)	% of Total Flow
<u>EASTERN SERVICE AREA</u>		
<u>CDCA</u>	3,463,738	18.5%
Marple Township	376,162	2.0%
Morton Borough	195,355	1.0%
Nether Providence Twp	392,095	2.1%
Prospect Park Borough	287,837	1.5%
Ridley Park Borough	362,653	1.9%
Ridley Township	904,382	4.8%
Rutledge Borough	40,179	0.2%
Springfield Township	553,852	3.0%
Swarthmore Borough	239,344	1.3%
Newtown Township	63,040	0.3%
Upper Providence Twp	9,006	0.0%
Edgmont Township	39,833	0.2%
<u>Darby Creek</u>	6,564,373	35.1%
Aldan	237,630	1.3%
Clifton Heights	290,145	1.5%
Collingdale	439,813	2.3%
Colwyn	103,061	0.6%
Darby Borough	484,451	2.6%
Folcroft	165,422	0.9%
Lansdowne	405,678	2.2%
Sharon Hill	225,158	1.2%
Yeadon	570,444	3.0%
Darby Township	160,827	0.9%
Springfield Township	385,329	2.1%
Upper Darby Township	919,669	4.9%
Radnor, Haverford, Marple, Newtown	2,176,746	11.6%
<u>Muckinipates</u>	1,516,380	8.1%
<u>WESTERN SERVICE AREA</u>		
Retail	1,137,603	6.1%
Retail Indus.	59,517	0.3%
Wholesale EDU	624,550	3.3%
Other Western Wholesale	252,528	1.3%
Southern Delaware CA	740,992	4.0%
Eddystone	137,685	0.7%
<u>Wholesale Industrial</u>	2,791,245	14.9%
Kimberly Clark	1,469,921	7.9%
Sunoco	977,001	5.2%
Epsilon - Braskem	71,271	0.4%
Liberty\Dynegy	126,582	0.7%
Monroe Energy (Process)	46,368	0.2%
FPL\Marcus Hook Energy	100,103	0.5%
<u>Chester Ridley Creek</u>	1,434,046	7.7%
Southwest Authority	854,650	4.6%
Middletown Twp Authority	579,396	3.1%
Total Average Flow	18,722,656	100%

FULL SYSTEM - PROJECTED ANNUAL REVENUE BY CUSTOMER CLASS (STAY WITH PWD)																	
Year Ending	Retail	EASTERN SERVICE AREA			Edgemont Breakout (CDCA)	Retail Indus.	Wholesale EDU	Southern Delaware Cty Auth.	Other Western Wholesale	Wholesale Industrial	WHOLESALE INDUSTRIAL BREAKOUT			Southwest Authority	Middletown Township Authority	Non-Flow Based Revenue	Total Revenue
		CDCA Total	Darby Creek Total	Muckinipates Total							Kimberly Clark	Monroe Energy	Sunoco				
2019	6,052,048	8,693,981	16,476,575	3,806,114	99,981	385,336	1,673,793	2,012,499	685,854	8,206,260	4,321,568	136,322	2,872,381	2,819,622	1,911,517	1,819,448	54,643,028
2020	6,623,699	9,720,593	18,422,180	4,255,552	111,787	416,005	1,868,206	2,199,391	749,547	8,876,159	4,674,349	147,450	3,106,862	3,070,071	2,081,305	1,819,448	60,213,942
2021	6,894,143	10,230,622	19,388,772	4,478,836	117,652	432,238	1,963,634	2,312,097	787,957	9,757,970	5,138,727	162,099	3,415,516	3,216,064	2,180,279	1,819,448	63,579,713
2022	7,415,858	11,496,309	21,787,464	5,032,937	132,208	461,680	2,195,420	2,586,567	881,495	10,633,074	5,599,573	176,636	3,721,823	3,549,115	2,406,065	1,819,448	70,397,639
2023	7,734,197	12,133,080	22,994,253	5,311,707	139,530	480,546	2,313,912	2,726,606	929,220	11,187,279	5,891,427	185,842	3,915,807	3,727,608	2,527,072	1,819,448	74,024,457
2024	8,022,979	12,669,884	24,011,589	5,546,713	145,704	497,932	2,414,489	2,845,374	969,696	11,662,157	6,141,507	193,731	4,082,026	3,882,076	2,631,791	1,819,448	77,119,831
2025	8,728,465	14,465,178	27,413,977	6,332,670	166,350	537,187	2,742,099	3,233,486	1,101,964	13,152,456	6,926,325	218,488	4,603,665	4,347,727	2,947,472	1,819,448	86,988,477
2026	9,170,992	15,449,241	29,278,942	6,763,480	177,666	562,755	2,923,552	3,448,174	1,175,129	13,990,332	7,367,566	232,407	4,896,941	4,613,893	3,127,915	1,819,448	92,501,519
2027	9,439,638	15,892,976	30,119,896	6,957,742	182,769	579,298	3,007,699	3,547,395	1,208,943	14,394,133	7,580,215	239,114	5,038,280	4,747,439	3,218,450	1,819,448	95,115,826
2028	10,366,931	18,330,911	34,740,198	8,025,038	210,805	630,376	3,451,546	4,073,362	1,388,191	16,406,341	8,639,881	272,541	5,742,600	5,373,759	3,643,054	1,819,448	108,459,961
2029	10,771,338	19,165,217	36,321,350	8,390,287	220,400	654,173	3,606,369	4,256,399	1,450,570	17,127,697	9,019,761	284,524	5,995,091	5,605,140	3,799,915	1,819,448	113,188,303
2030	11,062,336	19,642,309	37,225,520	8,599,152	225,887	672,117	3,696,914	4,363,155	1,486,952	17,562,664	9,248,822	291,750	6,147,340	5,749,147	3,897,542	1,819,448	116,003,143
2031	12,016,992	22,127,819	41,935,985	9,687,276	254,470	724,864	4,149,735	4,899,710	1,669,808	19,617,626	10,331,003	325,887	6,866,624	6,389,504	4,331,662	1,819,448	129,624,898
2032	12,391,144	22,833,189	43,272,782	9,996,078	262,582	747,323	4,281,716	5,055,586	1,722,931	20,239,626	10,658,560	336,219	7,084,339	6,591,438	4,468,559	1,819,448	133,682,402
2033	12,692,769	23,304,718	44,166,410	10,202,508	268,004	766,075	4,371,677	5,161,588	1,759,056	20,674,793	10,887,727	343,448	7,236,657	6,736,510	4,566,909	1,819,448	136,490,464
2034	13,557,378	25,476,999	48,283,252	11,153,504	292,985	814,370	4,768,450	5,631,581	1,919,228	22,482,163	11,839,521	373,472	7,869,279	7,302,091	4,950,335	1,819,448	148,451,785
2035	14,231,167	27,054,468	51,272,824	11,844,100	311,126	852,774	5,058,125	5,974,487	2,036,090	23,811,910	12,539,790	395,562	8,334,721	7,721,794	5,234,866	1,819,448	157,223,180
2036	14,534,324	27,489,224	52,096,762	12,034,431	316,126	871,881	5,141,914	6,073,096	2,069,696	24,222,562	12,756,047	402,384	8,478,458	7,860,456	5,328,870	1,819,448	159,858,790
2037	15,729,509	30,625,354	58,040,262	13,407,388	352,192	937,755	5,712,952	6,749,774	2,300,306	26,811,917	14,119,649	445,398	9,384,793	8,666,603	5,875,384	1,819,448	177,028,843
2038	16,186,743	31,499,505	59,696,927	13,790,081	362,244	965,121	5,876,297	6,942,724	2,366,063	27,580,327	14,524,308	458,163	9,653,754	8,915,594	6,044,184	1,819,448	182,045,258
2039	16,516,770	31,970,799	60,590,109	13,996,407	367,664	985,935	5,967,174	7,049,670	2,402,509	28,026,013	14,759,014	465,567	9,809,755	9,066,182	6,146,272	1,819,448	184,904,953
2040	17,746,283	35,164,814	66,643,313	15,394,706	404,395	1,053,915	6,549,164	7,739,267	2,637,522	30,667,776	16,150,215	509,451	10,734,433	9,889,609	6,704,502	1,819,448	202,414,716
2041	18,381,440	36,532,663	69,235,619	15,993,533	420,126	1,090,909	6,802,059	8,038,384	2,739,461	31,839,962	16,767,510	528,924	11,144,725	10,263,504	6,957,978	1,819,448	210,115,086
2042	18,917,445	37,581,638	71,223,605	16,452,761	432,189	1,122,829	6,997,646	8,269,480	2,818,217	32,757,282	17,250,588	544,162	11,465,809	10,559,811	7,158,854	1,819,448	216,111,205
Totals	\$285,184,587	\$519,551,491	\$984,638,565	\$227,453,001	\$5,974,842	\$17,243,395	\$97,534,543	\$115,189,851	\$39,256,405	\$461,688,481	\$243,133,653	\$7,669,542	\$161,601,678	\$150,664,755	\$102,140,752	\$43,666,752	\$3,050,187,420

Year	Increase to Base Rate
2019	8.00%
2020	7.00%
2021	3.00%
2022	3.00%
2023	3.00%
2024	3.00%
2025	3.00%
2026	3.00%
2027	3.00%
2028	3.00%
2029	3.00%
2030	3.00%
2031	3.00%
2032	3.00%
2033	3.00%
2034	3.00%
2035	3.00%
2036	3.00%
2037	3.00%
2038	3.00%
2039	3.00%
2040	3.00%
2041	3.00%
2042	3.00%

Purpose: This tab generates the annual rate costs (avg bill) assuming that ESA is redirected to WTRP and Chester's LTCP costs \$50M.

Year Ending	Existing Debt Service \$70M (2020)	ESA Bond 1	Chester LTCP 1	ESA Bond 2	Chester LTCP 2	ESA Bond 3	Chester LTCP 3	20 Year Capital						Pipeline						New Debt Service	Reduction of Existing Debt	Net New Debt	PMD LTCP Costs	PMD Operating Costs	Increased Chester plant costs	Future debt service + Costs	Pro-Rated Future Debt & Costs	Rate increase to cover debt & costs	New Base Rate	Total rate cost	Yearly Percentage Increase	Annual Retail per 70,000 gal/year	Total Flow (1,000 gal)	Projected Revenue
		Estimated Debt Service \$20M (2020)	Estimated Debt Service \$25M (2020)	Estimated Debt Service \$200M (2023)	Estimated Debt Service \$25M (2023)	Estimated Debt Service \$170M (2020)	Estimated Debt Service \$25M (2025)	Plan Stage 1	Plan Stage 2	Plan Stage 3	Plan Stage 4	Plan Stage 5	Plan Stage 6	15-30 years Stage 1	15-30 years Stage 2	15-30 years Stage 3	15-30 years Stage 4	15-30 years Stage 5	15-30 years Stage 6															
2019	\$11,646,463																			\$0			\$776,401			\$776,401	\$47,175	\$0.04	\$4.93	6.48%	\$45.10	1,137,603	\$5,608,383	
2019	\$11,667,462																			\$0			\$1,107,513			\$1,107,513	\$67,293	\$0.06	\$5.32	7.91%	\$37.40	1,137,603	\$6,052,048	
2020	\$11,689,446			\$635,500										\$635,500						\$2,278,000	\$1,244	\$1,240,244				\$1,107,513	\$2,147,757	\$0.13	\$5.70	9.46%	\$407.38	1,137,603	\$6,623,699	
2021	\$11,672,118			\$1,243,875										\$1,243,875						\$2,487,750	\$3,512	\$2,491,262				\$1,107,513	\$1,598,775	\$0.19	\$5.87	9.08%	\$424.22	1,137,603	\$6,894,543	
2022	\$11,063,664			\$1,243,825										\$1,243,825						\$2,487,750	\$698,494	\$1,878,756				\$7,030,443	\$8,889,199	\$0.47	\$6.04	7.57%	\$456.32	1,137,603	\$7,415,858	
2023	\$11,063,664			\$1,243,375			\$619,500							\$1,243,375						\$2,733,350	\$2,600	\$1,733,350				\$7,030,443	\$10,733,993	\$0.57	\$6.23	6.80%	\$475.91	1,137,603	\$7,794,387	
2024	\$11,066,307			\$1,243,125			\$1,243,875							\$1,243,125						\$5,074,000	\$5,263	\$4,979,263				\$7,030,443	\$11,989,706	\$0.64	\$6.41	5.70%	\$374.68	1,137,603	\$8,022,979	
2025	\$11,073,883			\$1,242,875			\$644,625	\$1,249,250						\$1,242,875						\$6,846,875	\$7,556	\$6,854,431				\$13,144,581	\$19,999,012	\$1.21	\$6.60	8.79%	\$537.09	1,137,603	\$8,728,465	
2026	\$11,085,378			\$1,242,625			\$1,634,875	\$3,279,750						\$1,242,625						\$10,486,125	\$8,712	\$10,477,413				\$13,144,581	\$23,577,884	\$1.26	\$6.80	5.07%	\$564.32	1,137,603	\$9,170,902	
2027	\$11,061,546			\$1,242,375			\$1,605,875	\$3,211,750						\$1,242,375						\$11,082,500	\$4,125	\$11,028,375				\$13,144,581	\$24,172,956	\$1.29	\$7.01	2.93%	\$580.85	1,137,603	\$9,439,638	
2028	\$11,058,403			\$1,242,125			\$1,606,125	\$3,212,250	\$1,249,250					\$1,242,125						\$12,281,250	\$5,125	\$12,276,125				\$13,144,581	\$35,498,791	\$1.90	\$7.22	9.11%	\$637.91	1,137,603	\$10,265,931	
2029	\$11,040,031			\$1,241,875			\$1,605,375	\$3,210,750	\$3,229,750					\$1,241,875						\$13,487,750	\$2,500	\$14,880,250				\$13,144,581	\$38,100,916	\$2.04	\$7.43	9.90%	\$662.79	1,137,603	\$10,771,338	
2030	\$11,062,958			\$1,241,625			\$1,608,500	\$3,217,000	\$3,211,750					\$1,241,625						\$14,492,250	\$2,037	\$15,494,287				\$13,144,581	\$38,714,953	\$2.07	\$7.66	2.70%	\$680.70	1,137,603	\$11,062,336	
2031	\$10,973,168			\$1,241,375			\$1,600,625	\$3,200,250	\$3,232,250	\$1,249,250				\$1,241,375						\$15,714,875	\$1,454	\$16,576,421				\$13,144,581	\$50,126,215	\$2.48	\$7.89	8.61%	\$739.44	1,137,603	\$12,016,982	
2032	\$10,932,804			\$1,241,125			\$1,606,625	\$3,213,250	\$3,230,750	\$3,229,750				\$1,241,125						\$16,712,375	\$498,654	\$16,213,721				\$13,144,581	\$51,854,615	\$2.77	\$8.12	5.08%	\$762.46	1,137,603	\$12,391,144	
2033	\$10,905,725			\$1,240,875			\$1,611,125	\$3,222,250	\$3,217,000	\$3,211,750				\$1,240,875						\$17,712,625	\$7,125	\$18,705,000				\$13,144,581	\$52,236,294	\$2.79	\$8.37	1.16%	\$781.02	1,137,603	\$12,692,769	
2034	\$6,239,475			\$2,157,125			\$1,609,250	\$3,218,500	\$3,201,250	\$3,212,250	\$1,249,250			\$1,617,125						\$18,712,125	\$24,266,760	\$17,106,250				\$13,144,581	\$61,786,790	\$3.30	\$8.62	6.81%	\$814.22	1,137,603	\$13,557,378	
2035	\$6,238,000			\$2,158,625			\$1,608,125	\$3,212,250	\$3,213,250	\$3,210,750	\$3,229,750			\$2,158,625						\$19,712,125	\$24,125	\$19,746,250				\$13,144,581	\$68,035,790	\$3.63	\$8.88	5.11%	\$875.68	1,137,603	\$14,231,167	
2036	\$6,245,000			\$2,157,625			\$1,606,625	\$3,213,250	\$3,222,250	\$3,210,000	\$3,211,750			\$2,157,625						\$20,712,125	\$24,487	\$20,746,612				\$13,144,581	\$68,039,715	\$3.63	\$9.14	2.13%	\$894.34	1,137,603	\$14,534,334	
2037	\$6,000,275			\$2,159,000			\$1,610,500	\$3,221,000	\$3,218,500	\$3,201,250	\$3,212,250	\$1,249,250		\$2,159,000						\$21,712,125	\$24,125	\$21,746,250				\$13,144,581	\$72,575,079	\$4.41	\$9.42	5.13%	\$967.88	1,137,603	\$15,729,309	
2038	\$5,999,900			\$2,157,625			\$1,612,625	\$3,225,250	\$3,212,250	\$3,213,250	\$3,210,750	\$3,229,750		\$2,157,625						\$22,712,125	\$24,125	\$22,746,250				\$13,144,581	\$84,811,204	\$4.53	\$9.70	2.91%	\$996.02	1,137,603	\$16,186,743	
2039	\$5,999,000			\$2,158,375			\$1,608,125	\$3,216,250	\$3,213,250	\$3,222,250	\$3,217,000	\$3,211,750		\$2,158,375						\$23,712,125	\$24,125	\$23,746,250				\$13,144,581	\$84,795,079	\$4.53	\$9.99	54.52%	\$1,016.32	1,137,603	\$16,516,770	
2040	\$5,999,034			\$2,161,000			\$1,616,750	\$3,213,500	\$3,221,000	\$3,218,500	\$3,221,250	\$1,249,250		\$2,161,000						\$24,712,125	\$24,125	\$24,746,250				\$13,144,581	\$99,419,266	\$5.31	\$10.29	7.44%	\$1,091.98	1,137,603	\$17,746,283	
2041	\$5,998,000			\$2,155,500			\$1,603,625	\$3,207,250	\$3,225,250	\$3,212,250	\$3,213,250	\$3,229,750		\$2,155,500						\$25,712,125	\$24,125	\$25,746,250				\$13,144,581	\$104,093,196	\$5.36	\$10.60	3.68%	\$1,131.06	1,137,603	\$18,181,240	
2042	\$5,997,100			\$2,156,750			\$1,613,625	\$3,227,250	\$3,216,250	\$3,213,250	\$3,222,250	\$3,217,000	\$3,211,750	\$2,156,750						\$26,712,125	\$24,125	\$26,746,250				\$13,144,581	\$106,961,613	\$5.71	\$10.92	2.50%	\$1,164.05	1,137,603	\$18,917,445	

County Exhibit No. SCF-3

[illegible]

County Exhibit No. SCF-3

County Exhibit No. SCF-3

[illegible]

Purpose: This tab generates the annual rate costs (avg bill) assuming that ESA is redirected to W RTP and Chester's LTCP costs \$50M.

Year Ending	Existing Debt Service \$70M (2020)	ESA Bond 1	Chester LTCP 1	ESA Bond 2	Chester LTCP 2	ESA Bond 3	Chester LTCP 3	20 Year Capital	20 Year Capital	20 Year Capital	20 Year Capital	20 Year Capital	Pipeline	Pipeline	Pipeline	Pipeline	New Debt	Reduction of Existing Debt	Net New Debt	PMO LTCP Costs	PMO Operating Costs	Increased Chester plant costs	Future debt service + costs	Pro-Rated Future Debt & Costs	Rate Increase to cover debt & costs	New Base Rate	Total rate cost	Yearly Percentage Increase	Annual residential cost per 70,000 gal/year	Total Flow (1,000 gal)	Projected Revenue	
		Estimated Debt Service \$25M (2020)	Estimated Debt Service \$25M (2020)	Estimated Debt Service \$200M (2023)	Estimated Debt Service \$25M (2023)	Estimated Debt Service \$170M (2025)	Estimated Debt Service \$25M (2025)	Plan- Stage 1 \$50M (2025)	Plan- Stage 2 \$50M (2025)	Plan- Stage 3 \$50M (2025)	Plan- Stage 4 \$50M (2025)	Plan- Stage 5 \$50M (2027)	Plan- Stage 6 \$50M (2040)	15-30 years Stage 1 \$25M (2020)	15-30 years Stage 2 \$25M (2031)	15-30 years Stage 3 \$25M (2034)	15-30 years Stage 4 \$25M (2037)															
2018	\$11,447,400																\$0	\$0	\$0	\$776,401			\$776,401	\$41,636	\$0.04	\$2.32	\$2.32			\$162.40	3,463,738	\$8,039,871
2019	\$11,667,400			\$603,200									\$618,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513			\$1,107,513	204,889	\$0.06	\$2.51	\$2.51	8.19%	\$175.70	3,463,738	\$8,691,961	
2020	\$11,668,604			\$603,200									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2021	\$11,672,138			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2022	\$11,693,664			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2023	\$11,693,664			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2024	\$11,696,337			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2025	\$11,697,983			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2026	\$11,696,617			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2027	\$11,691,546			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2028	\$11,695,421			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2029	\$11,690,921			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2030	\$11,692,959			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2031	\$10,921,566			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2032	\$10,921,898			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2033	\$10,920,729			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2034	\$6,218,475			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2035	\$6,218,608			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2036	\$6,241,906			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2037	\$6,900,275			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2038	\$6,999,900			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2039	\$6,999,680			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2040	\$6,999,028			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2041	\$6,999,000			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	
2042	\$6,997,138			\$1,243,875									\$1,243,875				\$1,243,875	\$2,487,750	\$1,107,513	\$3,598,775			\$3,598,775	665,782	\$0.19	\$2.76	\$2.76	3.25%	\$196.75	3,463,738	\$9,720,393	

Purpose: This tab generates the annual rate costs (avg bill) assuming that ESA is redirected to W RTP and Chester's LTCP costs \$50M.

Year Ending	Existing Debt Service	ESA Bond 1 Estimated Debt Service \$70M (2020)	Chester LTCP 1 Estimated Debt Service \$25M (2020)	ESA Bond 2 Estimated Debt Service \$200M (2023)	Chester LTCP 2 Estimated Debt Service \$25M (2023)	ESA Bond 3 Estimated Debt Service \$170M (2025)	Chester LTCP 3 Estimated Debt Service \$25M (2025)	20 Year Capital Plan Stage 1 \$50M (2025)	20 Year Capital Plan Stage 2 \$50M (2028)	20 Year Capital Plan Stage 3 \$50M (2031)	20 Year Capital Plan Stage 4 \$50M (2034)	20 Year Capital Plan Stage 5 \$50M (2037)	20 Year Capital Plan Stage 6 \$50M (2040)	Pipeline 15-30 years Stage 1 \$25M (2028)	Pipeline 15-30 years Stage 2 \$25M (2031)	Pipeline 15-30 years Stage 3 \$25M (2034)	Pipeline 15-30 years Stage 4 \$25M (2037)	New Debt Service	Reduction of Existing Debt	Net New Debt	PMO LTCP Costs	PMO Operating Costs	Increased Chester plant costs	Future debt service + Costs	Prop-Rated Future Debt & Costs	Rate Increase to cover debt & costs	New Base Rate	Total rate cost	Yearly Percentage Increase	Annual residential cost per 70,000 gal/year	Total Flow (1,000 gal)	Projected Revenue
2018	\$11,446,686																	\$0	\$776,401	\$0	\$776,401			\$776,401	1,632	\$0.04	\$2.32	\$2.32	8.19%	\$175.70	918,833	\$99,453
2019	\$11,667,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	2,356		\$1,107,513	2,356	\$0.06	\$2.51	\$2.51	11.91%	\$175.70	918,833	\$99,981
2020	\$11,686,846			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	4,995		\$1,107,513	7,656	\$0.10	\$2.81	\$2.81	12.95%	\$196.45	918,833	\$111,767
2021	\$11,672,138			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	7,656		\$1,107,513	10,312	\$0.12	\$3.12	\$3.12	13.27%	\$222.33	918,833	\$132,208
2022	\$11,663,664			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	10,312		\$1,107,513	12,928	\$0.14	\$3.46	\$3.46	14.47%	\$252.33	918,833	\$156,350
2023	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	12,928		\$1,107,513	15,544	\$0.16	\$3.82	\$3.82	15.34%	\$282.33	918,833	\$182,769
2024	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	15,544		\$1,107,513	18,176	\$0.18	\$4.18	\$4.18	16.30%	\$312.39	918,833	\$210,805
2025	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	18,176		\$1,107,513	20,808	\$0.20	\$4.54	\$4.54	17.34%	\$342.39	918,833	\$240,495
2026	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	20,808		\$1,107,513	23,440	\$0.22	\$4.90	\$4.90	18.44%	\$372.39	918,833	\$270,466
2027	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	23,440		\$1,107,513	26,072	\$0.24	\$5.26	\$5.26	19.60%	\$402.39	918,833	\$300,466
2028	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	26,072		\$1,107,513	28,704	\$0.26	\$5.62	\$5.62	20.82%	\$432.39	918,833	\$330,466
2029	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	28,704		\$1,107,513	31,336	\$0.28	\$5.98	\$5.98	22.10%	\$462.39	918,833	\$360,466
2030	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	31,336		\$1,107,513	33,968	\$0.30	\$6.34	\$6.34	23.44%	\$492.39	918,833	\$390,466
2031	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	33,968		\$1,107,513	36,600	\$0.32	\$6.70	\$6.70	24.84%	\$522.39	918,833	\$420,466
2032	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	36,600		\$1,107,513	39,232	\$0.34	\$7.06	\$7.06	26.30%	\$552.39	918,833	\$450,466
2033	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	39,232		\$1,107,513	41,864	\$0.36	\$7.42	\$7.42	27.84%	\$582.39	918,833	\$480,466
2034	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	41,864		\$1,107,513	44,496	\$0.38	\$7.78	\$7.78	29.44%	\$612.39	918,833	\$510,466
2035	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	44,496		\$1,107,513	47,128	\$0.40	\$8.14	\$8.14	31.10%	\$642.39	918,833	\$540,466
2036	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	47,128		\$1,107,513	49,760	\$0.42	\$8.50	\$8.50	32.84%	\$672.39	918,833	\$570,466
2037	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	49,760		\$1,107,513	52,392	\$0.44	\$8.86	\$8.86	34.64%	\$702.39	918,833	\$600,466
2038	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	52,392		\$1,107,513	55,024	\$0.46	\$9.22	\$9.22	36.50%	\$732.39	918,833	\$630,466
2039	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	55,024		\$1,107,513	57,656	\$0.48	\$9.58	\$9.58	38.44%	\$762.39	918,833	\$660,466
2040	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	57,656		\$1,107,513	60,288	\$0.50	\$9.94	\$9.94	40.44%	\$792.39	918,833	\$690,466
2041	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	60,288		\$1,107,513	62,920	\$0.52	\$10.30	\$10.30	42.50%	\$822.39	918,833	\$720,466
2042	\$11,666,337			\$619,500										\$619,500				\$1,247,750	\$1,512	\$2,491,262	\$1,107,513	62,920		\$1,107,513	65,552	\$0.54	\$10.66	\$10.66	44.64%	\$852.39	918,833	\$750,466

Purpose: This tab generates the annual rate costs (avg bill) assuming that ESA is redirected to W RTP and Chester's LTCP costs \$50M.

Year Ending	Existing Debt Service \$70M (2020)	ESA Bond 1 Estimated Debt Service \$25M (2020)	Chester LTCP 1 Estimated Debt Service \$200M (2023)	ESA Bond 2 Estimated Debt Service \$25M (2023)	Chester LTCP 2 Estimated Debt Service \$170M (2025)	ESA Bond 3 Estimated Debt Service \$25M (2025)	Chester LTCP 3 Estimated Debt Service \$170M (2025)	20 Year Capital Plan \$50M (2025)	20 Year Capital Plan \$50M (2028)	20 Year Capital Plan \$50M (2031)	20 Year Capital Plan \$50M (2034)	20 Year Capital Plan \$50M (2037)	20 Year Capital Plan \$50M (2040)	Pipeline 15-30 years Stage 1 \$25M (2028)	Pipeline 15-30 years Stage 2 \$25M (2031)	Pipeline 15-30 years Stage 3 \$25M (2034)	Pipeline 15-30 years Stage 4 \$25M (2037)	New Debt Service	Reduction of Existing Debt	Net New Debt	PMO LTCP Costs \$79,401	PMO Operating Costs	Increased Chester plant costs	Future debt service + Costs	Pro-Rated Future Debt & Costs	Rate increase to cover debt & costs	New Base Rate	Total rate cost	Yearly Percentage Increase	Annual residential cost per 70,000 gal/year	Total Flow (1,000 gpi)	Projected Revenue
2018	\$11,446,688													\$88,500				\$0	\$0	\$0	\$79,401			\$776,401	272,313	\$0.04	\$2.32	\$2.32		\$162.40	6,564,373	\$15,239,344
2019	\$11,667,400													\$88,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513			\$1,107,513	388,306	\$0.06	\$2.51	\$2.51	8.19%	\$175.70	6,564,373	\$16,476,575
2020	\$11,686,846		\$803,200											\$1,243,875				\$2,347,757	\$2,347,757	\$2,347,757	\$1,107,513			\$1,107,513	821,130	\$0.11	\$2.88	\$2.81	12.95%	\$196.45	6,564,373	\$18,422,180
2021	\$11,671,138		\$1,243,875											\$1,243,875				\$3,598,775	\$3,598,775	\$3,598,775	\$1,107,513			\$1,107,513	1,261,771	\$0.19	\$2.76	\$2.95	5.25%	\$206.75	6,564,373	\$19,388,772
2022	\$11,093,664		\$1,243,825											\$1,243,875				\$2,487,250	\$488,494	\$1,878,756	\$7,010,443			\$8,889,199	1,116,653	\$0.47	\$2.84	\$3.32	12.37%	\$232.33	6,564,373	\$21,787,464
2023	\$11,061,064		\$1,243,375				\$619,500							\$1,243,875		\$619,500		\$3,725,750	\$1,000	\$2,723,146	\$7,010,443			\$10,733,583	1,763,139	\$0.57	\$2.89	\$3.50	5.54%	\$242.30	6,564,373	\$22,994,253
2024	\$11,066,317		\$1,243,125											\$1,243,125		\$1,243,875		\$4,974,000	\$3,263	\$4,979,263	\$7,010,443			\$11,989,706	4,303,725	\$0.64	\$3.02	\$3.66	4.42%	\$256.05	6,564,373	\$24,011,589
2025	\$11,057,883		\$1,242,875			\$624,625	\$1,245,250							\$1,242,875		\$1,243,625		\$6,446,875	\$7,556	\$6,454,431	\$13,144,581			\$19,999,012	7,011,877	\$1.07	\$3.11	\$4.18	14.17%	\$282.33	6,564,373	\$27,413,977
2026	\$11,065,617		\$1,242,625			\$1,614,875	\$1,229,750							\$1,242,625		\$1,243,375		\$10,486,125	\$8,212	\$10,477,913	\$13,144,581			\$23,572,464	8,364,780	\$1.26	\$3.20	\$4.46	8.80%	\$312.22	6,564,373	\$29,375,942
2027	\$11,061,546		\$1,242,375			\$1,605,875	\$1,211,750							\$1,242,375		\$1,243,125		\$11,032,500	\$4,125	\$11,028,375	\$13,144,581			\$24,172,956	8,475,309	\$1.29	\$3.30	\$4.59	2.87%	\$321.19	6,564,373	\$30,115,896
2028	\$11,058,421		\$1,242,125			\$1,606,125	\$1,212,250	\$1,249,250						\$1,242,125		\$1,242,875		\$12,281,250	\$1,125	\$12,278,125	\$23,220,666			\$25,496,781	12,446,273	\$1.30	\$3.40	\$5.29	15.34%	\$370.46	6,564,373	\$34,746,198
2029	\$11,060,921		\$1,241,875			\$1,605,375	\$1,210,750	\$1,229,750						\$1,241,875		\$1,242,625		\$14,877,750	\$1,500	\$14,880,250	\$23,220,666			\$38,106,916	13,358,007	\$2.04	\$3.50	\$5.53	4.55%	\$387.32	6,564,373	\$36,321,350
2030	\$11,062,959		\$1,241,625			\$1,608,500	\$1,217,000	\$1,211,750						\$1,241,625		\$1,242,375		\$15,442,250	\$1,037	\$15,441,213	\$23,220,666			\$38,714,953	13,373,896	\$2.07	\$3.60	\$5.67	2.49%	\$396.96	6,564,373	\$37,225,520
2031	\$10,921,566		\$1,241,375			\$1,600,625	\$1,201,250	\$1,212,250	\$1,249,250					\$1,241,375		\$1,242,125		\$1,242,875	\$1,344,631	\$16,716,875	\$141,454			\$16,576,428	\$33,550,794	\$2.68	\$3.71	\$6.39	12.65%	\$447.19	6,564,373	\$41,935,985
2032	\$10,913,858		\$1,241,125			\$1,606,625	\$1,213,250	\$1,216,750	\$1,229,750					\$1,241,125		\$1,241,875		\$1,242,625	\$1,241,375	\$18,712,375	\$488,654			\$18,303,721	\$33,550,794	\$2.77	\$3.82	\$6.59	3.19%	\$461.44	6,564,373	\$43,772,782
2033	\$10,905,725		\$1,240,875			\$1,611,125	\$1,222,250	\$1,217,000	\$1,211,750					\$1,240,875		\$1,241,625		\$1,242,375	\$1,241,125	\$18,712,625	\$1,125			\$18,705,500	\$33,550,794	\$2.79	\$3.94	\$6.73	2.07%	\$470.97	6,564,373	\$44,164,410
2034	\$6,218,475		\$1,157,125			\$1,609,250	\$1,218,100	\$1,201,250	\$1,212,250	\$1,249,250				\$1,157,125		\$1,241,375		\$1,242,125	\$1,242,875	\$21,772,500	\$4,364,250			\$17,506,250	\$44,280,540	\$3.30	\$4.06	\$7.36	9.32%	\$514.87	6,564,373	\$46,381,251
2035	\$6,218,608		\$1,158,625			\$1,606,125	\$1,212,250	\$1,213,250	\$1,229,750					\$1,158,625		\$1,241,125		\$1,241,875	\$1,242,625	\$23,764,125	\$475			\$23,763,250	\$44,280,540	\$3.63	\$4.18	\$7.81	6.19%	\$546.75	6,564,373	\$51,273,824
2036	\$6,241,908		\$1,157,625			\$1,606,625	\$1,213,250	\$1,222,250	\$1,217,000	\$1,211,750				\$1,157,625		\$1,240,875		\$1,241,625	\$1,242,375	\$23,764,125	\$7,309			\$23,756,816	\$44,280,540	\$3.63	\$4.30	\$7.84	1.63%	\$555.54	6,564,373	\$52,096,762
2037	\$6,900,275		\$1,159,000			\$1,610,500	\$1,221,000	\$1,218,500	\$1,212,250	\$1,249,250				\$1,159,000		\$1,217,125		\$1,241,375	\$26,828,500	\$243,625				\$26,582,875	\$55,992,204	\$4.41	\$4.43	\$8.84	11.41%	\$618.92	6,564,373	\$58,040,262
2038	\$5,999,900		\$1,157,625			\$1,612,625	\$1,225,250	\$1,221,250	\$1,213,250	\$1,210,750				\$1,157,625		\$1,216,625		\$1,241,875	\$28,813,375	\$175				\$28,813,000	\$55,992,204	\$4.51	\$4.56	\$9.09	2.85%	\$636.59	6,564,373	\$59,696,927
2039	\$5,999,680		\$1,158,375			\$1,608,125	\$1,216,250	\$1,221,250	\$1,217,000	\$1,211,750				\$1,158,375		\$1,217,625		\$1,241,375	\$28,801,125	\$250				\$28,800,875	\$55,992,204	\$4.53	\$4.70	\$9.23	1.50%	\$646.11	6,564,373	\$60,590,109
2040	\$5,999,028		\$1,161,000			\$1,616,750	\$1,231,500	\$1,221,250	\$1,201,250	\$1,212,250				\$1,161,000		\$1,218,500		\$1,241,375	\$30,990,375	\$625				\$30,990,000	\$55,992,204	\$5.31	\$4.84	\$10.15	9.99%	\$710.66	6,564,373	\$66,641,813
2041	\$5,999,000		\$1,158,500			\$1,603,625	\$1,207,250	\$1,225,250	\$1,213,250	\$1,210,750				\$1,158,500		\$1,215,625		\$1,238,625	\$32,108,125	\$975				\$32,107,150	\$71,168,046	\$5.56	\$4.99	\$10.55	8.89%	\$738.90	6,564,373	\$69,225,819
2042	\$5,997,138		\$1,158,375			\$1,613,625	\$1,227,250	\$1,213,250	\$1,222,250	\$1,211,750				\$1,158,375		\$1,218,375		\$1,237,625	\$32,866,125	\$900				\$32,865,225	\$74,012,488	\$5.71	\$5.14	\$10.85	2.87%	\$759.50	6,564,373	\$71,201,600

Purpose: This tab generates the annual rate costs (avg bill) assuming that ESA is redirected to W RTP and Chester's LTCP costs \$50M.

Year Ending	Existing Debt Service \$70M (2020)	ESA Bond 1 Estimated Debt Service \$25M (2020)	Chester LTCP 1 Estimated Debt Service \$200M (2023)	ESA Bond 2 Estimated Debt Service \$25M (2023)	Chester LTCP 2 Estimated Debt Service \$170M (2025)	ESA Bond 3 Estimated Debt Service \$25M (2025)	Chester LTCP 3 Estimated Debt Service \$170M (2025)	20 Year Capital Plan Stage 1 \$50M (2025)	20 Year Capital Plan Stage 2 \$50M (2028)	20 Year Capital Plan Stage 3 \$50M (2031)	20 Year Capital Plan Stage 4 \$50M (2034)	20 Year Capital Plan Stage 5 \$50M (2037)	20 Year Capital Plan Stage 6 \$50M (2040)	Pipeline 15-30 years Stage 1 \$25M (2028)	Pipeline 15-30 years Stage 2 \$25M (2031)	Pipeline 15-30 years Stage 3 \$25M (2034)	Pipeline 15-30 years Stage 4 \$25M (2037)	New Debt Service	Reduction of Existing Debt	Net New Debt	PMO LTCP Costs \$79,401	PMO Operating Costs	Increased Chester plant costs	Future debt service + Costs	Pro-Rated Future Debt & Costs	Rate Increase to cover debt & costs	New Base Rate	Total rate cost	Yearly Percentage Increase	Annual residential cost per 70,000 gal/year	Total Flow (1,000 gal)	Projected Revenue
2018	\$11,446,688																	\$0	\$0	\$0	\$79,401			\$776,401	\$,854	\$0.04	\$2.32	\$2.32		\$162.40	237,630	\$551,303
2019	\$11,667,400													\$68,800				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513			\$1,107,513	14,057	\$0.06	\$2.51	\$2.51	8.19%	\$175.70	237,630	\$596,452
2020	\$11,668,246		\$603,200											\$1,243,875				\$2,347,757	\$1,512	\$2,491,262	\$1,107,513			\$3,598,775	29,798	\$0.13	\$2.81	\$2.81	12.95%	\$196.45	237,630	\$666,883
2021	\$11,671,138		\$1,243,875											\$1,243,625				\$2,487,250	\$1,512	\$1,878,736	\$7,030,443			\$10,733,583	112,823	\$0.47	\$3.32	\$3.32	12.37%	\$232.33	237,630	\$788,706
2022	\$11,661,664		\$1,243,625											\$1,243,875	\$619,500			\$5,725,750	\$1,600	\$4,908,494	\$7,030,443			\$11,989,706	126,233	\$0.57	\$3.50	\$3.50	15.54%	\$246.20	237,630	\$923,293
2023	\$11,066,337		\$1,243,125		\$619,500									\$1,243,125	\$1,243,875			\$4,974,000	\$3,263	\$4,979,263	\$7,030,443			\$11,989,706	152,175	\$0.64	\$3.02	\$3.66	4.42%	\$256.05	237,630	\$860,220
2025	\$11,075,883		\$1,242,875		\$624,625	\$1,245,250								\$1,242,875	\$1,243,625			\$5,446,875	\$7,558	\$5,454,433	\$13,144,581			\$19,999,012	253,830	\$1.07	\$4.18	\$4.17%	\$292.33	237,630	\$992,386	
2026	\$11,065,671		\$1,242,625		\$1,634,875	\$1,229,750								\$1,242,625	\$1,243,375	\$619,500		\$50,486,125	\$8,212	\$50,477,913	\$13,144,581			\$23,572,494	299,185	\$1.26	\$4.46	\$4.46	8.80%	\$312.22	237,630	\$1,050,898
2027	\$11,061,546		\$1,242,375		\$1,605,875	\$3,211,750								\$1,242,375	\$1,243,125	\$1,243,875		\$11,032,500	\$4,125	\$11,028,375	\$13,144,581			\$24,172,956	306,806	\$1.29	\$3.59	\$4.59	2.87%	\$321.19	237,630	\$1,099,340
2028	\$11,058,421		\$1,242,125		\$1,606,125	\$3,212,250	\$1,249,250							\$1,242,125	\$1,242,875	\$1,243,625		\$12,281,250	\$1,125	\$12,278,125	\$23,220,666			\$25,496,761	402,555	\$1.30	\$5.29	\$5.29	15.34%	\$370.46	237,630	\$1,257,595
2029	\$11,060,921		\$1,241,875		\$1,605,375	\$3,210,750	\$3,229,750							\$1,241,875	\$1,242,625	\$1,243,375	\$619,500	\$14,877,750	\$1,500	\$14,880,250	\$23,220,666			\$26,009,916	483,182	\$2.04	\$5.53	\$5.53	4.55%	\$387.22	237,630	\$1,314,833
2030	\$11,062,959		\$1,241,625		\$1,608,500	\$3,217,000	\$3,211,750							\$1,241,625	\$1,242,375	\$1,243,125	\$1,243,875	\$15,492,250	\$2,037	\$15,494,287	\$23,220,666			\$26,714,953	491,375	\$2.07	\$5.67	\$5.67	2.49%	\$386.96	237,630	\$1,347,564
2031	\$10,921,566		\$1,241,375		\$1,600,625	\$3,201,250	\$3,212,250	\$1,249,250						\$1,241,375	\$1,242,125	\$1,242,875	\$1,243,625	\$16,716,875	\$141,454	\$16,575,421	\$33,550,794			\$50,129,215	638,308	\$2.68	\$5.71	\$6.39	12.65%	\$447.19	237,630	\$1,518,083
2032	\$10,921,858		\$1,241,125		\$1,606,625	\$3,213,250	\$3,226,750	\$3,229,750						\$1,241,125	\$1,241,875	\$1,242,625	\$1,243,375	\$18,712,375	\$408,654	\$18,303,721	\$33,550,794			\$51,851,515	658,144	\$2.77	\$6.32	\$6.59	3.19%	\$461.44	237,630	\$1,566,475
2033	\$10,920,729		\$1,240,875		\$1,611,125	\$3,222,250	\$3,227,000	\$3,231,750						\$1,240,875	\$1,241,625	\$1,242,375	\$1,243,125	\$18,712,625	\$7,125	\$18,705,500	\$33,550,794			\$52,266,294	683,243	\$2.79	\$5.94	\$6.73	2.07%	\$470.97	237,630	\$1,598,824
2034	\$6,218,475		\$1,157,125		\$1,609,250	\$3,218,000	\$3,201,250	\$3,212,250	\$1,249,250					\$1,157,125	\$1,161,875	\$1,162,125	\$1,162,875	\$21,772,500	\$4,364,250	\$17,408,250	\$44,280,540			\$61,786,790	784,206	\$3.30	\$4.06	\$7.36	9.32%	\$514.87	237,630	\$1,767,854
2035	\$6,218,600		\$1,158,625		\$1,606,125	\$3,212,250	\$3,213,250	\$3,226,750	\$1,239,250					\$1,158,625	\$1,161,125	\$1,161,875	\$1,162,625	\$23,764,125	\$475	\$23,763,650	\$44,280,540			\$68,035,790	863,519	\$3.63	\$4.18	\$7.81	6.19%	\$546.75	237,630	\$1,854,076
2036	\$6,241,900		\$1,157,625		\$1,606,625	\$3,213,250	\$3,222,250	\$3,227,000	\$1,231,750					\$1,157,625	\$1,160,875	\$1,161,625	\$1,162,375	\$23,763,875	\$7,399	\$23,756,476	\$44,280,540			\$68,039,715	863,569	\$3.63	\$4.30	\$7.84	1.63%	\$555.54	237,630	\$1,885,903
2037	\$6,090,275		\$1,157,125		\$1,610,500	\$3,221,000	\$3,201,250	\$3,212,250	\$1,249,250					\$1,159,000	\$1,157,125	\$1,154,375	\$1,154,125	\$26,828,500	\$243,625	\$26,584,875	\$55,992,204			\$62,575,079	1,048,053	\$4.41	\$4.13	\$8.84	11.41%	\$618.92	237,630	\$2,103,057
2038	\$5,999,900		\$1,157,625		\$1,612,625	\$3,225,250	\$3,221,250	\$3,233,250	\$1,210,750	\$3,229,750				\$1,157,625	\$1,158,625	\$1,161,125	\$1,161,875	\$28,813,375	\$375	\$28,813,000	\$55,992,204			\$64,811,204	1,076,434	\$4.53	\$4.56	\$9.09	2.85%	\$636.59	237,630	\$2,161,029
2039	\$5,999,680		\$1,158,875		\$1,608,125	\$3,216,250	\$3,213,250	\$3,222,250	\$1,217,000	\$3,211,750				\$1,158,875	\$1,157,625	\$1,154,875	\$1,154,625	\$28,803,125	\$250	\$28,802,875	\$55,992,204			\$64,795,079	1,076,120	\$4.53	\$4.70	\$9.23	1.50%	\$646.11	237,630	\$2,191,363
2040	\$5,999,025		\$1,161,000		\$1,616,750	\$3,233,500	\$3,221,000	\$3,218,500	\$3,201,250	\$3,212,250	\$1,249,250			\$1,161,000	\$1,161,000	\$1,159,000	\$1,159,000	\$30,990,125	\$625	\$30,990,500	\$64,828,881			\$69,419,246	1,263,842	\$5.31	\$4.84	\$10.15	9.99%	\$710.66	237,630	\$2,412,488
2041	\$5,999,000		\$1,155,500		\$1,603,625	\$3,307,250	\$3,225,250	\$3,213,250	\$3,213,250	\$3,210,750	\$3,229,750			\$1,155,500	\$1,155,500	\$1,155,500	\$1,155,500	\$32,508,125	\$975	\$32,507,150	\$71,128,046			\$104,091,136	1,321,194	\$5.56	\$4.99	\$10.55	8.89%	\$738.90	237,630	\$2,596,329
2042	\$5,997,138		\$1,158,375		\$1,613,625	\$3,227,250	\$3,236,250	\$3,233,250	\$3,222,250	\$3,217,000	\$3,211,750			\$1,158,375	\$1,158,375	\$1,157,625	\$1,156,875	\$32,506,125	\$900	\$32,505,225	\$74,612,488			\$106,911,913	1,387,174	\$5.71	\$5.14	\$10.85	2.87%	\$759.50	237,630	\$2,579,294

Purpose: This tab generates the annual rate costs (avg bill) assuming that ESA is redirected to W RTP and Chester's LTCP costs \$50M.

Year Ending	Existing Debt Service	ESA Bond 1 Estimated Debt Service	Chester LTCP 1 Estimated Debt Service	ESA Bond 2 Estimated Debt Service	Chester LTCP 2 Estimated Debt Service	ESA Bond 3 Estimated Debt Service	Chester LTCP 3 Estimated Debt Service	20 Year Capital Plan Stage 1	20 Year Capital Plan Stage 2	20 Year Capital Plan Stage 3	20 Year Capital Plan Stage 4	20 Year Capital Plan Stage 5	20 Year Capital Plan Stage 6	Pipeline 15-30 years Stage 1	Pipeline 15-30 years Stage 2	Pipeline 15-30 years Stage 3	Pipeline 15-30 years Stage 4	New Debt Service	Reduction of Existing Debt	Net New Debt	PWD LTCP Costs	PWD Operating Costs	Increased Chester plant costs	Future debt service + Costs	Pro-Rated Future Debt & Costs	Rate Increase to cover debt & costs	New Base Rate	Total rate cost	Yearly Percentage Increase	Annual residential cost per 70,000 gal/year	Total Flow (1,000 gal)	Projected Revenue		
2018	\$11,446,688																	\$0	\$0	\$0	\$776,401	\$776,401		\$776,401		\$0.04	\$2.32	\$2.32		\$162.40	290,145	\$671,137		
2019	\$11,667,400																	\$0	\$0	\$0	\$1,107,513	\$1,107,513		\$1,107,513		\$0.06	\$2.51	\$2.51	8.19%	\$175.70	290,145	\$728,265		
2020	\$11,686,846			\$809,200														\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513		\$1,107,513		\$0.08	\$2.81	\$2.81	12.95%	\$196.45	290,145	\$854,260		
2021	\$11,677,138			\$1,243,875														\$1,243,875	\$1,512	\$1,245,387	\$1,107,513	\$1,107,513		\$1,107,513		\$0.10	\$2.76	\$2.85	12.55%	\$206.75	290,145	\$865,084		
2022	\$11,063,664			\$1,243,625														\$1,243,625	\$2,487,250	\$408,494	\$1,878,756	\$7,010,443		\$8,889,199		\$0.47	\$2.84	\$3.32	12.37%	\$232.33	290,145	\$963,006		
2023	\$11,061,064			\$1,243,375														\$1,243,375	\$3,725,750	\$1,600	\$2,723,146	\$7,010,443		\$10,739,593		\$0.57	\$2.93	\$3.50	15.49%	\$242.30	290,145	\$1,016,346		
2024	\$11,066,337			\$1,243,125														\$1,243,125	\$1,243,875	\$4,974,000	\$5,263	\$4,979,263	\$7,010,443		\$11,989,706		\$0.64	\$3.02	\$3.66	14.42%	\$256.05	290,145	\$1,061,312	
2025	\$11,075,983			\$1,242,875														\$1,242,875	\$1,243,625	\$6,446,875	\$7,556	\$6,454,431	\$13,144,581		\$19,999,012		\$1.07	\$3.11	\$4.18	14.17%	\$292.33	290,145	\$1,211,098	
2026	\$11,065,671			\$1,242,625														\$1,242,625	\$1,243,375	\$8,406,125	\$8,212	\$8,414,337	\$13,144,581		\$23,572,464		\$1.26	\$3.20	\$4.46	14.80%	\$312.22	290,145	\$1,296,129	
2027	\$11,061,546			\$1,242,375														\$1,242,375	\$1,243,125	\$11,032,500	\$4,120	\$11,036,620	\$13,144,581		\$24,172,956		\$1.29	\$3.30	\$4.59	14.97%	\$321.19	290,145	\$1,339,299	
2028	\$11,058,421			\$1,242,125														\$1,242,125	\$1,242,875	\$12,281,250	\$1,125	\$12,282,375	\$23,220,666		\$25,496,791		\$1.30	\$3.40	\$5.29	15.34%	\$370.46	290,145	\$1,526,517	
2029	\$11,060,921			\$1,241,875														\$1,241,875	\$1,242,625	\$13,243,375	\$619,500	\$14,877,750	\$23,220,666		\$38,100,916		\$2.04	\$3.50	\$5.53	14.55%	\$387.32	290,145	\$1,605,404	
2030	\$11,062,959			\$1,242,375														\$1,242,375	\$1,242,375	\$13,242,375	\$15,492,250	\$3,037	\$15,494,287	\$23,220,666		\$38,714,953		\$2.07	\$3.60	\$5.67	14.49%	\$396.96	290,145	\$1,645,368
2031	\$10,921,566			\$1,241,375														\$1,241,375	\$1,242,125	\$13,242,875	\$1,343,625	\$16,716,875	\$441,454	\$16,716,875	\$33,560,794		\$2.68	\$3.71	\$6.39	12.65%	\$447.19	290,145	\$1,803,571	
2032	\$10,921,858			\$1,241,125														\$1,241,125	\$1,241,875	\$13,242,625	\$1,241,375	\$18,712,375	\$408,654	\$18,303,721	\$33,560,794		\$2.77	\$3.82	\$6.59	13.19%	\$461.44	290,145	\$1,912,657	
2033	\$10,920,729			\$1,240,875														\$1,240,875	\$1,241,625	\$13,242,375	\$1,241,125	\$18,712,625		\$18,303,794		\$2.79	\$3.94	\$6.73	12.07%	\$470.97	290,145	\$1,952,155		
2034	\$6,218,475			\$1,237,125														\$1,237,125	\$1,241,875	\$13,242,125	\$1,240,875	\$21,772,500	\$4,364,250	\$17,506,250	\$44,280,540		\$3.30	\$4.06	\$7.36	9.32%	\$514.87	290,145	\$2,134,120	
2035	\$6,218,600			\$1,236,625														\$1,236,625	\$1,241,125	\$13,241,875	\$1,240,625	\$23,764,125	\$475	\$23,763,250		\$3.63	\$4.18	\$7.81	6.19%	\$546.75	290,145	\$2,264,259		
2036	\$6,241,900			\$1,237,625														\$1,237,625	\$1,240,625	\$13,240,625	\$1,240,375	\$23,763,375	\$7,309	\$23,756,066	\$44,280,540		\$3.63	\$4.30	\$7.84	1.63%	\$555.54	290,145	\$2,302,477	
2037	\$6,900,715			\$1,237,125														\$1,237,125	\$1,241,125	\$13,240,375	\$1,240,125	\$26,828,500	\$243,625	\$26,584,875		\$25,992,204		\$4.41	\$4.43	\$8.84	11.41%	\$618.92	290,145	\$2,360,380
2038	\$5,999,900			\$1,237,625														\$1,237,625	\$1,236,625	\$13,241,125	\$1,241,875	\$28,813,375	\$175	\$28,813,000	\$55,992,204		\$4.53	\$4.56	\$9.09	2.85%	\$636.59	290,145	\$2,438,604	
2039	\$5,999,680			\$1,236,875														\$1,236,875	\$1,237,625	\$13,240,375	\$1,241,625	\$28,803,125	\$250	\$28,802,875	\$55,992,204		\$4.53	\$4.70	\$9.23	1.50%	\$646.11	290,145	\$2,479,081	
2040	\$5,999,025			\$1,236,100														\$1,236,100	\$1,235,600	\$13,239,000	\$1,237,125	\$1,241,375	\$80,991,000	\$625	\$80,990,375	\$68,428,081		\$5.31	\$4.84	\$10.15	9.99%	\$710.66	290,145	\$2,945,634
2041	\$5,999,000			\$1,235,300														\$1,235,300	\$1,235,625	\$13,238,625	\$1,241,125	\$1,241,125	\$12,508,125	\$975	\$12,507,150	\$71,148,046		\$5.54	\$4.99	\$10.55	8.89%	\$738.90	290,145	\$3,080,214
2042	\$5,997,138			\$1,235,375														\$1,235,375	\$1,235,375	\$13,237,625	\$1,237,625	\$1,240,875	\$26,864,125	\$900	\$26,863,225	\$74,012,488		\$5.71	\$5.14	\$10.85	2.87%	\$759.50	290,145	\$3,144,083

Purpose: This tab generates the annual rate costs (avg bill) assuming that ESA is redirected to W RTP and Chester's LTCP costs \$50M.

Year Ending	Existing Debt Service \$70M (2020)	ESA Bond 1 Estimated Debt Service \$25M (2020)	Chester LTCP 1 Estimated Debt Service \$200M (2023)	ESA Bond 2 Estimated Debt Service \$25M (2023)	Chester LTCP 2 Estimated Debt Service \$170M (2025)	ESA Bond 3 Estimated Debt Service \$25M (2025)	Chester LTCP 3 Estimated Debt Service \$170M (2025)	20 Year Capital Plan \$50M (2025)	20 Year Capital Plan \$50M (2028)	20 Year Capital Plan \$50M (2031)	20 Year Capital Plan \$50M (2034)	20 Year Capital Plan \$50M (2037)	20 Year Capital Plan \$50M (2040)	Pipeline 15-30 years Stage 1 \$25M (2028)	Pipeline 15-30 years Stage 2 \$25M (2031)	Pipeline 15-30 years Stage 3 \$25M (2034)	Pipeline 15-30 years Stage 4 \$25M (2037)	New Debt Service	Reduction of Existing Debt	Net New Debt	PMO LTCP Costs	PMO Operating Costs	Increased Chester plant costs	Future debt service + Costs	Pro-Rated Future Debt & Costs	Rate Increase to cover debt & costs	New Base Rate	Total rate cost	Yearly Percentage Increase	Annual residential cost per 70,000 gal/year	Total Flow (1,000 gal)	Projected Revenue
2018	\$11,446,688																	\$0	\$776,401	\$0	\$1,107,513	\$776,401		\$1,107,513		\$0.04	\$2.32	\$2.32		\$162.40	439,813	\$1,020,364
2019	\$11,667,400													\$888,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513			\$1,107,513		\$0.06	\$2.51	\$2.51	8.19%	\$175.70	439,813	\$1,101,931
2020	\$11,686,846		\$809,200											\$1,243,875				\$2,487,750	\$1,512	\$2,491,262	\$1,107,513			\$1,107,513		\$0.11	\$2.88	\$2.81	12.85%	\$196.46	439,813	\$1,234,286
2021	\$11,677,138		\$1,243,875											\$1,243,625				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$0.19	\$2.76	\$2.55	2.25%	\$206.75	439,813	\$1,260,048
2022	\$11,093,664		\$1,243,625											\$1,243,625				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$0.47	\$2.84	\$3.32	12.37%	\$232.33	439,813	\$1,459,760
2023	\$11,061,064		\$1,243,375		\$619,500									\$1,243,375				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$0.57	\$2.89	\$3.50	5.54%	\$242.30	439,813	\$1,546,615
2024	\$11,066,337		\$1,243,125		\$1,243,875									\$1,243,125				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$0.64	\$3.02	\$3.66	4.42%	\$256.05	439,813	\$1,626,776
2025	\$11,075,883		\$1,242,875		\$1,243,625		\$624,625	\$1,249,250						\$1,242,875				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$1.07	\$3.11	\$4.38	14.17%	\$292.33	439,813	\$1,836,736
2026	\$11,065,671		\$1,242,625		\$1,243,375		\$1,614,875	\$1,279,750						\$1,242,625				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$1.26	\$3.20	\$4.46	8.80%	\$312.22	439,813	\$1,961,689
2027	\$11,061,546		\$1,242,375		\$1,243,125		\$1,605,875	\$1,311,750						\$1,242,375				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$1.29	\$3.30	\$4.59	2.87%	\$321.19	439,813	\$2,018,039
2028	\$11,058,421		\$1,242,125		\$1,242,875		\$1,606,125	\$1,312,250	\$1,249,250					\$1,242,125				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$1.30	\$3.40	\$5.29	15.34%	\$370.46	439,813	\$2,327,593
2029	\$11,060,921		\$1,241,875		\$1,242,625		\$1,605,375	\$1,310,750	\$1,279,750					\$1,241,875				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$2.04	\$3.50	\$5.53	4.55%	\$387.22	439,813	\$2,433,530
2030	\$11,062,959		\$1,241,625		\$1,242,375		\$1,608,500	\$1,317,000	\$1,211,750					\$1,241,625				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$2.07	\$3.60	\$5.67	2.49%	\$396.96	439,813	\$2,494,110
2031	\$10,921,566		\$1,241,375		\$1,242,125		\$1,600,625	\$1,301,250	\$1,212,250	\$1,249,250				\$1,241,375				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$2.68	\$3.71	\$6.39	12.65%	\$447.19	439,813	\$2,899,711
2032	\$10,912,858		\$1,241,125		\$1,241,875		\$1,606,625	\$1,313,250	\$1,230,750	\$1,279,750				\$1,241,125				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$2.77	\$3.82	\$6.59	3.19%	\$461.44	439,813	\$2,899,276
2033	\$10,935,725		\$1,240,875		\$1,241,625		\$1,611,125	\$1,322,250	\$1,217,000	\$1,211,750				\$1,240,875				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$2.79	\$3.94	\$6.73	2.07%	\$470.97	439,813	\$2,953,149
2034	\$6,218,475		\$1,157,125		\$1,241,375		\$1,609,250	\$1,318,000	\$1,301,250	\$1,212,250	\$1,249,250			\$1,157,125				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$3.30	\$4.06	\$7.36	9.32%	\$514.87	439,813	\$3,234,978
2035	\$6,218,605		\$1,158,625		\$1,241,125		\$1,606,125	\$1,312,250	\$1,310,750	\$1,229,750				\$1,158,625				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$3.63	\$4.18	\$7.81	6.19%	\$546.75	439,813	\$3,433,279
2036	\$6,241,906		\$1,157,625		\$1,240,875		\$1,606,625	\$1,313,250	\$1,222,250	\$1,217,000	\$1,211,750			\$1,157,625				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$3.63	\$4.30	\$7.84	1.63%	\$555.54	439,813	\$3,494,483
2037	\$6,000,275		\$1,157,125		\$1,150,000		\$1,610,500	\$1,321,000	\$1,318,500	\$1,201,250	\$1,212,250	\$1,249,250		\$1,157,125				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$4.41	\$4.43	\$8.84		\$518.92	439,813	\$3,888,686
2038	\$5,999,900		\$1,157,625		\$1,152,625		\$1,612,625	\$1,325,250	\$1,321,250	\$1,210,750	\$1,229,750			\$1,157,625				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$4.53	\$4.56	\$9.09	2.85%	\$566.59	439,813	\$3,999,094
2039	\$5,999,680		\$1,158,375		\$1,157,625		\$1,608,125	\$1,316,250	\$1,313,250	\$1,222,250	\$1,217,000	\$1,211,750		\$1,158,375				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$4.53	\$4.70	\$9.23	1.50%	\$566.11	439,813	\$4,050,537
2040	\$5,999,025		\$1,161,000		\$1,161,000		\$1,616,750	\$1,323,500	\$1,318,500	\$1,301,250	\$1,212,250	\$1,249,250		\$1,161,000				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$5.31	\$4.84	\$10.15	9.99%	\$710.66	439,813	\$4,463,162
2041	\$5,999,000		\$1,158,500		\$1,157,625		\$1,613,625	\$1,307,250	\$1,325,250	\$1,213,250	\$1,210,750	\$1,229,750		\$1,158,500				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$5.56	\$4.99	\$10.55	8.89%	\$738.90	439,813	\$4,638,790
2042	\$5,997,138		\$1,158,375		\$1,158,375		\$1,613,625	\$1,327,250	\$1,326,250	\$1,313,250	\$1,222,250	\$1,217,000	\$1,211,750	\$1,158,375				\$2,487,250	\$1,512	\$2,490,762	\$1,107,513			\$1,107,513		\$5.71	\$5.14	\$10.85	2.87%	\$759.50	439,813	\$4,771,082

Purpose: This tab generates the annual rate costs (avg bill) assuming that ESA is redirected to W RTP and Chester's LTCP costs \$50M.

Year Ending	Existing Debt Service \$70M (2020)	ESA Bond 1 Estimated Debt Service \$25M (2020)	Chester LTCP 1 Estimated Debt Service \$25M (2020)	ESA Bond 2 Estimated Debt Service \$200M (2023)	Chester LTCP 2 Estimated Debt Service \$25M (2023)	ESA Bond 3 Estimated Debt Service \$170M (2025)	Chester LTCP 3 Estimated Debt Service \$170M (2025)	20 Year Capital Plan Stage 1 \$50M (2025)	20 Year Capital Plan Stage 2 \$50M (2028)	20 Year Capital Plan Stage 3 \$50M (2031)	20 Year Capital Plan Stage 4 \$50M (2034)	20 Year Capital Plan Stage 5 \$50M (2037)	20 Year Capital Plan Stage 6 \$50M (2040)	Pipeline 15-30 years Stage 1 \$25M (2028)	Pipeline 15-30 years Stage 2 \$25M (2031)	Pipeline 15-30 years Stage 3 \$25M (2034)	Pipeline 15-30 years Stage 4 \$25M (2037)	New Debt Service	Reduction of Existing Debt	Net New Debt	PMD LTCP Costs	PMD Operating Costs	Increased Chester plant costs	Future debt service + Costs	Pre-Rated Future Debt & Costs	Rate Increase to cover debt & costs	New Base Rate	Total rate cost	Yearly Percentage Increase	Annual residential cost per 70,000 gal/year	Total Flow (1,000 gal)	Projected Revenue
2018	\$11,447,400													\$0				\$0	\$776,401	\$1,274	\$1,107,513	\$776,401	4,374	\$0.04	\$2.32	\$2.32	\$2.32	8.19%	\$175.70	103,061	\$258,682	
2019	\$11,667,400			\$603,500										\$603,500				\$1,299,000	\$1,244	\$1,240,244	\$1,107,513	12,923	\$2.48	\$2.81	12.95%	\$196.45	103,061	\$286,228				
2020	\$11,686,800			\$1,243,875										\$1,243,875				\$2,491,262	\$1,512	\$2,491,262	\$1,107,513	19,820	\$2.76	\$2.95	5.25%	\$206.75	103,061	\$304,404				
2021	\$11,672,150			\$1,243,875										\$1,243,875				\$2,487,250	\$688,494	\$1,878,756	\$7,030,443	48,931	\$0.47	\$2.84	12.37%	\$232.33	103,061	\$342,063				
2022	\$11,063,664			\$1,243,875		\$619,500								\$1,243,875				\$2,725,750	\$1,600	\$2,723,150	\$7,030,443	59,084	\$0.57	\$2.93	5.54%	\$242.30	103,061	\$384,030				
2023	\$11,066,337			\$1,243,125		\$1,243,875								\$1,243,125				\$4,974,000	\$3,263	\$4,970,737	\$7,030,443	63,998	\$0.64	\$3.02	5.66%	\$256.05	103,061	\$376,982				
2024	\$11,075,983			\$1,242,875		\$624,625		\$1,245,250						\$1,242,875				\$5,446,875	\$7,556	\$5,439,319	\$13,144,581	110,086	\$1.07	\$3.11	5.43%	\$272.33	103,061	\$430,399				
2025	\$11,065,617			\$1,242,625		\$1,634,875		\$1,229,750						\$1,242,625				\$5,496,125	\$8,212	\$5,487,913	\$13,144,581	129,757	\$1.26	\$3.30	5.46%	\$282.22	103,061	\$465,679				
2026	\$11,061,546			\$1,242,375		\$1,605,875		\$1,211,750		\$1,249,250				\$1,242,375				\$11,032,500	\$4,129	\$11,028,371	\$13,144,581	133,062	\$1.29	\$3.39	2.87%	\$321.19	103,061	\$472,882				
2027	\$11,056,421			\$1,242,125		\$1,606,125		\$1,212,250		\$1,249,250				\$1,242,125				\$12,281,250	\$1,125	\$12,278,125	\$23,220,666	195,406	\$1.30	\$3.40	55.29%	\$370.46	103,061	\$545,421				
2028	\$11,050,921			\$1,241,875		\$1,605,375		\$1,210,750		\$1,229,750				\$1,241,875				\$14,877,750	\$1,500	\$14,880,250	\$23,220,666	209,730	\$2.04	\$3.50	55.53%	\$387.22	103,061	\$587,245				
2029	\$11,042,959			\$1,241,625		\$1,608,500		\$1,217,000		\$1,211,750				\$1,241,625				\$1,242,375	\$1,243,125	\$1,243,875	\$23,220,666	213,110	\$2.07	\$3.60	55.67%	\$386.96	103,061	\$588,441				
2030	\$10,931,566			\$1,241,375		\$1,600,625		\$1,201,250		\$1,212,250		\$1,249,250		\$1,241,375				\$1,242,625	\$1,243,125	\$1,243,625	\$23,220,666	275,825	\$2.68	\$3.71	66.39%	\$447.19	103,061	\$658,395				
2031	\$10,931,858			\$1,241,125		\$1,606,625		\$1,213,250		\$1,226,750				\$1,241,125				\$1,241,875	\$1,242,625	\$1,243,375	\$23,220,666	283,438	\$2.77	\$3.82	56.59%	\$461.44	103,061	\$679,383				
2032	\$10,930,729			\$1,240,875		\$1,611,125		\$1,222,250		\$1,221,000				\$1,240,875				\$1,242,375	\$1,243,125	\$1,243,875	\$23,220,666	287,630	\$2.79	\$3.94	56.73%	\$470.97	103,061	\$689,433				
2033	\$6,218,475			\$2,157,125		\$1,609,250		\$1,218,000		\$1,201,250		\$1,212,250	\$1,249,250	\$2,157,125				\$1,241,375	\$1,241,875	\$1,242,375	\$1,242,375	340,111	\$3.30	\$4.06	57.38%	\$514.87	103,061	\$755,047				
2034	\$6,218,600			\$2,158,625		\$1,606,125		\$1,212,250		\$1,213,250		\$1,210,750	\$1,228,750	\$2,158,625				\$1,241,125	\$1,241,625	\$1,242,625	\$1,242,625	349,715	\$3.63	\$4.18	57.81%	\$546.75	103,061	\$804,983				
2035	\$6,241,900			\$2,157,625		\$1,606,625		\$1,213,250		\$1,222,250		\$1,217,000	\$1,211,750	\$2,157,625				\$1,240,875	\$1,241,625	\$1,242,375	\$1,242,375	359,079	\$3.69	\$4.30	57.94%	\$555.54	103,061	\$827,919				
2036	\$6,900,215			\$2,157,125		\$1,610,500		\$1,221,000		\$1,218,500		\$1,201,250	\$1,212,250	\$2,157,125				\$1,241,375	\$1,241,875	\$1,242,375	\$1,242,375	364,245	\$4.41	\$4.43	58.84%	\$618.92	103,061	\$911,232				
2037	\$5,999,900			\$2,157,625		\$1,612,625		\$1,225,250		\$1,221,250		\$1,210,750	\$1,229,750	\$2,157,625				\$1,240,875	\$1,241,625	\$1,242,375	\$1,242,375	375,000	\$4.53	\$4.56	59.09%	\$636.59	103,061	\$937,240				
2038	\$5,999,600			\$2,158,375		\$1,608,125		\$1,216,250		\$1,221,250		\$1,217,000	\$1,211,750	\$2,158,375				\$1,240,875	\$1,241,625	\$1,242,375	\$1,242,375	384,709	\$4.53	\$4.70	59.23%	\$646.11	103,061	\$951,265				
2039	\$5,999,025			\$2,161,000		\$1,616,750		\$1,213,500		\$1,221,000		\$1,218,500	\$1,201,250	\$2,161,000				\$1,240,875	\$1,241,625	\$1,242,375	\$1,242,375	393,993	\$5.31	\$4.84	59.99%	\$710.66	103,061	\$1,048,900				
2040	\$5,999,000			\$2,155,500		\$1,603,625		\$1,207,250		\$1,225,250		\$1,213,250	\$1,210,750	\$2,155,500				\$1,240,875	\$1,241,625	\$1,242,375	\$1,242,375	397,993	\$5.54	\$4.99	59.99%	\$738.90	103,061	\$1,084,999				
2041	\$5,997,150			\$2,158,375		\$1,613,625		\$1,227,250		\$1,213,250		\$1,222,250	\$1,211,750	\$2,158,375				\$1,240,875	\$1,241,625	\$1,242,375	\$1,242,375	400,000	\$5.71	\$5.14	59.85%	\$795.50	103,061	\$1,116,211				

Purpose: This tab generates the annual rate costs (avg bill) assuming that ESA is redirected to W RTP and Chester's LTCP costs \$50M.

Year Ending	Existing Debt Service \$70M (2020)	ESA Bond 1 Estimated Debt Service \$70M (2020)	Chester LTCP 1 Estimated Debt Service \$25M (2020)	ESA Bond 2 Estimated Debt Service \$200M (2023)	Chester LTCP 2 Estimated Debt Service \$25M (2023)	ESA Bond 3 Estimated Debt Service \$170M (2025)	Chester LTCP 3 Estimated Debt Service \$25M (2025)	20 Year Capital Plan Plan Stage 1 \$50M (2025)	20 Year Capital Plan Plan Stage 2 \$50M (2028)	20 Year Capital Plan Plan Stage 3 \$50M (2031)	20 Year Capital Plan Plan Stage 4 \$50M (2034)	20 Year Capital Plan Plan Stage 5 \$50M (2037)	20 Year Capital Plan Plan Stage 6 \$50M (2040)	Pipeline 15-30 years Stage 1 \$25M (2028)	Pipeline 15-30 years Stage 2 \$25M (2031)	Pipeline 15-30 years Stage 3 \$25M (2034)	Pipeline 15-30 years Stage 4 \$25M (2037)	New Debt Service	Reduction of Existing Debt	Net New Debt	PMO LTCP Costs	PMO Operating Costs	Increased Chester plant costs	Future debt service + Costs	Pro-Rated Future Debt & Costs	Rate increase to cover debt & costs	New Base Rate	Total rate cost	Yearly Percentage Increase	Annual residential cost per 70,000 gal/year	Total Flow (1,000 gal)	Projected Revenue		
2018	\$11,446,688																	\$0	\$0	\$0	\$776,461			\$776,461	20,089	\$0.04	\$2.32	\$2.32	\$2.32	\$162.40	484,451	\$1,321,826	484,451	\$1,321,826
2019	\$11,667,740			\$803,200										\$803,200				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513			\$1,107,513	28,657	\$0.06	\$2.51	\$2.51	\$2.51	\$175.70	484,451	\$1,331,871	484,451	\$1,331,871
2020	\$11,648,846			\$1,243,875										\$1,243,875				\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,118	\$2.88	\$2.81	11.85%	\$196.45	484,451	\$1,350,557	484,451	\$1,350,557	
2021	\$11,672,138			\$1,243,875										\$1,243,875				\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2022	\$11,063,664			\$1,243,875										\$1,243,875				\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2023	\$11,063,664			\$1,243,875	\$619,500									\$1,243,875	\$619,500			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2024	\$11,063,664			\$1,243,875	\$1,243,875									\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2025	\$11,075,988			\$1,243,875	\$1,243,875	\$624,625		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2026	\$11,065,617			\$1,243,875	\$1,243,875	\$1,243,875		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2027	\$11,061,546			\$1,243,875	\$1,243,875	\$1,243,875		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2028	\$11,065,617			\$1,243,875	\$1,243,875	\$1,243,875		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2029	\$11,060,921			\$1,243,875	\$1,243,875	\$1,243,875		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2030	\$11,062,959			\$1,243,875	\$1,243,875	\$1,243,875		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2031	\$10,921,566			\$1,243,875	\$1,243,875	\$1,243,875		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2032	\$10,921,566			\$1,243,875	\$1,243,875	\$1,243,875		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2033	\$10,921,566			\$1,243,875	\$1,243,875	\$1,243,875		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2034	\$6,218,616			\$1,243,875	\$1,243,875	\$1,243,875		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2035	\$6,218,616			\$1,243,875	\$1,243,875	\$1,243,875		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2036	\$6,218,616			\$1,243,875	\$1,243,875	\$1,243,875		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2037	\$6,000,375			\$1,243,875	\$1,243,875	\$1,243,875		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2038	\$5,999,680			\$1,243,875	\$1,243,875	\$1,243,875		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2039	\$5,999,680			\$1,243,875	\$1,243,875	\$1,243,875		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2040	\$5,999,680			\$1,243,875	\$1,243,875	\$1,243,875		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2041	\$5,999,680			\$1,243,875	\$1,243,875	\$1,243,875		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	
2042	\$5,997,138			\$1,243,875	\$1,243,875	\$1,243,875		\$1,243,875						\$1,243,875	\$1,243,875			\$2,487,750	\$1,512	\$2,489,262	\$1,107,513			\$1,107,513	30,119	\$2.76	\$2.95	12.55%	\$206.75	484,451	\$1,400,881	484,451	\$1,400,881	

Purpose: This tab generates the annual rate costs (avg bill) assuming that ESA is redirected to W RTP and Chester's LTCP costs \$50M.

Year Ending	Existing Debt Service	ESA Bond 1 Estimated Debt Service \$70M (2020)	Chester LTCP 1 Estimated Debt Service \$25M (2020)	ESA Bond 2 Estimated Debt Service \$200M (2023)	Chester LTCP 2 Estimated Debt Service \$25M (2023)	ESA Bond 3 Estimated Debt Service \$170M (2025)	Chester LTCP 3 Estimated Debt Service \$170M (2025)	20 Year Capital Plan \$50M (2025)	20 Year Capital Plan \$50M (2028)	20 Year Capital Plan \$50M (2031)	20 Year Capital Plan \$50M (2034)	20 Year Capital Plan \$50M (2037)	20 Year Capital Plan \$50M (2040)	Pipeline 15-30 years Stage 1 \$25M (2028)	Pipeline 15-30 years Stage 2 \$25M (2031)	Pipeline 15-30 years Stage 3 \$25M (2034)	Pipeline 15-30 years Stage 4 \$25M (2037)	New Debt Service	Reduction of Existing Debt	Net New Debt	PMO LTCP Costs	PMO Operating Costs	Increased Chester plant costs	Future debt service + Costs	Pre-Rated Future Debt & Costs	Rate Increase to cover debt & costs	New Base Rate	Total rate cost	Yearly Percentage Increase	Annual residential cost per 70,000 gal/year	Total Flow (1,000 gal)	Projected Revenue
2018	\$11,467,400																	\$0	\$776,401	\$0	\$776,401		\$776,401	6,860	\$0.04	\$2.32	\$2.32	\$2.32	\$162.40	165,422	\$381,379	
2019	\$11,467,400													\$688,500	\$1,243,875	\$1,243,875	\$1,243,875	\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	9,785	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	165,422	\$431,210		
2020	\$11,468,246		\$809,200											\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	20,749	\$0.13	\$2.88	\$2.81	12.85%	\$196.45	165,422	\$468,239		
2021	\$11,677,138		\$1,243,875											\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	31,797	\$0.19	\$2.76	\$2.55	2.25%	\$206.75	165,422	\$488,597		
2022	\$11,063,664		\$1,243,875											\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	42,845	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$549,044		
2023	\$11,063,664		\$1,243,875		\$619,500									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	53,893	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$579,455		
2024	\$11,066,337		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	64,941	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$609,866		
2025	\$11,075,985		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	75,989	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$640,277		
2026	\$11,085,671		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	87,037	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$670,688		
2027	\$11,095,357		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	98,085	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$701,099		
2028	\$11,105,043		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	109,133	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$731,510		
2029	\$11,114,729		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	120,181	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$761,921		
2030	\$11,124,415		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	131,229	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$792,332		
2031	\$11,134,101		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	142,277	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$822,743		
2032	\$11,143,787		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	153,325	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$853,154		
2033	\$11,153,473		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	164,373	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$883,565		
2034	\$11,163,159		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	175,421	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$913,976		
2035	\$11,172,845		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	186,469	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$944,387		
2036	\$11,182,531		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	197,517	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$974,798		
2037	\$11,192,217		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	208,565	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$1,005,209		
2038	\$11,201,903		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	219,613	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$1,035,620		
2039	\$11,211,589		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	230,661	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$1,066,031		
2040	\$11,221,275		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	241,709	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$1,096,442		
2041	\$11,230,961		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	252,757	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$1,126,853		
2042	\$11,240,647		\$1,243,875		\$1,243,875									\$1,243,875	\$1,243,875	\$1,243,875	\$1,243,875	\$1,247,750	\$1,532	\$2,491,242	\$1,107,513	\$1,107,513	263,805	\$0.17	\$2.84	\$3.32	12.37%	\$232.33	165,422	\$1,157,264		

[illegible]

[illegible]

Purpose: This tab generates the annual rate costs (avg bill) assuming that ESA is redirected to W RTP and Chester's LTCP costs \$50M.

Year Ending	Existing Debt Service	ESA Bond 1 Estimated Debt Service \$70M (2020)	Chester LTCP 1 Estimated Debt Service \$25M (2020)	ESA Bond 2 Estimated Debt Service \$200M (2023)	Chester LTCP 2 Estimated Debt Service \$25M (2023)	ESA Bond 3 Estimated Debt Service \$170M (2025)	Chester LTCP 3 Estimated Debt Service \$25M (2025)	20 Year Capital Plan Plan 1 \$50M (2025)	20 Year Capital Plan Plan 2 \$50M (2028)	20 Year Capital Plan Plan 3 \$50M (2031)	20 Year Capital Plan Plan 4 \$50M (2034)	20 Year Capital Plan Plan 5 \$50M (2037)	20 Year Capital Plan Plan 6 \$50M (2040)	Pipeline 15-30 years Stage 1 \$25M (2028)	Pipeline 15-30 years Stage 2 \$25M (2031)	Pipeline 15-30 years Stage 3 \$25M (2034)	Pipeline 15-30 years Stage 4 \$25M (2037)	New Debt Service	Reduction of Existing Debt	Net New Debt	PMO LTCP Costs	PMO Operating Costs	Increased Chester plant costs	Future debt service + Costs	Pre-Rated Future Debt & Costs	Rate increase to cover debt & costs	New Base Rate	Total rate cost	Yearly Percentage Increase	Annual residential cost per 70,000 gal/year	Total Flow (1,000 gal)	Projected Revenue	
2018	\$11,446,688																	\$0	\$0	\$0	\$776,401			\$776,401	214,653	\$0.04	\$2.32	\$2.32		\$162.40	570,444	\$1,321,430	
2019	\$11,667,740																	\$0	\$1,239,000	\$1,244	\$1,240,244	\$1,107,513			\$1,107,513	31,744	\$0.06	\$2.51	\$2.51	8.19%	\$175.70	570,444	\$1,431,814
2020	\$11,686,846			\$803,200														\$1,243,875	\$2,347,757	71,532	\$1,107,513			\$1,107,513	30,118	\$2.08	\$2.81	12.85%	\$196.45	570,444	\$1,608,087		
2021	\$11,677,138			\$1,243,875														\$1,243,875	\$3,598,775	109,148	\$1,107,513			\$1,107,513	50,139	\$2.76	\$2.95	5.25%	\$206.75	570,444	\$1,684,084		
2022	\$11,063,664			\$1,243,625														\$2,487,250	\$488,494	\$1,878,756	\$7,010,443			\$8,889,199	270,837	\$0.47	\$2.84	\$3.32	12.37%	\$232.33	570,444	\$1,893,331	
2023	\$11,061,064			\$1,243,375		\$619,500												\$3,725,750	\$1,600	\$7,723,146	\$7,010,443			\$10,793,583	327,032	\$0.57	\$2.83	\$3.50	5.54%	\$242.30	570,444	\$1,998,203	
2024	\$11,066,337			\$1,243,125		\$1,243,875												\$4,974,000	\$3,263	\$4,976,263	\$7,010,443			\$11,989,706	363,304	\$0.64	\$3.02	\$3.66	4.42%	\$256.05	570,444	\$2,086,607	
2025	\$11,075,983			\$1,242,875		\$1,243,625		\$624,625		\$1,245,250								\$1,242,875	\$1,243,625	\$7,556	\$6,854,433	\$13,144,581			\$19,999,012	609,332	\$1.07	\$3.11	\$4.18	14.17%	\$292.33	570,444	\$2,382,275
2026	\$11,065,671			\$1,242,625		\$1,243,375		\$1,614,875		\$1,229,750								\$1,242,625	\$1,243,375	\$619,500	\$10,469,125	\$13,144,581			\$23,572,494	718,209	\$1.26	\$3.30	\$4.46	8.80%	\$312.22	570,444	\$2,564,540
2027	\$11,061,546			\$1,242,375		\$1,243,125		\$1,605,875		\$1,211,750								\$1,242,375	\$1,243,125	\$1,243,875	\$13,144,581			\$24,172,956	736,504	\$1.29	\$3.30	\$4.59	2.87%	\$321.19	570,444	\$2,637,419	
2028	\$11,058,421			\$1,242,125		\$1,242,875		\$1,606,125		\$1,212,250		\$1,249,250						\$1,242,125	\$1,242,875	\$1,243,625	\$13,144,581			\$25,496,781	1,081,581	\$1.30	\$3.40	\$5.29	15.34%	\$370.46	570,444	\$3,016,923	
2029	\$11,060,921			\$1,241,875		\$1,242,625		\$1,605,375		\$1,210,750		\$1,229,750						\$1,241,875	\$1,242,625	\$1,243,375	\$619,500			\$14,680,230	\$23,220,666	\$2.04	\$3.50	\$5.53	4.55%	\$387.22	570,444	\$3,155,325	
2030	\$11,062,959			\$1,241,625		\$1,242,375		\$1,608,500		\$1,217,000		\$1,211,750						\$1,241,625	\$1,242,375	\$1,243,125	\$1,243,875			\$15,492,250	\$23,220,666	\$2.07	\$3.60	\$5.67	2.49%	\$396.96	570,444	\$3,234,898	
2031	\$10,921,566			\$1,241,375		\$1,242,125		\$1,600,625		\$1,201,250		\$1,243,250		\$1,249,250				\$1,241,375	\$1,242,125	\$1,242,875	\$1,243,625			\$16,716,875	\$44,1454	\$2.68	\$3.71	\$6.39	12.65%	\$447.19	570,444	\$3,644,237	
2032	\$10,921,858			\$1,241,125		\$1,241,875		\$1,606,625		\$1,213,250		\$1,235,750		\$1,229,750				\$1,241,125	\$1,241,875	\$1,242,625	\$1,243,375			\$18,303,721	\$33,550,794	\$2.77	\$3.82	\$6.59	3.19%	\$461.44	570,444	\$3,780,405	
2033	\$10,920,723			\$1,240,875		\$1,241,625		\$1,611,125		\$1,222,250		\$1,217,000		\$1,211,750				\$1,240,875	\$1,241,625	\$1,242,375	\$1,243,125			\$18,712,625	\$13,144,581	\$2.79	\$3.94	\$6.73	2.07%	\$470.97	570,444	\$3,838,061	
2034	\$6,218,475			\$1,157,125		\$1,241,375		\$1,609,250		\$1,218,000		\$1,201,250		\$1,249,250				\$1,157,125	\$1,241,375	\$1,242,125	\$1,242,875			\$21,772,500	\$4,246,250	\$3.30	\$4.06	\$7.38	9.32%	\$514.87	570,444	\$4,109,811	
2035	\$6,218,600			\$1,158,625		\$1,241,125		\$1,606,125		\$1,212,250		\$1,213,750		\$1,229,750				\$1,158,625	\$1,241,125	\$1,241,875	\$1,242,625			\$23,764,125	\$475	\$3.75	\$4.18	\$7.81	6.19%	\$546.75	570,444	\$4,405,608	
2036	\$6,241,900			\$1,157,625		\$1,240,875		\$1,606,625		\$1,213,250		\$1,222,250		\$1,211,750				\$1,157,625	\$1,240,875	\$1,241,625	\$1,242,375			\$23,764,125	\$44,280,540	\$3.63	\$4.30	\$7.84	1.63%	\$555.54	570,444	\$4,527,209	
2037	\$6,900,275			\$1,159,000		\$1,237,125		\$1,610,500		\$1,221,000		\$1,218,500		\$1,212,250				\$1,159,000	\$1,237,125	\$1,241,375	\$1,242,125			\$26,828,500	\$241,625	\$2.75	\$4.43	\$8.84	11.41%	\$618.92	570,444	\$5,041,099	
2038	\$5,999,900			\$1,157,625		\$1,236,625		\$1,612,625		\$1,225,250		\$1,213,250		\$1,229,750				\$1,157,625	\$1,236,625	\$1,241,125	\$1,241,875			\$28,813,375	\$175	\$3.75	\$5.89	\$9.09	2.85%	\$636.59	570,444	\$5,187,563	
2039	\$5,999,680			\$1,158,875		\$1,157,625		\$1,608,125		\$1,216,250		\$1,213,250		\$1,217,000				\$1,158,875	\$1,157,625	\$1,240,875	\$1,241,625			\$28,802,875	\$55,992,204	\$4.53	\$4.70	\$9.23	1.50%	\$646.11	570,444	\$5,262,395	
2040	\$5,999,025			\$1,161,000		\$1,161,750		\$1,616,750		\$1,213,000		\$1,218,500		\$1,210,750				\$1,161,000	\$1,161,750	\$1,240,875	\$1,241,625			\$30,990,375	\$68,428,881	\$5.31	\$4.84	\$10.15	9.99%	\$710.66	570,444	\$5,791,904	
2041	\$5,999,000			\$1,158,500		\$1,157,625		\$1,603,625		\$1,207,250		\$1,212,250		\$1,213,250				\$1,158,500	\$1,157,625	\$1,238,500	\$1,241,125			\$32,508,125	\$975	\$5.56	\$4.99	\$10.55	3.89%	\$738.30	570,444	\$6,034,375	
2042	\$5,997,138			\$1,158,375		\$1,163,625		\$1,613,625		\$1,227,250		\$1,213,250		\$1,222,250				\$1,158,375	\$1,163,625	\$1,157,625	\$1,240,875			\$32,508,125	\$900	\$5.71	\$5.14	\$10.85	2.87%	\$759.50	570,444	\$6,189,331	

Purpose: This tab generates the annual rate costs (avg bill) assuming that ESA is redirected to W RTP and Chester's LTCP costs \$50M.

Year Ending	Existing Debt Service \$70M (2020)	ESA Bond 1 Estimated Debt Service \$25M (2020)	Chester LTCP 1 Estimated Debt Service \$25M (2020)	ESA Bond 2 Estimated Debt Service \$200M (2023)	Chester LTCP 2 Estimated Debt Service \$25M (2023)	ESA Bond 3 Estimated Debt Service \$170M (2025)	Chester LTCP 3 Estimated Debt Service \$25M (2025)	20 Year Capital Plan Stage 1 \$50M (2025)	20 Year Capital Plan Stage 2 \$50M (2028)	20 Year Capital Plan Stage 3 \$50M (2031)	20 Year Capital Plan Stage 4 \$50M (2034)	20 Year Capital Plan Stage 5 \$50M (2037)	20 Year Capital Plan Stage 6 \$50M (2040)	Pipeline 15-30 years Stage 1 \$25M (2028)	Pipeline 15-30 years Stage 2 \$25M (2031)	Pipeline 15-30 years Stage 3 \$25M (2034)	Pipeline 15-30 years Stage 4 \$25M (2037)	New Debt Service	Reduction of Existing Debt	Net New Debt	PMO LTCP Costs	PMO Operating Costs	Increased Chester plant costs	Future debt service + Costs	Pro-Rated Future Debt & Costs	Rate increase to cover debt & costs	New Base Rate	Total rate cost	Yearly Percentage Increase	Annual residential cost per 70,000 gal/year	Total Flow (1,000 gal)	Projected Revenue		
2018	\$11,467,400													\$89,000	\$776,401	\$1,340,244	\$1,107,513	\$0	\$0	\$0	\$776,401			\$776,401	6,669	\$0.04	\$2.32	\$2.32		\$162.40	160,827	\$371,119		
2019	\$11,667,400													\$1,239,000	\$1,243,875	\$1,240,244	\$1,107,513	\$0	\$0	\$0	\$1,107,513			\$1,107,513	9,534	\$0.06	\$2.51	\$2.51	8.19%	\$175.70	160,827	\$400,676		
2020	\$11,686,846		\$809,200											\$1,243,875	\$1,243,875	\$2,492,244	\$1,107,513	\$2,247,757	\$0	\$0	\$0	\$3,598,775			\$3,598,775	30,913	\$0.10	\$2.76	\$2.95	5.25%	\$206.75	160,827	\$475,023	
2021	\$11,677,118		\$1,243,875											\$1,243,625	\$1,243,625	\$1,878,756	\$7,010,443	\$8,889,199	\$0	\$0	\$0	\$7,010,443			\$7,010,443	76,358	\$0.47	\$2.84	\$3.32	12.37%	\$232.33	160,827	\$533,793	
2022	\$11,063,664													\$1,243,375	\$1,243,375	\$5,270,750	\$1,000	\$1,243,375	\$0	\$0	\$0	\$7,000,443			\$7,000,443	92,201	\$0.57	\$2.93	\$3.50	5.54%	\$242.30	160,827	\$583,359	
2023	\$11,061,064			\$619,500										\$1,243,125	\$1,243,125	\$4,974,000	\$7,010,443	\$1,243,375	\$0	\$0	\$0	\$4,979,263			\$4,979,263	102,991	\$0.64	\$3.02	\$3.66	4.42%	\$256.05	160,827	\$588,284	
2024	\$11,066,317			\$1,243,125										\$1,242,875	\$1,242,875	\$5,946,875	\$1,134,581	\$1,242,875	\$0	\$0	\$0	\$5,854,443			\$5,854,443	113,144	\$1.07	\$3.11	\$4.18	14.17%	\$282.33	160,827	\$671,642	
2025	\$11,075,983			\$1,242,875										\$1,242,625	\$1,242,625	\$6,916,125	\$1,134,581	\$1,242,625	\$619,500	\$0	\$0	\$0	\$6,879,713			\$6,879,713	133,144	\$1.26	\$3.20	\$4.46	8.80%	\$312.22	160,827	\$771,394
2026	\$11,065,617			\$1,242,625										\$1,242,375	\$1,242,375	\$7,916,125	\$1,134,581	\$1,242,375	\$0	\$0	\$0	\$7,000,443			\$7,000,443	153,144	\$1.29	\$3.30	\$4.59	2.87%	\$321.19	160,827	\$797,937	
2027	\$11,061,546			\$1,242,375										\$1,242,125	\$1,242,125	\$8,921,250	\$1,134,581	\$1,242,125	\$0	\$0	\$0	\$7,000,443			\$7,000,443	173,220	\$1.30	\$3.40	\$5.29	15.34%	\$370.46	160,827	\$851,135	
2028	\$11,058,421			\$1,242,125										\$1,241,875	\$1,241,875	\$9,946,125	\$1,134,581	\$1,241,875	\$619,500	\$0	\$0	\$0	\$7,000,443			\$7,000,443	193,220	\$1.34	\$3.50	\$5.53	4.55%	\$387.22	160,827	\$889,873
2029	\$11,060,921			\$1,241,875										\$1,241,625	\$1,241,625	\$10,971,250	\$1,134,581	\$1,241,625	\$0	\$0	\$0	\$7,000,443			\$7,000,443	213,220	\$1.39	\$3.60	\$5.67	2.49%	\$396.96	160,827	\$912,025	
2030	\$11,062,959			\$1,241,625										\$1,241,375	\$1,241,375	\$12,006,250	\$1,134,581	\$1,241,375	\$619,500	\$0	\$0	\$0	\$7,000,443			\$7,000,443	233,220	\$1.44	\$3.71	\$6.39	12.65%	\$447.19	160,827	\$1,027,433
2031	\$10,921,566			\$1,241,375										\$1,241,125	\$1,241,125	\$13,041,250	\$1,134,581	\$1,241,125	\$0	\$0	\$0	\$7,000,443			\$7,000,443	253,220	\$1.49	\$3.82	\$6.59	3.19%	\$461.44	160,827	\$1,060,183	
2032	\$10,921,858			\$1,241,125										\$1,240,875	\$1,240,875	\$14,081,250	\$1,134,581	\$1,240,875	\$0	\$0	\$0	\$7,000,443			\$7,000,443	273,220	\$1.54	\$3.94	\$6.73	2.07%	\$470.97	160,827	\$1,082,077	
2033	\$6,218,475			\$1,237,125										\$1,240,625	\$1,240,625	\$15,121,250	\$1,134,581	\$1,240,625	\$0	\$0	\$0	\$7,000,443			\$7,000,443	293,220	\$1.59	\$4.06	\$7.36	9.32%	\$514.87	160,827	\$1,182,940	
2034	\$6,218,600			\$1,236,625										\$1,240,375	\$1,240,375	\$16,161,250	\$1,134,581	\$1,240,375	\$0	\$0	\$0	\$7,000,443			\$7,000,443	313,220	\$1.64	\$4.18	\$7.81	6.19%	\$546.75	160,827	\$1,254,184	
2035	\$6,241,900			\$1,237,625										\$1,240,125	\$1,240,125	\$17,201,250	\$1,134,581	\$1,240,125	\$0	\$0	\$0	\$7,000,443			\$7,000,443	333,220	\$1.69	\$4.30	\$7.84	1.63%	\$555.54	160,827	\$1,276,971	
2036	\$6,900,275			\$1,237,125										\$1,239,875	\$1,239,875	\$18,241,250	\$1,134,581	\$1,239,875	\$0	\$0	\$0	\$7,000,443			\$7,000,443	353,220	\$1.74	\$4.43	\$8.84	11.41%	\$618.92	160,827	\$1,421,966	
2037	\$5,999,900			\$1,237,625										\$1,239,625	\$1,239,625	\$19,281,250	\$1,134,581	\$1,239,625	\$0	\$0	\$0	\$7,000,443			\$7,000,443	373,220	\$1.79	\$4.56	\$9.09	2.85%	\$636.59	160,827	\$1,462,375	
2038	\$5,999,600			\$1,238,375										\$1,239,375	\$1,239,375	\$20,321,250	\$1,134,581	\$1,239,375	\$0	\$0	\$0	\$7,000,443			\$7,000,443	393,220	\$1.84	\$4.69	\$9.32	1.50%	\$658.92	160,827	\$1,503,823	
2039	\$5,999,025			\$1,238,000										\$1,239,125	\$1,239,125	\$21,361,250	\$1,134,581	\$1,239,125	\$1,249,500	\$0	\$0	\$0	\$7,000,443			\$7,000,443	413,220	\$1.89	\$4.81	\$9.59	1.50%	\$681.11	160,827	\$1,545,375
2040	\$5,999,000			\$1,238,500										\$1,238,875	\$1,238,875	\$22,401,250	\$1,134,581	\$1,238,875	\$1,249,500	\$0	\$0	\$0	\$7,000,443			\$7,000,443	433,220	\$1.94	\$4.94	\$9.88	1.50%	\$703.30	160,827	\$1,586,875
2041	\$5,999,000			\$1,239,000										\$1,239,375	\$1,239,375	\$23,441,250	\$1,134,581	\$1,239,375	\$1,249,500	\$0	\$0	\$0	\$7,000,443			\$7,000,443	453,220	\$1.99	\$5.04	\$10.07	1.50%	\$725.49	160,827	\$1,627,875
2042	\$5,997,118			\$1,238,500										\$1,239,875	\$1,239,875	\$24,481,250	\$1,134,581	\$1,239,875	\$1,249,500	\$0	\$0	\$0	\$7,000,443			\$7,000,443	473,220	\$2.04	\$5.14	\$10.15	2.87%	\$747.69	160,827	\$1,674,978

Purpose: This tab generates the annual rate costs (avg bill) assuming that ESA is redirected to W RTP and Chester's LTCP costs \$50M.

Year Ending	Existing Debt Service \$70M (2020)	ESA Bond 1 Estimated Debt Service \$25M (2020)	Chester LTCP 1 Estimated Debt Service \$25M (2020)	ESA Bond 2 Estimated Debt Service \$200M (2023)	Chester LTCP 2 Estimated Debt Service \$25M (2023)	ESA Bond 3 Estimated Debt Service \$170M (2025)	Chester LTCP 3 Estimated Debt Service \$170M (2025)	20 Year Capital Plan Stage 1 \$50M (2025)	20 Year Capital Plan Stage 2 \$50M (2028)	20 Year Capital Plan Stage 3 \$50M (2031)	20 Year Capital Plan Stage 4 \$50M (2034)	20 Year Capital Plan Stage 5 \$50M (2037)	20 Year Capital Plan Stage 6 \$50M (2040)	Pipeline 15-30 years Stage 1 \$25M (2028)	Pipeline 15-30 years Stage 2 \$25M (2031)	Pipeline 15-30 years Stage 3 \$25M (2034)	Pipeline 15-30 years Stage 4 \$25M (2037)	New Debt Service	Reduction of Existing Debt	Net New Debt	PWD LTCP Costs	PWD Operating Costs	Increased Chester plant costs	Future debt service + costs	Pro-Rated Future Debt & Costs	Rate increase to cover debt & costs	New Base Rate	Total rate cost	Yearly Percentage Increase	Annual residential cost per 70,000 gal/year	Total Flow (1,000 gal)	Projected Revenue
2018	\$11,446,688																	\$0	\$776,401	\$13,979	\$776,401	13,979	\$0.04	\$2.32	\$2.32	\$2.32	8.18%	\$175.70	385,329	\$967,175		
2019	\$11,667,400			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2020	\$11,686,846			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2021	\$11,677,138			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2022	\$11,663,664			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2023	\$11,661,064			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2024	\$11,666,337			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2025	\$11,673,883			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2026	\$11,665,671			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2027	\$11,661,546			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2028	\$11,656,421			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2029	\$11,650,921			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2030	\$11,642,629			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2031	\$11,631,566			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2032	\$11,609,898			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2033	\$11,605,929			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2034	\$11,591,875			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2035	\$11,578,625			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2036	\$11,565,166			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2037	\$11,550,207			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2038	\$11,534,800			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2039	\$11,518,950			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2040	\$11,502,650			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2041	\$11,486,000			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	
2042	\$11,469,138			\$619,500										\$619,500				\$0	\$1,299,000	\$1,344	\$1,244,244	\$1,107,513	\$1,107,513	22,794	\$0.06	\$2.51	\$2.51	8.18%	\$175.70	385,329	\$967,175	

[illegible]

Purpose: This tab generates the annual rate costs (avg bill) assuming that ESA is redirected to W RTP and Chester's LTCP costs \$50M.

Year Ending	Existing Debt Service	ESA Bond 1 Estimated Debt Service \$70M (2020)	Chester LTCP 1 Estimated Debt Service \$25M (2020)	ESA Bond 2 Estimated Debt Service \$200M (2023)	Chester LTCP 2 Estimated Debt Service \$25M (2023)	ESA Bond 3 Estimated Debt Service \$170M (2025)	Chester LTCP 3 Estimated Debt Service \$25M (2025)	20 Year Capital Plan Stage 1 \$50M (2025)	20 Year Capital Plan Stage 2 \$50M (2028)	20 Year Capital Plan Stage 3 \$50M (2031)	20 Year Capital Plan Stage 4 \$50M (2034)	20 Year Capital Plan Stage 5 \$50M (2037)	20 Year Capital Plan Stage 6 \$50M (2040)	Pipeline 15-30 years Stage 1 \$25M (2028)	Pipeline 15-30 years Stage 2 \$25M (2031)	Pipeline 15-30 years Stage 3 \$25M (2034)	Pipeline 15-30 years Stage 4 \$25M (2037)	New Debt Service	Reduction of Existing Debt	Net New Debt	PMO LTCP Costs	PMO Operating Costs	Increased Chester plant costs	Future debt service + Costs	Pre-Rated Future Debt & Costs	Rate increase to cover debt & costs	New Base Rate	Total rate cost	Yearly Percentage Increase	Annual residential cost per 70,000 gal/year	Total Flow (1,000 gal)	Projected Revenue
2018	\$11,467,400																	\$0	\$0	\$0	\$776,401	\$0	\$776,401	\$1,107,513	\$1,107,513	\$0.04	\$2.32	\$2.32	8.18%	\$175.70	2,176,746	\$6,461,682
2019	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2020	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2021	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2022	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2023	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2024	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2025	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2026	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2027	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2028	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2029	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2030	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2031	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2032	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2033	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2034	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2035	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2036	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2037	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2038	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2039	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2040	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2041	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682
2042	\$11,467,400			\$619,500										\$619,500				\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$2.51	\$2.51	12.37%	\$176.79	2,176,746	\$6,461,682

[illegible]

[illegible]

County Exhibit No. SCF-3

Purpose: This tab generates the annual rate costs (avg bill) assuming that ESA is redirected to W RTP and Chester's LTCP costs \$50M.

Year Ending	Existing Debt Service	ESA Bond 1 Estimated Debt Service \$70M (2020)	Chester LTCP 1 Estimated Debt Service \$25M (2020)	ESA Bond 2 Estimated Debt Service \$200M (2023)	Chester LTCP 2 Estimated Debt Service \$25M (2023)	ESA Bond 3 Estimated Debt Service \$170M (2025)	Chester LTCP 3 Estimated Debt Service \$25M (2025)	Plan - Stage 1 \$50M (2025)	Plan - Stage 2 \$50M (2028)	Plan - Stage 3 \$50M (2031)	Plan - Stage 4 \$50M (2034)	Plan - Stage 5 \$50M (2037)	Plan - Stage 6 \$50M (2040)	Pipeline 15-30 years Stage 1 \$25M (2028)	Pipeline 15-30 years Stage 2 \$25M (2031)	Pipeline 15-30 years Stage 3 \$25M (2034)	Pipeline 15-30 years Stage 4 \$25M (2037)	New Debt Service	Reduction of Existing Debt	Net New Debt	PMO LTCP Costs	PMO Operating Costs	Increased Chester plant costs	Future debt service + Costs	Pro-Rated Future Debt & Costs	Rate increase to cover debt & costs	New Base Rate	Total rate cost	Yearly Percentage Increase	Annual residential cost per 70,000 gal/year	Total Flow (1,000 gal)	Projected Revenue
2018	\$11,446,688																	\$0	\$0	\$0	\$776,401	\$776,401	\$10,772,83	\$1,674,401	\$0.04	\$2.46	\$2.46	\$2.46	10.40%	\$190.12	740,992	\$1,823,899
2019	\$11,467,400			\$619,500										\$619,500				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,661,882	\$1,554,371	\$0.06	\$2.66	\$2.72	\$2.72	9.29%	\$199.11	740,992	\$2,031,499
2020	\$11,488,246			\$1,243,875										\$1,243,875				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,598,775	\$1,491,288	\$0.10	\$2.93	\$3.12	\$3.12	11.87%	\$244.55	740,992	\$2,286,567
2021	\$11,507,138			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,589,199	\$1,482,710	\$0.17	\$3.48	\$4.13	\$4.13	14.83%	\$384.80	740,992	\$2,673,362
2022	\$11,523,664			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,579,263	\$1,473,783	\$0.26	\$4.46	\$5.24	\$5.24	18.00%	\$565.87	740,992	\$3,239,486
2023	\$11,538,064			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,569,699	\$1,464,945	\$0.39	\$5.49	\$6.49	\$6.49	21.00%	\$793.12	740,992	\$3,932,602
2024	\$11,550,337			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,559,922	\$1,456,107	\$0.54	\$6.99	\$8.19	\$8.19	23.00%	\$1,041.18	740,992	\$4,773,759
2025	\$11,561,983			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,549,956	\$1,447,169	\$0.72	\$8.54	\$9.94	\$9.94	24.00%	\$1,311.36	740,992	\$5,793,337
2026	\$11,572,917			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,539,899	\$1,437,231	\$0.94	\$10.24	\$11.84	\$11.84	24.00%	\$1,603.71	740,992	\$6,942,724
2027	\$11,583,246			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,529,749	\$1,427,081	\$1.20	\$12.09	\$13.89	\$13.89	24.00%	\$1,918.00	740,992	\$8,239,486
2028	\$11,593,021			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,519,599	\$1,416,931	\$1.50	\$14.09	\$16.09	\$16.09	24.00%	\$2,254.18	740,992	\$9,693,362
2029	\$11,602,350			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,509,449	\$1,406,781	\$1.84	\$16.34	\$18.54	\$18.54	24.00%	\$2,719.36	740,992	\$11,314,759
2030	\$11,611,229			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,499,299	\$1,396,631	\$2.24	\$19.14	\$21.54	\$21.54	24.00%	\$3,316.54	740,992	\$13,146,246
2031	\$11,619,658			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,489,149	\$1,386,481	\$2.69	\$22.49	\$25.09	\$25.09	24.00%	\$4,054.71	740,992	\$15,207,633
2032	\$11,627,737			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,479,000	\$1,376,331	\$3.19	\$26.49	\$29.29	\$29.29	24.00%	\$4,942.90	740,992	\$17,519,520
2033	\$11,635,566			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,468,850	\$1,366,181	\$3.74	\$31.14	\$34.14	\$34.14	24.00%	\$5,994.09	740,992	\$20,181,407
2034	\$11,643,145			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,458,700	\$1,356,031	\$4.34	\$36.44	\$39.64	\$39.64	24.00%	\$7,229.27	740,992	\$23,142,294
2035	\$11,650,574			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,448,550	\$1,345,881	\$4.99	\$42.44	\$45.84	\$45.84	24.00%	\$8,670.46	740,992	\$26,513,181
2036	\$11,657,853			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,438,400	\$1,335,731	\$5.69	\$49.44	\$52.94	\$52.94	24.00%	\$10,349.65	740,992	\$30,384,068
2037	\$11,664,982			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,428,250	\$1,325,581	\$6.44	\$57.44	\$60.94	\$60.94	24.00%	\$12,300.84	740,992	\$34,734,955
2038	\$11,671,911			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,418,100	\$1,315,431	\$7.24	\$66.44	\$69.94	\$69.94	24.00%	\$14,562.03	740,992	\$39,685,842
2039	\$11,678,740			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,407,950	\$1,305,281	\$8.09	\$76.44	\$79.94	\$79.94	24.00%	\$17,177.22	740,992	\$45,256,729
2040	\$11,685,469			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,397,800	\$1,295,131	\$8.99	\$87.44	\$90.94	\$90.94	24.00%	\$20,192.41	740,992	\$51,567,616
2041	\$11,692,198			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,387,650	\$1,285,000	\$9.94	\$99.44	\$102.94	\$102.94	24.00%	\$23,657.60	740,992	\$58,528,503
2042	\$11,698,927			\$1,343,125										\$1,343,125				\$0	\$0	\$0	\$1,107,513	\$1,107,513	\$1,377,500	\$1,274,850	\$10.94	\$112.44	\$115.94	\$115.94	24.00%	\$27,532.79	740,992	\$66,269,390

Purpose: This tab generates the annual rate costs (avg bill) assuming that ESA is redirected to W RTP and Chester's LTCP costs \$50M.

Year Ending	Existing Debt Service \$70M (2020)	ESA Bond 1 Estimated Debt Service \$25M (2020)	Chester LTCP 1 Estimated Debt Service \$200M (2023)	ESA Bond 2 Estimated Debt Service \$200M (2023)	Chester LTCP 2 Estimated Debt Service \$25M (2023)	ESA Bond 3 Estimated Debt Service \$170M (2025)	Chester LTCP 3 Estimated Debt Service \$25M (2025)	20 Year Capital Plan \$50M (2025)	20 Year Capital Plan \$50M (2028)	20 Year Capital Plan \$50M (2031)	20 Year Capital Plan \$50M (2034)	20 Year Capital Plan \$50M (2037)	20 Year Capital Plan \$50M (2040)	Pipeline 15-30 years Stage 1 \$25M (2028)	Pipeline 15-30 years Stage 2 \$25M (2031)	Pipeline 15-30 years Stage 3 \$25M (2034)	Pipeline 15-30 years Stage 4 \$25M (2037)	New Debt Service	Reduction of Existing Debt	Net New Debt	PWD LTCP Costs	PWD Operating Costs	Increased Chester plant costs	Future debt service + Costs	Pro-Rated Future Debt & Costs	Rate Increase to cover debt & costs	New Base Rate	Total rate cost	Yearly Percentage Increase	Annual residential cost per 70,000 gal./year	Total Flow (1,000 gal)	Projected Revenue		
2018	\$11,446,688																	\$0	\$776,401	\$0	\$776,401	\$10,670,287	\$0.04	\$2.46	\$2.46	\$2.46	\$2.46	\$2.46	\$2.46	\$2.46	\$172.20	252,328	\$681,219	
2019	\$11,467,740																	\$0	\$1,239,080	\$0	\$1,239,080	\$10,670,287	\$0.06	\$2.66	\$2.66	\$2.66	\$2.66	\$2.66	\$2.66	\$2.66	\$180.12	252,328	\$688,454	
2020	\$11,488,804			\$619,500														\$1,241,075	\$1,241,075	\$1,241,075	\$1,241,075	\$10,670,287	\$0.10	\$2.84	\$2.84	\$2.84	\$2.84	\$2.84	\$2.84	\$2.84	\$190.77	252,328	\$700,547	
2021	\$11,507,138			\$1,243,875														\$2,487,750	\$1,512	\$2,489,262	\$1,512	\$10,670,287	\$0.13	\$3.12	\$3.12	\$3.12	\$3.12	\$3.12	\$3.12	\$3.12	\$218.42	252,328	\$717,957	
2022	\$11,063,664			\$1,243,625														\$2,487,250	\$688,454	\$1,798,796	\$7,010,443	\$10,670,287	\$0.17	\$3.49	\$3.49	\$3.49	\$3.49	\$3.49	\$3.49	\$3.49	\$244.55	252,328	\$735,891	
2023	\$11,061,064			\$1,243,375	\$619,500													\$5,270,750	\$1,600	\$7,223,146	\$7,010,443	\$10,670,287	\$0.17	\$3.68	\$3.68	\$3.68	\$3.68	\$3.68	\$3.68	\$3.68	\$257.58	252,328	\$753,230	
2024	\$11,066,317			\$1,243,125														\$1,243,125	\$1,243,875	\$4,979,263	\$7,010,443	\$10,670,287	\$0.17	\$3.84	\$3.84	\$3.84	\$3.84	\$3.84	\$3.84	\$3.84	\$268.80	252,328	\$766,696	
2025	\$11,070,388			\$1,242,875														\$1,242,875	\$1,243,625	\$5,946,875	\$7,010,443	\$10,670,287	\$0.17	\$3.99	\$3.99	\$3.99	\$3.99	\$3.99	\$3.99	\$3.99	\$280.46	252,328	\$779,844	
2026	\$11,065,617			\$1,242,625														\$1,242,625	\$1,243,375	\$6,914,437	\$619,500	\$10,670,287	\$0.17	\$4.15	\$4.15	\$4.15	\$4.15	\$4.15	\$4.15	\$4.15	\$292.44	252,328	\$792,844	
2027	\$11,061,546			\$1,242,375														\$1,242,375	\$1,243,125	\$7,882,000	\$4,125	\$11,028,375	\$13,44,581	\$1,29	\$5.30	\$4.79	\$4.79	\$4.79	\$4.79	\$4.79	\$4.79	\$304.80	252,328	\$805,644
2028	\$11,058,421			\$1,242,125														\$1,242,125	\$1,242,875	\$8,849,562	\$1,125	\$12,278,125	\$23,220,666	\$1,30	\$5.50	\$5.50	\$5.50	\$5.50	\$5.50	\$5.50	\$5.50	\$317.40	252,328	\$818,444
2029	\$11,050,921			\$1,241,875														\$1,241,875	\$1,242,625	\$9,817,125	\$1,500	\$14,080,250	\$23,220,666	\$1,30	\$5.70	\$5.70	\$5.70	\$5.70	\$5.70	\$5.70	\$5.70	\$330.40	252,328	\$831,244
2030	\$11,042,959			\$1,241,625														\$1,241,625	\$1,242,375	\$10,784,687	\$1,900	\$15,980,587	\$23,220,666	\$1,30	\$5.90	\$5.90	\$5.90	\$5.90	\$5.90	\$5.90	\$5.90	\$343.40	252,328	\$844,044
2031	\$10,931,566			\$1,241,375														\$1,241,375	\$1,242,125	\$11,752,250	\$2,300	\$17,880,900	\$23,220,666	\$1,30	\$6.10	\$6.10	\$6.10	\$6.10	\$6.10	\$6.10	\$6.10	\$356.40	252,328	\$856,844
2032	\$10,912,858			\$1,241,125														\$1,241,125	\$1,241,875	\$12,719,812	\$2,700	\$19,781,212	\$23,220,666	\$1,30	\$6.30	\$6.30	\$6.30	\$6.30	\$6.30	\$6.30	\$6.30	\$369.40	252,328	\$869,644
2033	\$10,905,725			\$1,240,875														\$1,240,875	\$1,241,625	\$13,687,375	\$3,100	\$21,681,525	\$23,220,666	\$1,30	\$6.50	\$6.50	\$6.50	\$6.50	\$6.50	\$6.50	\$6.50	\$382.40	252,328	\$882,444
2034	\$10,898,600			\$1,240,625														\$1,240,625	\$1,241,375	\$14,654,937	\$3,500	\$23,581,837	\$23,220,666	\$1,30	\$6.70	\$6.70	\$6.70	\$6.70	\$6.70	\$6.70	\$6.70	\$395.40	252,328	\$895,244
2035	\$10,891,475			\$1,240,375														\$1,240,375	\$1,241,125	\$15,622,500	\$3,900	\$25,482,150	\$23,220,666	\$1,30	\$6.90	\$6.90	\$6.90	\$6.90	\$6.90	\$6.90	\$6.90	\$408.40	252,328	\$908,044
2036	\$10,884,350			\$1,240,125														\$1,240,125	\$1,240,875	\$16,590,062	\$4,300	\$27,382,362	\$23,220,666	\$1,30	\$7.10	\$7.10	\$7.10	\$7.10	\$7.10	\$7.10	\$7.10	\$421.40	252,328	\$920,844
2037	\$10,877,225			\$1,239,875														\$1,239,875	\$1,240,625	\$17,557,625	\$4,700	\$29,282,575	\$23,220,666	\$1,30	\$7.30	\$7.30	\$7.30	\$7.30	\$7.30	\$7.30	\$7.30	\$434.40	252,328	\$933,644
2038	\$10,870,100			\$1,239,625														\$1,239,625	\$1,240,375	\$18,525,187	\$5,100	\$31,182,687	\$23,220,666	\$1,30	\$7.50	\$7.50	\$7.50	\$7.50	\$7.50	\$7.50	\$7.50	\$447.40	252,328	\$946,444
2039	\$10,862,975			\$1,239,375														\$1,239,375	\$1,240,125	\$19,492,750	\$5,500	\$33,082,850	\$23,220,666	\$1,30	\$7.70	\$7.70	\$7.70	\$7.70	\$7.70	\$7.70	\$7.70	\$460.40	252,328	\$959,244
2040	\$10,855,850			\$1,239,125														\$1,239,125	\$1,239,875	\$20,460,312	\$5,900	\$34,982,912	\$23,220,666	\$1,30	\$7.90	\$7.90	\$7.90	\$7.90	\$7.90	\$7.90	\$7.90	\$473.40	252,328	\$972,044
2041	\$10,848,725			\$1,238,875														\$1,238,875	\$1,239,625	\$21,427,875	\$6,300	\$36,883,075	\$23,220,666	\$1,30	\$8.10	\$8.10	\$8.10	\$8.10	\$8.10	\$8.10	\$8.10	\$486.40	252,328	\$984,844
2042	\$10,841,600			\$1,238,625														\$1,238,625	\$1,239,375	\$22,395,437	\$6,700	\$38,783,137	\$23,220,666	\$1,30	\$8.30	\$8.30	\$8.30	\$8.30	\$8.30	\$8.30	\$8.30	\$499.40	252,328	\$997,644

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Purpose: This tab generates the annual rate costs (avg bill) assuming that ESA is redirected to W RTP and Chester's LTCP costs \$50M.

Year Ending	Existing Debt Service \$70M (2020)	ESA Bond 1 Estimated Debt Service \$25M (2020)	Chester LTCP 1 Estimated Debt Service \$25M (2020)	ESA Bond 2 Estimated Debt Service \$200M (2023)	Chester LTCP 2 Estimated Debt Service \$25M (2023)	ESA Bond 3 Estimated Debt Service \$170M (2025)	Chester LTCP 3 Estimated Debt Service \$25M (2025)	20 Year Capital Plan Stage 1 \$50M (2025)	20 Year Capital Plan Stage 2 \$50M (2028)	20 Year Capital Plan Stage 3 \$50M (2031)	20 Year Capital Plan Stage 4 \$50M (2034)	20 Year Capital Plan Stage 5 \$50M (2037)	20 Year Capital Plan Stage 6 \$50M (2040)	Pipeline 15-30 years Stage 1 \$25M (2028)	Pipeline 15-30 years Stage 2 \$25M (2031)	Pipeline 15-30 years Stage 3 \$25M (2034)	Pipeline 15-30 years Stage 4 \$25M (2037)	New Debt Service	Reduction of Existing Debt	Net New Debt	PMO LTCP Costs	PMO Operating Costs	Increased Chester plant costs	Future debt service + costs	Pro-Rated Future Debt & Costs	Rate increase to cover debt & costs	New Base Rate	Total rate cost	Yearly Percentage Increase	Annual residential cost per 70,000 gal./year	Total Flow (1,000 gal.)	Projected Revenue			
2018	\$11,467,400																	\$0	\$776,401	\$0	\$1,107,513	\$776,401	\$15,441,08	\$1,107,513	\$15,441,08	\$0.04	\$3.00	\$3.00		\$3.00		\$3.00	\$10,000	\$10,000	\$10,000
2019	\$11,467,400			\$609,500										\$609,500				\$0	\$1,239,000	\$1,244	\$1,240,244	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.06	\$3.24	\$3.30	9.97%	\$230.94	\$14,600	\$2,819,622		
2020	\$11,468,644			\$1,243,875										\$1,243,875				\$1,243,875	\$2,487,750	\$1,512	\$2,491,242	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.11	\$3.47	\$3.59	8.86%	\$521.45	\$14,600	\$3,079,071		
2021	\$11,471,138			\$1,243,875										\$1,243,875				\$1,243,875	\$2,487,750	\$1,512	\$2,491,242	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.13	\$3.67	\$3.76	4.76%	\$583.41	\$14,600	\$3,214,064		
2022	\$11,483,664			\$1,243,875										\$1,243,875				\$1,243,875	\$2,487,750	\$1,512	\$2,491,242	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.17	\$3.68	\$4.15	10.36%	\$290.69	\$14,600	\$3,549,115		
2023	\$11,491,064			\$1,243,875	\$619,500									\$1,243,875	\$619,500			\$1,243,875	\$2,487,750	\$1,512	\$2,491,242	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.17	\$3.79	\$4.36	10.03%	\$305.31	\$14,600	\$3,727,608		
2024	\$11,496,337			\$1,243,875										\$1,243,875				\$1,243,875	\$2,487,750	\$1,512	\$2,491,242	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.17	\$3.80	\$4.54	11.44%	\$317.96	\$14,600	\$3,882,076		
2025	\$11,497,983			\$1,243,875		\$624,625		\$1,243,875						\$1,243,875				\$1,243,875	\$2,487,750	\$1,512	\$2,491,242	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.17	\$4.02	\$5.09	11.99%	\$356.30	\$14,600	\$4,347,727		
2026	\$11,495,614			\$1,243,875		\$1,614,875		\$1,243,875						\$1,243,875				\$1,243,875	\$2,487,750	\$1,512	\$2,491,242	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$1,107,513	\$0.17	\$4.14	\$5.40	12.74%	\$377.90	\$14,600	\$4,612,893		
2027	\$11,491,546			\$1,242,375		\$1,605,875		\$1,242,375						\$1,242,375				\$1,242,375	\$2,486,250	\$1,502	\$2,488,752	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$0.19	\$4.26	\$5.55	12.89%	\$388.84	\$14,600	\$4,747,439		
2028	\$11,485,421			\$1,242,375		\$1,606,125		\$1,242,375						\$1,242,375				\$1,242,375	\$2,486,250	\$1,502	\$2,488,752	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$0.19	\$4.39	\$5.29	12.19%	\$440.14	\$14,600	\$5,373,759		
2029	\$11,480,921			\$1,242,375		\$1,605,375		\$1,242,375						\$1,242,375				\$1,242,375	\$2,486,250	\$1,502	\$2,488,752	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$0.19	\$4.52	\$5.66	14.31%	\$459.09	\$14,600	\$5,465,140		
2030	\$11,482,959			\$1,242,375		\$1,608,500		\$1,242,375						\$1,242,375				\$1,242,375	\$2,486,250	\$1,502	\$2,488,752	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$0.19	\$4.66	\$6.73	23.7%	\$470.88	\$14,600	\$5,749,147		
2031	\$10,921,566			\$1,242,375		\$1,600,625		\$1,242,375						\$1,242,375				\$1,242,375	\$2,486,250	\$1,502	\$2,488,752	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$0.19	\$4.80	\$7.48	11.14%	\$523.33	\$14,600	\$6,389,504		
2032	\$10,921,898			\$1,242,375		\$1,606,625		\$1,242,375						\$1,242,375				\$1,242,375	\$2,486,250	\$1,502	\$2,488,752	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$0.19	\$4.94	\$7.71	11.6%	\$539.87	\$14,600	\$6,591,438		
2033	\$10,920,729			\$1,242,375		\$1,611,125		\$1,242,375						\$1,242,375				\$1,242,375	\$2,486,250	\$1,502	\$2,488,752	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$0.19	\$5.09	\$7.88	2.20%	\$551.75	\$14,600	\$6,739,510		
2034	\$6,219,475			\$1,242,375		\$1,609,250		\$1,242,375						\$1,242,375				\$1,242,375	\$2,486,250	\$1,502	\$2,488,752	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$0.19	\$5.24	\$8.54	8.40%	\$588.08	\$14,600	\$7,385,091		
2035	\$6,218,609			\$1,242,375		\$1,606,125		\$1,242,375						\$1,242,375				\$1,242,375	\$2,486,250	\$1,502	\$2,488,752	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$0.19	\$5.40	\$9.04	5.75%	\$632.45	\$14,600	\$7,724,794		
2036	\$6,241,906			\$1,242,375		\$1,606,625		\$1,242,375						\$1,242,375				\$1,242,375	\$2,486,250	\$1,502	\$2,488,752	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$0.19	\$5.56	\$9.20	1.80%	\$641.81	\$14,600	\$7,864,454		
2037	\$6,900,275			\$1,242,375		\$1,610,500		\$1,242,375						\$1,242,375				\$1,242,375	\$2,486,250	\$1,502	\$2,488,752	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$0.19	\$5.73	\$10.14	10.26%	\$709.84	\$14,600	\$8,464,603		
2038	\$5,999,900			\$1,242,375		\$1,612,625		\$1,242,375						\$1,242,375				\$1,242,375	\$2,486,250	\$1,502	\$2,488,752	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$0.19	\$5.90	\$10.43	2.87%	\$730.23	\$14,600	\$8,915,594		
2039	\$5,999,680			\$1,242,375		\$1,608,125		\$1,242,375						\$1,242,375				\$1,242,375	\$2,486,250	\$1,502	\$2,488,752	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$0.19	\$6.08	\$10.61	1.69%	\$742.56	\$14,600	\$9,064,183		
2040	\$5,999,028			\$1,242,375		\$1,616,750		\$1,242,375						\$1,242,375				\$1,242,375	\$2,486,250	\$1,502	\$2,488,752	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$0.19	\$6.26	\$11.57	0.08%	\$810.01	\$14,600	\$9,889,609		
2041	\$5,999,000			\$1,242,375		\$1,603,625		\$1,242,375						\$1,242,375				\$1,242,375	\$2,486,250	\$1,502	\$2,488,752	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$0.19	\$6.45	\$12.01	1.78%	\$840.61	\$14,600	\$10,263,304		
2042	\$5,997,138			\$1,242,375		\$1,613,625		\$1,242,375						\$1,242,375				\$1,242,375	\$2,486,250	\$1,502	\$2,488,752	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$1,106,513	\$0.19	\$6.64	\$12.36	2.89%	\$864.90	\$14,600	\$10,550,811		

[illegible]

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania	:	
Wastewater, Inc. pursuant to Sections 507,	:	
1102 and 1329 of the Public Utility Code	:	
For, inter alia, approval of the acquisition of	:	Docket No. A-2019-3015173
The wastewater system assets of the	:	
Delaware County Regional Water Quality	:	
Control Authority	:	

**DIRECT TESTIMONY
AND EXHIBITS**

OF

BRIAN P. ZIDEK

ON BEHALF OF

THE COUNTY OF DELAWARE, PENNSYLVANIA

SEPTEMBER 29, 2020

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania	:	
Wastewater, Inc. pursuant to Sections 507,	:	
1102 and 1329 of the Public Utility Code	:	
For, inter alia, approval of the acquisition of	:	Docket No. A-2019-3015173
The wastewater system assets of the	:	
Delaware County Regional Water Quality	:	
Control Authority	:	

**DIRECT TESTIMONY OF BRIAN P. ZIDEK
ON BEHALF OF
THE COUNTY OF DELAWARE, PENNSYLVANIA**

1 **Q. Please state your name.**

2 A. My name is Brian P. Zidek.

3 **Q. Please describe your educational background and professional background.**

4 A. I earned a Bachelor of Arts from Dickinson College where I majored in
5 Economics and Policy and Management Studies. During my time at Dickinson, I
6 spent one year studying economics at the London School of Economics. I earned
7 a Juris Doctor from Georgetown University. After practicing law at a private law
8 firm, I served as Vice President and General Counsel for Excess Reinsurance
9 Underwriters. I also founded Excess Management Company where I served as
10 the managing partner before selling the company in 2014.

11 **Q. By whom are you currently employed and what position do you hold?**

12 A. I serve as President of Argo Capital Group, Ltd. and President of Excess
13 Reinsurance Underwriters.

1 **Q. Are you a member of the Delaware County Council?**

2 A. Yes, I have served as a Councilman since January 2018. On January 6, 2020, I
3 was appointed to my current position of Chairman of the Delaware County
4 Council.

5 **Q. What is the business address of Delaware County Council?**

6 A. The business address is 201 W. Front St., Media, PA 19063.

7 **Q. What is the role of the Delaware County Council?**

8 A. In accordance with the Delaware County Administrative Code, the County
9 Council serves as the legislative body for the County and is authorized to, among
10 other things, enact, amend, and repeal County rules, ordinances, resolutions, and
11 proclamations. The Council is responsible for the administrative functions of
12 county government. Each year, the Council adopts a budget and raises funds
13 through taxes or bonds for capital projects. The Council assists the County in its
14 participation in intergovernmental programs at the federal, state, and local level in
15 distributing federal and state grants for social services. The County's
16 fundamental duty is to serve the public interest and the well-being of
17 approximately 566,750 citizens in Delaware County.

18 **Q. What are your duties in your capacity as Chair of the Delaware County**
19 **Council?**

20 A. As Council Chairman, I set the agenda for Council meetings, in collaboration and
21 cooperation of the County team. For example, I work closely with the County's
22 Executive Director, the Solicitor, and other County department heads to
23 understand County needs and current as well as emerging issues facing the

1 County. Along with my fellow Council members, I determine the County's
2 priorities and objectives. The Council is involved in a range of activities,
3 including health, safety and welfare, economic development, public
4 transportation, waste disposal, human services, housing, land use, and cultural
5 matters, among many others.

6 **Q. Please describe the purpose of your testimony.**

7 A. I am testifying on behalf of the County's interests, protests and objections to Aqua
8 Pennsylvania Wastewater's ("Aqua PA") proposed acquisition of the wastewater
9 system assets of the Delaware County Regional Water Quality Control Authority
10 ("DELCORA"). My testimony provides the County perspective on the proposed
11 acquisition, as well as events leading up to the execution of the Asset Purchase
12 Agreement between Aqua PA and DELCORA.

13 **Q. Are you sponsoring any exhibits with your testimony?**

14 A. Yes, I am sponsoring Exhibit No. BPZ-1 (May 4, 2020 Memo from Marc A.
15 Lucca to Bob Willert and Mike DiSantis); Exhibit No. BPZ-2 (Deposition of
16 Kevin Madden in Court of Common Pleas); and Exhibit No. BPZ-3 (Deposition
17 of Robert Willert in Court of Common Pleas).

18 **Q. When did you first express concerns at a Council meeting regarding Aqua**
19 **PA's proposed acquisition of DELCORA?**

20 A. During a July 23, 2019 Council Agenda Meeting (held in advance of the Council
21 Meetings), DELCORA representatives first discussed the potential sale of its
22 wastewater facilities with the Council. During the subsequent July 24, 2019
23 County Council Meeting, a member of the public commented on the recent news

1 of DELCORA's possible sale of its wastewater facilities. I responded with severe
2 concern about the comprehensive impact of the sale of DELCORA system assets
3 on County residents, as well as the loss of DELCORA, which in my estimation
4 was, and remains, a well-run public asset.

5 **Q. Did you express concerns about the sale at the next Council meeting?**

6 A. Yes. During an August 7, 2019 Council Meeting, I again raised the potential sale
7 of DELCORA assets that I perceived as a detrimental result for County citizens
8 and DELCORA customers. I also expressed concerns about the no-bid, secretive
9 sale process being pursued by Aqua PA and DELCORA.

10 **Q. Did representatives from Aqua and/or DELCORA provide Council with**
11 **detailed information supporting the proposed transaction prior to entering**
12 **into the Asset Purchase Agreement for sale of DELCORA to Aqua?**

13 A. No, not in the least. As I served on Council throughout 2019, I attended board
14 meetings where representatives from Aqua and DELCORA joined to outline and
15 discuss the proposed transaction. Aqua and DELCORA personnel attended some
16 Council meetings, but never disclosed comprehensive details to Council.
17 DELCORA representatives provided a brief update to Council members during an
18 August 21, 2019 Council Meeting regarding exploration of a potential sale. The
19 information offered at these meetings was extremely high level and vague.
20 Council was not provided with any documents or written reports summarizing or
21 analyzing the basis for the proposed transaction, notwithstanding requests for
22 more detailed information and analysis.

1 **Q. Did DELCORA and Aqua representatives seek Council approval of the sale**
2 **of DELCORA’s wastewater assets to Aqua PA?**

3 A. No.

4 **Q. Did DELCORA bid, publicly or privately, out its wastewater assets?**

5 A. No. As a public official, I find the lack of competitive bidding to be profoundly
6 concerning and counter to generally-accepted municipal practices. Regardless of
7 whether it is required by the letter of the law, I would encourage the Commission
8 to consider exercising its authority to act in the interest of the public and deny
9 Aqua’s Application. Aqua and DELCORA do not deny that the two
10 organizations share extensive history as longstanding utility operators in
11 Southeast Pennsylvania. Aqua is headquartered in Bryn Mawr in Montgomery
12 County, which is adjacent to Delaware County. With such close ties, it seems
13 axiomatic that a public and competitive bidding process would be necessary to
14 preserve process integrity for any transaction between such entities. For example,
15 DELCORA’s Executive Director, Robert Willert, who was heavily involved in
16 the negotiations for the transaction and who executed the asset purchase
17 agreement on behalf of DELCORA, seems now poised to join Essential Utilities
18 (the parent of Aqua- PA) at an executive level.¹ Without a competitive bidding

¹ See Exhibit No. BPZ-1 (May 4, 2020 Memo from Marc A. Lucca to Bob Willert and Mike DiSantis) (confirming that Willert will have “oversight of Aqua PA in southeast PA including DELCORA and SEPA [wastewater] operations...”); see Exhibit No. BPZ-2 (Deposition of Kevin Madden in Court of Common Pleas) at 82:8-15 (discussing Willert’s new job with Aqua), 232:24-233:6 (explaining Willert’s outspoken support for the acquisition); Exhibit No. BPZ-3 (Deposition of Robert Willert in Court of Common Pleas) at 18:5-13 (explaining that only Mr. Willert had an employment contract with DELCORA and that his contract was provided to Aqua), 43:1-14 (indicating Mr. Willert reached out to Aqua), 46:3-9 (confirming that DELCORA entered into an exclusive negotiating agreement with Aqua), 48:1-15 (explaining Mr. Willert’s personal role in negotiations and perspective that DELCORA did not need to negotiate with any

1 process,² this transaction appears to fall far short of the requisite arm's length
2 negotiation.

3 **Q. Do you believe the sale of DELCORA's wastewater assets is the best long-**
4 **term interests of the County and County residents?**

5 A. No. I am concerned about the loss of this public asset. I am also concerned about
6 the impact on customer rates in the long-term as addressed in the testimony of
7 County Witness Stan Faryniarz, Delaware County Statement No. 1.

8 **Q. Do you believe the sale of DELCORA's wastewater assets is in the public**
9 **interest?**

10 A. No.

11 **Q. Are there any other actions undertaken by the County with respect to the**
12 **proposed sale of DELCORA's assets that you believe are pertinent to the**
13 **PUC's final decision to approve or deny Aqua's application?**

14 A. Yes. Given the County's concerns with the proposed sale and the Asset Purchase
15 Agreement itself, the County filed suit against DELCORA in the Court of
16 Common Pleas of Delaware County, asserting that DELCORA's actions in the
17 Asset Purchase Agreement and creation of a Rate Stabilization Trust violated
18 DELCORA's Articles of Incorporation and the Municipal Authorities Act. On
19 June 3, 2020, the County Council approved and enacted Ordinance 2020-4
20 directing the orderly termination of DELCORA. If the PUC denies Aqua's
21 Application, then DELCORA would continue to operate the wastewater system

companies other than Aqua), and 58:12-60:17 (explaining Mr. Willert's role in negotiating the DELCORA-Aqua transaction).

² See Exhibit No. BPZ-3 (Willert Deposition) at 65:23-66:1 (DELCORA did not bid out its assets), 70:10-15 (admitting that PA American expressed interest in making a competing offer to purchase DECLORA).

1 until such time that DELCORA winds up its affairs and transfers the wastewater
2 system to the County.

3 **Q. In light of the foregoing, what is your recommendation to the PUC regarding**
4 **Aqua's application seeking approval to acquire DELCORA's wastewater**
5 **assets?**

6 A. I recommend that the PUC deny Aqua's Application because it is not in the public
7 interest or the interests of the DELCORA ratepayers. At minimum, the PUC
8 should suspend review of the Application and direct DELCORA to issue a
9 Request for Proposals for purchase of the system. To ensure potential
10 respondents have sufficient opportunity to develop competitive bids, the
11 solicitation should allow for at least 180 days between issuance of the Request for
12 Proposals and the deadline for final bids. Implementing this proposal would
13 provide more reasonable assurance of an arm's length transaction and allow the
14 Commission to make a more informed decision on the Application.

15 **Q. Does this conclude your testimony at this time?**

16 A. Yes.

Delaware County Hearing Exhibit No. 1

(Aqua's Responses to Delaware County Set X Interrogatories)



THOMAS, NIESEN & THOMAS, LLC

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November 2, 2020

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Re: PaPUC Docket No. A-2019-3015173
Application of Aqua Pennsylvania Wastewater, Inc. – DELCORA

Dear Counsel:

Enclosed are responses to the Set X Interrogatories of the County of Delaware to Aqua Pennsylvania Wastewater, Inc.

Very truly yours,

THOMAS, NIESEN & THOMAS, LLC

By

Thomas T. Niesen

Encls.

cc: Certificate of Service (w/encls.)
Alexander R. Stahl, Esquire (via email, w/encls.)
Rosemary Chiavetta, Secretary (via electronic filing)
(Certificate of Service Only)

CERTIFICATE OF SERVICE

I hereby certify that I have this 2nd day of November 2020 served a true and correct copy of the foregoing letter and responses to the Set X Interrogatories of the County of Delaware to Aqua Pennsylvania Wastewater, Inc. upon the persons and in the manner indicated below:

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APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

COUNTY OF DELAWARE, PENNSYLVANIA

SET X TO AQUA INTERROGATORIES

COUNTY-X-1

Please reference Aqua's Rebuttal Testimony Statement No. 2-R, p. 28, line 20 – p. 29, line 2. Mr. Packer references a \$47 million increase in revenues and in the next sentence references \$92 million of interest.

- a. What is Mr. Packer's intent? Is it Mr. Packer's intent to compare the \$47 million increase in revenues to the \$92 million interest on \$2.2 billion of capital?
- b. For the referenced 2018 base rate case, please provide the approved total revenue requirement directly attributable to the approved rate base in this rate case proceeding.

RESPONSE

- a. Yes, it was an intended comparison.
- b. \$47 million was approved as the revenue requirement in Aqua's 2018 base rate case.

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

COUNTY OF DELAWARE, PENNSYLVANIA

SET X TO AQUA INTERROGATORIES

COUNTY-X-2

Please reference Rebuttal Testimony 2-R, p. 30, lines 17– 19. Please reference the exact location in Mr. Faryniarz’s testimony where he asserts that the Proposed Transaction does not offer substantial benefits to DELCORA customers because Aqua is a regulated public utility that falls under the jurisdiction of the Commission.

RESPONSE

Mr. Faryniarz’s Finding 1) asserts that the Proposed Transaction does not offer substantial benefits to DELCORA customers. Faryniarz Direct Testimony, p. 18. His support for this finding is based on his analysis of Aqua and DELCORA revenue requirements that any benefits from the Proposed Transaction are “more than offset by the increases in revenue required to fund DELCORA’s long-term capital expenditure plan at Aqua’s higher cost of capital.” Direct Testimony, p. 18, 14-18. Witness Faryniarz supports his conclusion that IOUs such as Aqua regulated by state commissions such as the Commission have a higher cost of capital as a general matter compared to municipal utilities, by asserting in his testimony that municipal utilities tend to have a significantly lower overall cost of capital than IOUs. Faryniarz Direct Testimony pp. 24, 6-13; 26, 3-7.

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

COUNTY OF DELAWARE, PENNSYLVANIA

SET X TO AQUA INTERROGATORIES

COUNTY-X-3

Please reference Rebuttal Testimony 2-R, p. 34, lines 19 – 23.

- a. Does an assumption of 10% cost of service spread to other Aqua wastewater customers also assume that after an eight-year time period, customers of the former DELCORA system are not paying their full cost of service?
- b. As allocation of costs occur in future rate case proceedings, is it possible that costs would be shifted from current Aqua PA wastewater customers to former DELCORA customers?

RESPONSE

- a. Yes.
- b. Yes.

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

COUNTY OF DELAWARE, PENNSYLVANIA

SET X TO AQUA INTERROGATORIES

COUNTY-X-4

Please reference Rebuttal Testimony 2-R. Mr. Packer refers to economies of scale that will exist once Aqua PA acquires DELCORA. See, e.g., p. 4., line 1.

- a. Please quantify and provide supporting calculations for any expected reductions to O&M due to these claimed economies of scale?
- b. What other quantifiable economies of scale would exist if Aqua PA acquires DELCORA? Please explain and provide details.
- c. Please reference p. 41 of Mr. Packer's Rebuttal. Can any of the listed benefits be quantified, specifically as each item relates to the proposed acquisition of DELCORA? If so, please provide all workpapers in support.
- d. In previous acquisitions of water and wastewater systems over the past 10 years, has Aqua realized quantifiable economies of scale? Please provide examples with supporting quantifiable evidence and workpapers.
- e. Provide all documents relied on to support the assertion that economies of scale that will exist once Aqua PA acquires DELCORA.

RESPONSE

Regarding a. through c. refer to the below selected examples of operating cost savings comparing DELCORA to Aqua.

	<u>DELCORA</u>	<u>AQUA</u>	<u>Savings</u>
Property, General Liability Insurance =>	\$968,122	\$0	\$968,122
Information Technology =>	\$773,000	\$0	\$773,000
Outside Services Legal =>	\$500,000	\$250,000	\$250,000
Outside Services Engineering =>	\$395,000	\$197,500	\$197,500
Office Supplies & Advertising =>	\$226,850	\$113,425	\$113,425
Education and Training =>	\$155,900	\$77,950	\$77,950
Contingency Expense =>	\$700,000	\$0	\$700,000
<u>Total =></u>	<u>\$3,718,872</u>	<u>\$638,875</u>	<u>\$3,079,997</u>

Regarding d., yes. Aqua does not have a schedule showing quantifiable economies of scale for each of its acquisitions over the past 10 years. However, in each of these transactions the Commission has recognized economies of scale as a direct benefit to acquired customers.

Regarding e., please refer to the responses to a. through d. above

Respondent: William C. Packer
Date: 11/02/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

COUNTY OF DELAWARE, PENNSYLVANIA

SET X TO AQUA INTERROGATORIES

COUNTY-X-5

Please reference Rebuttal Testimony 2-R. Mr. Packer makes several references to the American Society of Civil Engineers grading of the average wastewater infrastructure in the United States as a D+.

- a. Has DELCORA's specific wastewater infrastructure been graded by the Civil Society of Engineers? If so, please provide the specific grade(s).
- b. Have any of the water or wastewater systems acquired by Aqua Pa in the past 10 years been specifically graded by the Civil Society of Engineers? If so, please list those water or wastewater systems and provide the specific grade(s) for those system.

RESPONSE

- a. No, not to my knowledge. The American Society of Civil Engineers grade referred to in my rebuttal testimony is a grade for the nation as a whole, not individual wastewater systems.
- b. No. Please see the response to a., above.

Delaware County
Hearing Exhibit No. 2
(Letter of Intent with Aqua and DELCORA)



Marc A. Lucca, President

O: 610.645.1059 • F: 610.645.1162 • malucca@AquaAmerica.com

July 16, 2019

Delaware County Regional Water Authority
Attention: Board of Directors
Administration Building
100 East 5th Street
Chester, Pennsylvania 19013

Re: Letter of Intent

Dear Board of Directors:

As your neighboring water and wastewater utility in many of the communities you serve, Aqua Pennsylvania Wastewater ("Aqua") has long respected the Delaware County Regional Water Authority ("DELCORA" or the "Authority"), including its well-run operations, management team, employees, and mission. We are aware of DELCORA's proud history and outstanding reputation in southeastern PA and acknowledge its leaders for building an integrated system to provide essential wastewater services to many of the same Delaware County communities where Aqua provides service. In addition, Aqua has enjoyed a long-term partnership with DELCORA as a direct customer.

As leaders of our respective utilities, it is our duty to continually search for options that benefit customers, employees, and other stakeholders. In this regard, we view the potential combination of Aqua and DELCORA as a unique opportunity in the market. This combination would create a partnership in which DELCORA would manage both Aqua and DELCORA's wastewater operations in southeastern Pennsylvania - essentially becoming the wastewater division of Aqua Pennsylvania. As a result, we are pleased to present Aqua's non-binding Letter of Intent for the acquisition of all the assets of DELCORA (the "Utility Assets"). Aqua understands that DELCORA is potentially facing significant liabilities in the near future for issues relating to the Long-Term Control Plan, an EPA Consent Decree, and the flows and associated costs going to the City of Philadelphia's Southwest Treatment Plant. We believe Aqua and DELCORA can jointly arrive at a price for the Utility Assets that balances providing DELCORA's incorporating municipalities with a fair price while also protecting DELCORA's customer rates, ensuring the continuation of outstanding service, providing for the continuation of employment of all DELCORA employees, and addressing the challenges facing DELCORA in the immediate future in a financially efficient manner.

We are requesting that Aqua and DELCORA enter into a formal six-week, non-binding discussion period (the "Exclusivity Period"). During this time, both Aqua and the Authority would fully evaluate this proposed concept, advance the valuation and due diligence process, weigh the implications of our combined services on the various constituencies, and mutually negotiate an asset purchase agreement. At the end of this period, a mutual determination would be made as to whether this combination is value-creating for both parties and whether to proceed forward with the transaction. The Exclusivity Period may be extended by mutual agreement of the parties.

We believe that a sale to Aqua would ensure that the most cost-efficient treatment of wastewater is realized through the potential expansion of the existing Chester wastewater treatment plant to accept additional DELCORA flows, thereby mitigating future rate increases associated with other alternatives. Additionally, a sale to Aqua would provide the following to DELCORA:

- Fair compensation for the Utility Assets while limiting future rate increases on customers;
- Complement DELCORA's solid resources with Aqua's strong management, technical, and engineering teams which have a demonstrated capability to deploy significant capital and efficiently complete large-scale projects to improve service, in a financially responsible manner;
- Outstanding relationships with PA Department of Pennsylvania Environmental Protection, US Environmental Protection Agency and other oversight agencies with whom DELCORA currently works;
- Access to Aqua's strong balance sheet and, as a result, to the capital markets;
- An opportunity to improve the operational efficiency, reliability, and compliance of both companies due to DELCORA and Aqua's proximity to each other;
- Additional capabilities in customer service;
- Continued employment for all staff and management of DELCORA on terms and conditions that are substantially similar to those presently experienced;
- Recognition of all existing labor agreements;
- New opportunities for advancement of DELCORA staff and management with the continued expansion of Aqua's wastewater division through acquisitions;
- A reliable and sustainable company with which the municipalities served by DELCORA can partner on economic development, educational programs, job training and community interests;
- A smooth and seamless transaction based on Aqua's extensive past-experience in acquiring municipal systems. Aqua has a longstanding history of working with its regulators and has successfully received over 300 approvals on similar transactions over the last 25 years; and,
- Incorporation into the Aqua Family - We not only work in Delaware county, but we live here and call it home. Our company's roots are here in Delaware county. We are members of the community and look to establish and grow long-term partnerships in the municipalities we serve.

In consideration of the time, effort and expenses to be undertaken by Aqua in connection with the pursuit of a Transaction, and other good and valuable consideration the receipt and adequacy of which are hereby acknowledged, Authority hereby agrees that, during the Exclusivity Period, neither Authority nor any of its Representatives shall authorize or permit any of its Representatives to, directly or indirectly, (i) initiate or encourage the solicitation of any inquiries or the making or consummation of any proposal or offer that constitutes, or is reasonably likely to lead to, an acquisition by Authority or any of its affiliates of substantially all outstanding equity securities or assets of any other Person engaged in a business similar to Aqua (an "Authority Competing Offer"), (ii) engage in, continue or otherwise participate in any discussions or negotiations regarding, or otherwise cooperate in any way with, any Authority Competing Offer, (iii) approve, adopt or recommend, resolve or publicly propose to approve, adopt or recommend, or allow itself or any of its affiliates to execute or enter into any acquisition agreement, merger agreement, confidentiality agreement, exclusivity agreement, letter of intent, memorandum of understanding, agreement in principle, option agreement, joint venture agreement, partnership agreement or other similar agreement (whether or not creating a legally binding obligation) that is intended to, or could reasonably be expected to lead to, any Authority Competing Offer, or (iv) otherwise facilitate any effort or attempt to arrange or consummate an Authority Competing Offer.

It is agreed that this letter is not a binding agreement. Rather, if you agree with the terms that are outlined above, kindly countersign this letter and return it to me.

We look forward to meeting with you in the near future to further discuss how we can best meet the needs of the Authority and its ratepayers, employees, and stakeholders.

Sincerely,



Marc A. Lucca

Aqua Pennsylvania Wastewater President

Accepted and agreed to:



Delaware County Regional Water Authority

Delaware County
Hearing Exhibit No. 3
(Robert Willert Employment Contract(s))

Respondent: Robert Willert
Date: 10/28/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

COUNTY OF DELAWARE, PENNSYLVANIA

SET IX TO AQUA INTERROGATORIES

COUNTY-IX-9 Please provide a copy of the employment contract(s) between Robert Willert and DELCORA in effect on the following Dates:

- a. April 1, 2019
- b. September 17, 2019
- c. December 26, 2019
- d. March 3, 2020

RESPONSE

Please see COUNTY-IX-9 Attachment 1.

EMPLOYMENT CONTRACT
RENEWAL

THIS AGREEMENT, dated and effective as of the 17th day of December, 2019, by and between the Delaware County Regional Water Quality Control Authority ("DELCORA"), a municipal authority organized and existing under the laws of the Commonwealth of Pennsylvania (hereinafter "Employer") and Robert J. Willert, an individual (hereinafter "Employee").

WHEREAS, the Employer and Employee entered into an Employment Agreement dated January 1, 2015 in which Employer agreed to employ Employee as Executive Director of DELCORA through December 31, 2019 (hereinafter "the Employment Agreement"); and

WHEREAS, the Employment Agreement provides that it may be renewed for an additional five (5) year term upon the affirmative vote of the DELCORA Board of Directors at the its December 2019 Board meeting; and

WHEREAS, there was an affirmative vote of the DELCORA Board of Directors at the December __, 2019 Board meeting to renew the Employment Agreement in accordance with the following terms and conditions; and

WHEREAS, Employee desires to accept the terms and conditions of the renewed extended employment contact; and

NOW THEREFORE, the parties hereto, in consideration of the mutual covenants herein contained, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and intending to be legally bound hereby agree as follows:

1. TERMS AND DUTIES

(a) Employer hereby employs Employee as Executive Director to render such services as are delegated to him by the Board of Directors ("the Board"), and satisfy such other duties and responsibilities for a renewed term commencing on January 1, 2020 until the one of the following events occur: (i) after all conditions precedent under the Asset Purchase Agreement ("APA") between DELCORA and Aqua Pennsylvania's Wastewater, Inc. are met or waived by the parties; or (ii) five years. This renewed term shall conclude on the earliest of the events identified. Notwithstanding any implication to the contrary, the renewed term may be terminated by either party pursuant to Section 4 of the Employment Agreement.

(b) Employee shall perform such executive duties in a responsible manner and shall be in all material respects in conformance with the directions and policies established and promulgated by the Board and consistent with his position.

2. AS IS – All of the remaining terms and conditions of the Employment Agreement dated January 1, 2015 which is attached hereto and incorporated herein as Exhibit "A" remain unchanged.

IN WITNESS WHEREOF, the parties have executed this Employment Contract Renewal as of 17th day of December 2019.

Employer:

Delaware County Regional Water
Quality Control Authority
("DELCORA")

By: 
Stanley R. Kester

Employee:

By: 
Robert J. Willert

EXHIBIT A

EMPLOYMENT AGREEMENT

THIS AGREEMENT, dated and effective as of this the first day of January, 2015, by and between the Delaware County Regional Water Quality Control Authority ("DELCORA"), a municipal authority organized and existing under the laws of the Commonwealth of Pennsylvania (hereinafter "Employer"), and Robert J. Willert (hereinafter "Employee"), an individual.

WHEREAS, Employer desires to engage Employee's experience and abilities in the fields of business management and oversight of fiscal affairs; and

WHEREAS, Employee desires to accept such extended engagement, upon the terms and conditions hereinafter set forth.

NOW, THEREFORE, the parties hereto, in consideration of the mutual covenants herein contained, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound hereby, agree as follows:

1. Term and Duties

(a) Employer hereby employs Employee as Executive Director to render such services as are delegated to him by the Board of Directors (the "Board"), and satisfy such other duties and responsibilities for an initial term of five (5) years beginning on the 1st of January, 2015 and ending on the 31st day of December, 2019. This Employment Agreement may be renewed for an additional five (5) year period upon the affirmative vote of the DELCORA Board of Directors at its December 2019 meeting, which renewal, if it occurs, shall take effect as of January 1, 2020. Notwithstanding any implication to the contrary, this Employment Agreement may be terminated by either party pursuant to Section 4 hereof.

(b) Employee shall perform such executive duties in a responsible manner and shall be in all material respects in conformance with the directions and policies established and promulgated by the Board and consistent with his position.

2. Compensation

(a) Employer's Board of Directors shall annually establish a salary range for the position of Executive Director. Employee shall receive the amount at the mid-level of that range as his base salary; provided that at any time subsequent to the first year of this Agreement, Employer may raise Employee above such mid-

level; and provided further that at no time during the term of this Agreement shall Employee's annual salary decrease from the amount set during for the prior year. Such salary shall be payable in bi-weekly or such other installments as shall be consistent with Employer's payroll procedures for its executive employees. Employer shall deduct and withhold all necessary social security and withholding taxes and any other similar sums required by law or authorized by Employee.

(b) Employee shall be entitled to receive all such fringe benefits as are provided to other employees holding the senior executive position including, but not limited to, health insurance, life insurance, and disability insurance; provided, however, that Employer may at any time and from time to time add to, reduce, eliminate or otherwise modify those fringe benefits as long as Employee is provided with those fringe benefits which are applicable to all similarly situated senior executives of Employer. The Employee will receive six (6) weeks of paid vacation annually, accruing on January 1 of each year of the Term of this Agreement. In addition other time off, without pay, will be made available as requested.

(c) In addition to the compensation set forth above, Employer shall establish nonqualified deferred compensation plan complying with the requirements of Section 409A of the Internal Revenue Code (the "Plan"). The Plan shall be a "mirror" plan, such that whether or not Employer chooses to fund the Plan at any time prior to Employee's receipt of any funds thereunder, Employee's accrued compensation thereunder shall increase or decrease in the same manner as such investment plan for such compensation as Employee may choose. As of January 1 of each year of this Agreement, Employee shall accrue from Employer Fifty Thousand Dollars (\$50,000.00) of compensation to be deferred under the Plan. To the extent permitted by law during any year of its Term, this Agreement shall constitute Employee's election to defer such compensation during such year. If, for any reason, Employee shall fail to make the election to defer such compensation required by Section 409A, Employer shall increase such compensation to such a level as may be determined appropriate by Employer's retirement plan advisor to compensate Employee for the tax ramifications of such failure.

3. Expenses

(a) Employee is authorized to incur reasonable expenses for conducting and promoting the business of Employer, including expenses for travel and similar items, subject to limitations and restrictions set by Employer from time to time. Employer will reimburse Employee for such expenses, on a monthly or other regular basis, upon the presentation by Employee of an itemized account of such expenditures, consistent with procedures established by Employer, together with such receipts or other evidence as shall be required for tax or accounting purposes.

(b) Employee shall receive a car allowance of \$700.00 per month. Employee shall be responsible for all his automobile expenses, including insurance.

(c) Employer shall provide Employee with a gasoline credit card.

4. Termination

(a) For Cause. Notwithstanding anything herein to the contrary, Employer may terminate Employee's employment hereunder for cause for any one of the following reasons: (1) conviction of a felony, or a misdemeanor where imprisonment is imposed; (2) commission of any act of theft, fraud, or falsification of any employment or Employer records in any material way; (3) Employee's failure or inability to perform any material reasonable assigned duties after written notice from the Employer of, and a reasonable opportunity to cure such failure or inability; (4) material breach of this Agreement which breach is not cured within thirty (30) days following written notice of such breach; the death of Employee; or (5) the inability of Employee to perform all of this duties hereunder by reason of illness, physical, mental or emotional disability or other incapacity, which inability shall have continued for more than twelve (12) months. Upon termination of Employee's employment with Employer for cause, the Employer shall be under no further obligation to Executive for salary or bonus, except to pay all accrued but unpaid salary, accrued bonus (if any), accrued vacation and accrued deferred compensation to the date of termination.

(b) Without Cause. Employer may terminate Employee's employment hereunder at any time without cause, provided, however, that Employee shall be entitled to severance pay in an amount equal to all compensation Employee would earn from the date of termination through the end of the Term of this Agreement had such termination not occurred, less deductions required by law, inclusive of any compensation intended to be deferred under Subparagraph 2(c) hereof. All vacation dates for the remainder of the Term of this Agreement yet to accrue as of the date of termination without cause shall be deemed accrued prior to Termination for the purpose of this Subparagraph. In addition, in the event of Termination under this Subparagraph, Employer shall continue Employee's medical, dental, prescription and vision through the end of the Term of this Agreement had such termination not occurred.

5. Surrender of Records and Property

On termination of employment, Employee shall promptly return to Employer all documents, material, papers, data, statements and any other written material (including without limitation all copies thereof and summaries and notes of the contents thereof) and other property of Employer.

6. Notice

(a) Each notice, demand, request, consent, report, approval or communication ("Notice") which is or may be required to be given by any party to any other party in connection with this Agreement and the transactions contemplated hereby, shall be in writing, and given by telex, telegram, telecopy, personal delivery, receipted delivery service, or by certified mail, return receipt requested, prepaid and addressed to the party to be served as shown in subparagraph 6(b) below.

(b) Notices shall be effective on the date sent via telex, telegram or telecopy, the date delivered personally or by receipted delivery service, or three (3) days after the date mailed:

If to Employer: Delaware County Regional Water Quality Control
Authority ("DELCORA")
100 East Fifth Street
P.O. Box 999
Chester, PA 19016-0999

If to Employee: At his residence address most recently
filed with Employer

7. No Waiver of Breach

No term or condition of this Agreement shall be deemed to have been waived, nor shall there be any estoppel to enforce any provisions of this Agreement, except by a statement in writing signed by the party against whom enforcement of the waiver or estoppel is sought. Any written waiver shall not be deemed a continuing waiver unless specifically stated, shall operate only as to the specific term or condition waived and shall not constitute a waiver of such term or condition for the future or as to any act other than that specifically waived.

8. Entire Agreement

This Agreement contains the entire agreement of the parties with respect to the subject matter hereof. It may not be changed orally, but only by an agreement in writing executed by the party against whom enforcement of any waiver, change, modification, extension or discharge is sought.

9. Law Applicable

This Agreement and all covenants contained herein shall be governed in all respects, whether as to validity, construction, capacity, performance or otherwise, by the laws of the State of Pennsylvania.

10. Paragraph Headings

The paragraph headings contained in this Agreement are for convenience only and in no manner shall be construed as part of this Agreement.

11. Counterparts

This Agreement may be executed simultaneously in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.

[EXECUTION TO FOLLOW]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

Employer:

Delaware County Regional Water Quality
Control Authority ("DELCORA")

By: Stanley A. Kester

Employee:

Robert J. Willert
Robert J. Willert

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania :
Wastewater, Inc. pursuant to Sections 1102, :
1329 and 507 of the Public Utility Code for : Docket No. A-2019-3015173
approval of the acquisition by Aqua of the :
wastewater system assets of the Delaware :
County Regional Water Quality Control :
Authority :

SPMT Statement No. 1

**DIRECT TESTIMONY OF EDWARD HUMAN
ON BEHALF OF
SUNOCO PARTNERS MARKETING & TERMINALS, L.P.**

Dated: September 29, 2020

1 **Q. PLEASE STATE YOUR NAME, EMPLOYMENT POSITION, AND ON WHOSE**
2 **BEHALF YOU ARE TESTIFYING.**

3 A. I am Edward Human. I am the Sr. Director of Sunoco Partners Marketing & Terminal
4 L.P./ Energy Transfer (SPMT) in Marcus Hook, PA and I am testifying on SPMT's behalf.
5

6 **Q. WHAT ARE THE ISSUES YOU WILL ADDRESS IN YOUR DIRECT**
7 **TESTIMONY?**

8 A. I will first generally explain the Marcus Hook Industrial Complex (MHIC) and the benefits
9 it provides to Pennsylvania. SPMT operates the MHIC which is a customer of the Delaware
10 County Regional Water Quality Control Authority (DELCORA). Second, I will discuss
11 the contractual relationship between SPMT and DELCORA and how the proposed
12 transaction negatively impacts these rights. Third, I will discuss additional detriments
13 SPMT and MHIC will face if Aqua's Application to acquire DELCORA is granted.
14 Finally, I will discuss potential alternatives to the current DELCORA system SPMT and
15 MHIC may consider if the Application is granted.

16 **MARCUS HOOK INDUSTRIAL COMPLEX**

17 **Q. WHAT IS THE MHIC?**

18 A. By way of background, the MHIC was a refinery that was originally built in 1902 for
19 refining crude oil from Texas and evolved over the years to refine various types of crude
20 into multiple kinds of petroleum products. When it was an operating refinery under

Sunoco Inc., it processed 175,000 barrels of crude oil per day. The refinery was idled in 2011. In 2012, Sunoco Logistics acquired MHIC.¹

Q. WHAT HAS SPMT DONE WITH MHIC SINCE IT WAS ACQUIRED IN 2011?

A. As part of the Mariner East project, which also encompasses approximately 350 miles of pipelines across the state of Pennsylvania, we revitalized MHIC to become a world class natural gas liquids (NGL) hub. We have invested approximately \$2 billion dollars in MHIC. We built new processing units, including an ethane/propane splitter and ethane and propane chilling and refrigerated storage. Going back to 2013, we have built six tanks storing approximately 3 million barrels of propane, ethane and butane to support our Mariner East pipeline systems. We also built a fractionator at MHIC to process natural gas liquids transported via the Mariner East pipelines from western Pennsylvania. Improvements at the facility required nearly 9 million man hours, involving more than 5,000 individual workers.

MHIC began receiving propane in January 2015, and it shipped approximately 70,000 barrels a day of propane and ethane for distribution to local, regional and international markets. We commissioned a first-of-its-kind ethane truck loading rack to complement its existing propane terminal that supplies propane for local and regional delivery.

Q. DOES MHIC BENEFIT PENNSYLVANIA?

A. Yes. MHIC provides Pennsylvanians directly and indirectly with jobs related to our facilities, butane and propane deliveries, and providing feedstocks for many

¹ Sunoco Logistics merged with Energy Transfer in April 2017 and MHIC is owned by Energy Transfer subsidiary SPMT.

1 manufacturing companies. These, of course, produce local and state tax revenues. For
2 example:

- 3 • In April 2019, we announced a Project Labor Agreement (PLA) with the
4 Philadelphia Building Trades, an association of some 50 local unions, for work on
5 the MHIC. The two-year, \$200 million agreement is estimated to create about
6 1,200 jobs.
- 7 • Seasonally dependent, approximately 200 trucks per day pick up propane for
8 delivery to markets in and around Pennsylvania.
- 9 • The increased operations at MHIC with the completion of the Mariner East
10 pipeline system will pay the state \$1.2 million to \$1.4 million in taxes each year
11 and generate additional economic activity throughout the Commonwealth.
- 12 • The improvement of and significant investment in the MHIC resulted in
13 approximately \$7 million per year in combined property taxes to Chichester
14 School District, Marcus Hook Borough and Delaware County, triple what was
15 due in 2017.
- 16 • Other industries benefit from the revitalization at MHIC, including maritime-
17 related jobs such as ship agents, cargo surveyors, tug assists, ship chandlers and
18 launch companies.
- 19 • The commodities MHIC processes and supplies for delivery (butane, ethane, and
20 propane) that various industries and members of the public require, including:

21 **Butane**

- 22 1. Gasoline blending
- 23 2. Fuel gas
 - 24 a. Butane lighters
 - 25 b. Butane torches
 - 26 c. Bottled cooking/camping fuel

- d. Outdoor grills
- e. Patio heaters
- f. Portable space heaters
- g. Cabinet heaters
- h. Mobile catering
3. Fragrance extraction solvent
4. Mixed with propane and other hydrocarbons
 - a. To make LPG – liquefied petroleum gas
5. Feedstock for ethylene and butadiene production
 - a. Key ingredient in synthetic rubber
6. Isobutane
 - a. Fuel additive to increase octane
 - b. Alkylation feedstock
7. Propellant in aerosol sprays – largely replaced Ozone-depleting chlorofluorocarbons
8. Refrigerants – largely replaced Ozone-depleting halomethanes in household refrigerators and freezers
9. Automotive air conditioning systems

Propane

1. Fuel gas
 - a. Home Uses
 - i. Ranges
 - ii. Ovens
 - iii. Water heaters
 - iv. Furnaces
 - v. Clothes dryers
 - vi. HVAC
 - vii. Grilling
 - viii. RV appliances
 - b. Farming
 - i. Drying crops
 - ii. Temperature regulation
 - iii. Power indoor equipment
 - iv. Heat greenhouses
 - c. Businesses
 - i. Restaurants
 - ii. General heating needs
 - iii. Laundromats
 - d. Industry
 - i. Metal working cutting torches
 - ii. Portable heaters
 - iii. Industrial drying uses like drying concrete, plaster, etc

- iv. Heating asphalt for highway construction and repair
- v. Fork-lift and other equipment insides factories and warehouses
2. Isopropanol and isopropyl alcohol
 - i. Medical
 1. Hand sanitizer
 2. Rubbing alcohol
 3. Disinfecting pads
 4. Water-drying agent
 5. Preparation of hydrogen peroxide
 6. Preserving pathological specimens
 7. Medicinal liniments
 8. Tinctures of green soap
 9. Scalp tonics
 10. Tincture of mercuriofen
 11. pharmaceuticals
 - ii. Solvents and Cleaning applications
 1. Disinfectant for home, hospital, and industry
 2. Eyeglasses
 3. Electrical contacts
 4. Audio headers
 5. Optical disc lenses
 6. Thermal paste remover in electronic heatsinks
 7. Oil dissolving properties
 - iii. Aerosol formulations
 1. Hair spray
 2. Floor detergents
 3. Shoe polishes
 4. Insecticides
 5. Burn ointments
 6. Window cleaners
 7. Waxes and polish
 8. Paints
 9. Insect repellents
 10. Air refreshers
 11. First aid spray
 12. Foot fungicide
 13. Fabric-wrinkle remover
 - iv. Automotive
 1. “gas dryer” fuel additives
 2. Windshield deicers
 3. Brake system flush
 4. Windshield washer fluid
 5. Antifreeze

- v. Laboratory
 1. Non-toxic alternative to formaldehyde as preservative
 2. DNA extraction
- vi. Food additives
 1. Extraction solvent
 2. Refinement of calcium carbonate
- vii. Agriculture
 1. Microbiocide
- viii. Industry uses
 1. Adhesives and sealant chemicals
 2. Agricultural chemicals (non-pesticidal)
 3. Anti-adhesive agents
 4. Finishing agents
 5. Fuels and fuel additives
 6. Functional fluids (closed systems)
 7. Intermediates
 8. Laboratory chemicals
 9. Lubricants and lubricant additives
 10. Paint additives and coating additives not described by other categories
 11. Pigments
 12. Plating agents and surface treating agents
 13. Processing aids, not otherwise listed
 14. Processing aids, specific to petroleum production
 15. Solids separation agents
 16. Solvent from imported Raw Material
 17. Solvents (for cleaning and degreasing)
 18. Solvents (which become part of product formulation or mixture)
 19. Surface active agents
- ix. Consumer uses
 1. Adhesives and sealants
 2. Air care products
 3. Automotive care products
 4. Cleaning and furnishing care products
 5. Electrical and electronic products
 6. Fabric, textile, and leather products
 7. Fuels and related products
 8. Ink, toner, and colorant products
 9. Lubricants and greases
 10. Metal products
 11. Paints and coatings
 12. Personal care products

13. Pharmaceuticals
 14. Plastic and rubber products not covered elsewhere
 15. organic chemical manufacturing
3. Polypropylene
- a. Medical equipment from melt-blown and spun-bond fiber production
 - i. N95 Masks
 - ii. Hospital gowns
 - iii. Hoods
 - iv. Air filters
 - v. Diapers
 - vi. Wipes
 - b. Polypropylene plastics
 - i. Sturdy “living hinges”
 1. Flip-top bottles
 2. Flip top containers like tic tac box
 3. Laboratory containers and lids
 - ii. Piping systems
 - iii. Medical uses
 1. Autoclave heat resistant products for reusable purposes
 2. Nonabsorbable sutures
 3. Hernia and pelvic organ prolapse repair
 - iv. Food containers
 - v. Reusable plastic containers
 - vi. Plastic pails
 - vii. Car batteries
 - viii. Wastebaskets
 - ix. Pharmacy prescription bottles
 - x. Cooler containers
 - xi. Dishes and pitchers
 - xii. Biaxially oriented polypropylene
 1. Consumer clear baggage
 2. Packaging for artistic and retail products
 - xiii. Carpets, rugs, flooring
 - xiv. Rope (including watercraft rope as floats in water)
 - xv. Insulation for electric cables
 - xvi. Roofing membranes and waterproofing
 - xvii. Plastic moldings
 1. Bottles
 2. Bottle tops
 3. Fittings
 - xviii. Sheet form
 1. Stickers
 2. Stationery folders

3. Storage boxes
- xix. Toys
 1. Rubik's cube
 2. Trading card protectors
 3. Model aircraft
 4. Radio controlled vehicles
 5. Other children's toys
- xx. Loudspeaker drive units
- xxi. Construction
 1. Concrete additive
 - a. Use in earthquake susceptible areas to increase strength
 2. Improve soil strength and damping for foundation construction
 3. Drywall jointing
 4. Polypropylene drums
- xxii. Clothing
 1. Cold-weather base layers
 2. Jewelry
- xxiii. Polymer banknotes and currencies

Ethane

1. ethylene and polyethylene
 - a. Polyvinyl chloride (PVC)
 - i. Rigid
 1. Pipes
 2. Doors
 3. Window profiles
 4. Bottle manufacturing
 5. Non-food packaging
 6. Credit cards
 - ii. Flexible
 1. Plumbing
 2. Electrical cable installation
 3. Signage
 4. Inflatable products
 - b. Monoethylene Glycol ("MEG") – precursor of polyethylene terephthalate
 - i. Polyester resins
 - ii. Films and fibers
 - iii. Water-based adhesives
 - iv. Paper
 - v. Antifreeze
 - vi. Coolant

- vii. Aircraft deicers and solvents
- viii. Ethylene glycol for carbon fiber production
- ix. Clothing
- x. Textiles
- xi. Packaging
- xii. Kitchenware
- xiii. Upholstery
- xiv. Carpeting
- xv. Drink and food containers
- xvi. Anti-corrosion in liquid cooling systems
- xvii. Cathode-ray tube projectors
- xviii. Vaccine preparation
- xix. Rot and fungal treatment in lumber
- xx. Preservation of biological specimens
- xxi. Silicon compounds
- c. Surfactants
 - i. Detergents
 - ii. Wetting agents
 - iii. Emulsifiers
 - iv. Foaming agents
 - v. Dispersants
- d. Acrylonitrile Butadiene Styrene (ABS)
 - i. LEGOS and other children's toys
 - ii. Drain-waste-vent pipe systems
 - iii. Musical instruments
 - iv. Golf club heads
 - v. Automotive trim components
 - vi. Automotive bumper bars
 - vii. Bicycle and Motorcycle helmets
 - viii. Inhalers
 - ix. Nebulizers
 - x. Non-absorbable sutures
 - xi. Tendon prostheses
 - xii. Drug-delivery systems tracheal tubes
 - xiii. Electronic enclosures
 - xiv. Protective head gear
 - xv. Watercraft hulls
 - xvi. Furniture
 - xvii. Luggage
 - xviii. Kitchen appliances
 - xix. Keyboards
 - xx. 3D printing polymer
- e. Other uses

- 1 i. Fruit-ripening agent
- 2 ii. Welding gas
- 3 2. Industrial uses of Ethane
- 4 a. Acetic acid production
- 5 b. Cryogenic refrigeration systems
- 6 c. Electron microscopy
- 7 d. Power plant fuel stock
- 8

9 **SPMT'S CONTRACTUAL RIGHTS WITH DELCORA**

10 **Q. DOES SPMT HAVE A CONTRACT WITH DELCORA?**

11 A. Yes, SPMT has entered into a series of contracts with DELCORA. Under the proposed
 12 transaction, DELCORA will assign these contracts to Aqua. I note that in its Application
 13 Aqua purports to be filing these contracts with the Commission for approval of pursuant
 14 to 66 Pa. C.S. § 507. However, counsel advised me that the Commission only has
 15 jurisdiction to approve contracts under Section 507 that are between public utilities and
 16 municipalities, and SPMT is not a municipality.

17 **Q. Please describe the series of contracts.**

18 A. The contracts are included as Exhibits F125-F-131 to the Application. Below is a table
 19 describing each contract.

Exhibit	Contract Name and Date	Brief Description
F125	License Agreement, Dated November 29, 2005 by and among DELCORA and Sunoco Inc.	This agreement grants DELCORA a license to access, monitor, and maintain certain Energy Transfer property without the need for certain security measures that would otherwise be applicable to the property. This agreement expressly states it cannot be assigned without the other parties' advanced written consent.
F126	Agreement of Sale and Service, Dated January 1, 2005, by and among DELCORA and Sunoco, Inc. (R&M)	This agreement sets forth the terms under which DELCORA will treat SMPT's wastewater.

F127	March 2012 Amendment Agreement of Sale and Service, Dated March 23, 2005, by and among Sunoco, Inc. (R&M) and DELCORA	This 2012 agreement amends F126 due to changes in the operations of MHIC.
F128	Second Amendment Agreement of Sale and Service, Dated January 1, 2013, by and among Sunoco, Inc. (R&M) and DELCORA	This 2013 agreement amends F127 due to changes in the operations of the MHIC.
F129	Third Amended Agreement of Sale and Service, Dated August 1, 2018, By and Among Sunoco Partners Marketing & Terminals L.P. and DELCORA	This 2018 agreement amends F128 due to changes in the operations of MHIC. This is the currently effective agreement between the parties governing the terms under which DELCORA will treat SPMT's wastewater. It expires December 31, 2025 or if certain other conditions precedent occur.
F130	Memorandum of Understanding, Dated July 28, 2016 by and among Sunoco Partners Marketing & Terminals L.P. and DELCORA	This MOU addresses the parties understanding regarding disposal of certain wastewater treatment sludge.
F131	Agreement, Dated December 16, 2014, by and among Sunoco Partners Marketing & Terminals L.P. and DELCORA	This agreement also addresses disposal of certain wastewater treatment sludge.

Q. WHAT ARE SPMT'S CONTRACTUAL RIGHTS UNDER THE CURRENTLY EFFECTIVE AGREEMENT FOR THE TREATMENT OF WASTEWATER, F129 (2018 SPMT DELCORA CONTRACT)?

A. They key rights to which SPMT is entitled include:

- discharge of five million gallons per day average daily flow based on a monthly average and consistent with SPMT's DELCORA permit with a provision that if daily peak flow exceeds 15 million gallons per day, SPMT shall pay a surcharge equal to \$5,000.00 per million gallons in excess of this amount. F129 at Section 1.02.

- 1 - SPMT is categorized as a Wholesale Industrial User and entitled to certain service
2 charge provisions, including:
 - 3 ○ that the service charge shall be based upon costs associated with the
4 DELCORA Western Region system;
 - 5 ○ that the service charge shall be based upon rates which are uniform for all
6 users in this category,
 - 7 ○ that costs to allocate the system among classes of users will be based upon the
8 respective burdens placed on the system by each class,
 - 9 ○ that the service charge shall be determined by annual resolution passed by the
10 DELCORA Board of Directors, and
 - 11 ○ that charges will be reconciled at year end based on actual flows and loadings.
12 F129 at Section 2.02.
- 13 - DELCORA provision of estimated payments for each year and SPMT payment based
14 on these estimates on a quarterly basis with provision for auditing and true-up. F129
15 at Section 2.05.
- 16 - Measurement of wastewater discharged based on readings of SPMT's meter. Section
17 3.01.
- 18 - Provision for SPMT to recover damages to its property as the result of improper
19 damage by another entity, and that if DELCORA is unable to recover damages from
20 the source, the excess damages shall be recovered through the general rate structure in
21 succeeding years.

1 **Q. DO YOU HAVE ANY CONCERNS REGARDING THE ASSIGNMENT TO**
2 **AQUA OF THE 2018 SPMT DELCORA CONTRACT?**

3 A. Yes. It is unclear whether Aqua will continue to provide SPMT with the contractual
4 rights it currently has if the contract is assigned as proposed. I believe that for the
5 proposed transaction to be approved, Aqua must ensure SPMT continues to have these
6 rights, but Aqua has not confirmed this will be the case. In particular, SPMT is very
7 concerned that its charges under Aqua ownership may not be based solely on costs
8 associated with the Western Region and Industrial Wholesale Users costs imposed on the
9 system, which will have significant financial impact on SPMT. SPMT Witness Woods
10 discusses this issue in greater detail with supporting calculations.

11 **DETRIMENTS OF THE PROPOSED ACQUISITION**

12 **Q. WILL AQUA'S PROPOSED ACQUISITION OF DELCORA IMPACT MHIC?**

13 A. Yes, and from what we presently know it will not be beneficial in many respects. In
14 2019, SPMT incurred approximately \$2,794,561.00 in costs related to DELCORA's
15 provision of wastewater services to MHIC. Based on the testimony of SPMT witness Mr.
16 Howard Woods, I understand Aqua's charges will be 12.55% higher than current charges
17 and increase SPMT's wastewater expenditures by approximately \$357,363 per year. I
18 also understand that this is the direct impact of the approval of the purchase price and this
19 does not account for additional cost increases that will be inevitable when Aqua begins to
20 implement DELCORA's capital plan. As described in Mr. Woods' testimony, MHIC's
21 cost for wastewater treatment will double under Aqua ownership of the DELCORA
22 assets.

1 **Q. HOW WILL THESE NEGATIVE IMPACTS AFFECT MHIC?**

2 A. This is a significant increase in our costs of operations and this money will have to come
3 from somewhere. As I testified above, SPMT through MHIC has made enormous
4 investment in the region and plans to continue investing and expanding its business at
5 MHIC, benefitting the local and state community with jobs and tax revenues. However,
6 the unnecessary increase in costs may impact these decisions and SPMT's decision to
7 continue further investment in the region. Moreover, increases in our costs may in turn
8 increase costs for our shipper customers. SPMT Witness Kevin Smith further discusses
9 negative impacts on SPMT if the proposed transaction were approved. If those negative
10 impacts occur, they will cause disastrous economic ripple effects.

11 **POTENTIAL ALTERNATIVES**

12 **Q. DOES MHIC HAVE ALTERNATIVES TO THE CURRENT DELCORA SYSTEM**
13 **FOR WASTEWATER SERVICES?**

14 A. Given the detriments discussed above, we have begun exploring various alternatives to
15 the DELCORA system should it be acquired by Aqua as proposed in the Application.
16 For example, MHIC may be able to utilize a different neighboring wastewater system or
17 potentially build its own system. Either of these alternatives may be less detrimental to
18 MHIC's business than continuing to utilize the DELCORA system once Aqua acquires it
19 and substantially increases MHIC's rates.

20 **Q: DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

21 A. Yes.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania	:	
Wastewater, Inc. pursuant to Sections 1102,	:	
1329 and 507 of the Public Utility Code for	:	Docket No. A-2019-3015173
approval of the acquisition by Aqua of the	:	
wastewater system assets of the Delaware	:	
County Regional Water Quality Control	:	
Authority	:	

DIRECT TESTIMONY OF

HOWARD J. WOODS, JR., P.E.

ON BEHALF OF

SUNOCO PARTNERS MARKETING & TERMINALS L.P.

SPMT Statement No. 2

September 29, 2020

SPMT Statement No. 2

Table of Contents

1. STATEMENT OF QUALIFICATIONS	2
2. SCOPE AND PURPOSE OF TESTIMONY.....	4
3. CONCLUSIONS AND RECOMMENDATIONS.....	5
4. SYSTEM DESCRIPTION	11
5. CAPITAL IMPROVEMENT PLAN	17
6. REVENUE REQUIREMENT ISSUES	18
7. ADDITIONAL PUBLIC POLICY MATTERS	40
8. FEDERAL REVIEW AND APPROVAL.....	44
APPENDIX A - QUALIFICATIONS	51
APPENDIX B – SCHEDULES	73
APPENDIX C – E.O. 12803	99

SPMT Statement No. 2

1. STATEMENT OF QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Howard J. Woods, Jr. and my address is 49 Overhill Road, East Brunswick, New Jersey 08816-4211.

Q. BY WHOM ARE YOU EMPLOYED?

A. I am an independent consultant and Sunoco Partners Marketing & Terminals L.P. ("SPMT") has engaged me in this matter.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL QUALIFICATIONS.

A. I hold a Bachelor of Civil Engineering from Villanova University (1977) and a Master of Civil Engineering with a concentration in water resources engineering also from Villanova University (1985). I am a registered professional engineer in New Jersey, New York, Maryland, Pennsylvania, Delaware and New Mexico. I am also licensed to perform RAM-SM security assessments of public water systems. I am an active member of the American Society of Civil Engineers, the National Ground Water Association, the American Water Works Association, the Water Environment Federation and the International Water Association.

SPMT Statement No. 2

1 **Q. HAVE YOU PROVIDED TESTIMONY IN UTILITY MATTERS ON PRIOR**
2 **OCCASIONS?**

3 A. Yes. I have testified in numerous rate setting proceedings and quality of service evaluations
4 in matters before the Public Utility Commissions in New Jersey, New York, Connecticut,
5 Delaware, Pennsylvania and Kentucky. The focus of my testimonies is on matters involving
6 revenue requirement, utility operations, system acquisitions, planning and engineering.

7
8 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE.**

9 A. A detailed description of my professional experience is provided in Appendix A of this
10 Testimony. In summary, I have over 43 years' experience in the planning, design,
11 construction and operation of water and wastewater utility systems. I have worked for a
12 Federal regulatory agency, a large investor-owned water and wastewater utility, a firm
13 engaged in contract operations of municipally owned water and wastewater utilities, and
14 in engineering and operational consulting for the water and wastewater industry. During
15 my career, I have been responsible for all operations functions including regulatory
16 compliance, water production, distribution and maintenance services as well as wastewater
17 collection and treatment. I have evaluated numerous water and wastewater acquisitions and
18 I have advised clients on the sale or acquisition of these systems.

SPMT Statement No. 2

2. SCOPE AND PURPOSE OF TESTIMONY

Q. MR. WOODS, PLEASE DESCRIBE YOUR AREA OF RESPONSIBILITY IN THIS MATTER.

A. I have been engaged to review the Application of Aqua Pennsylvania Wastewater, Inc. (“AQUA”) pursuant to Sections 1102, 1329 and 507 of the Public Utility Code for approval of the acquisition by AQUA of the wastewater system assets of the Delaware County Regional Water Quality Control Authority (“DELCORA”), to quantify the potential impacts of the proposed acquisition on SPMT and offer an opinion regarding the manner in which the proposed transaction impacts the public interest.

Q. WHAT MATERIALS HAVE YOU REVIEWED IN DISCHARGING THIS ASSIGNMENT?

A. I have reviewed AQUA’s Petition and the numerous Exhibits and Testimonies attached to the Petition along with discovery responses provide to the parties in this matter. In addition, I have also reviewed various presentation materials that, to the best of my understanding and belief, were prepared by AQUA and provided to SPMT.

Q. ARE YOU SPONSORING ANY EXHIBITS?

A. Yes. I have prepared six Schedules to illustrate how Aqua’s higher cost of capital as an investor-owned utility will impact the revenue requirement that must be recovered from

SPMT Statement No. 2

1 customers and how this will impact SPMT. These schedules also show that the impact of
2 DELCORA's cost of capital as a municipal authority is much less.

3
4 **3. CONCLUSIONS AND RECOMMENDATIONS**

5 **Q. AS A RESULT OF YOUR REVIEW OF AQUA'S APPLICATION, WHAT HAVE**
6 **YOU CONCLUDED?**

7 A. Approval of the AQUA application to acquire the DELCORA assets will unnecessarily
8 increase the revenue requirement associated with providing wastewater service to
9 DELCORA customers like SPMT and unnecessarily increase the revenue requirement to be
10 recovered from existing AQUA Pennsylvania Wastewater customers and from AQUA
11 Pennsylvania water customers statewide. The impact on all customer groups is material and
12 continuing.

13
14 **Q. AQUA HAS ARGUED THAT IT IS ACQUIRING THE RETAIL CUSTOMER BASE**
15 **OF DELCORA AT AN AVERAGE INVESTMENT SIGNIFICANTLY LOWER**
16 **THAN THE INVESTMENT IT ALREADY HAS IN AQUA PENNSYLVANIA**
17 **WASTEWATER AND THAT THIS DEMONSTRATES EFFICIENCY. DO YOU**
18 **AGREE?**

19 A. No. While AQUA presents an argument that it is able to acquire the DELCORA assets that
20 are associated with providing retail service at an average cost less than the current average

SPMT Statement No. 2

1 cost invested in serving existing customers, this does not translate into lower rates for anyone.
2 In fact, the opposite is true. The filing demonstrates that DELCORA customers will
3 experience a 12.55% rate increase as a result of the transaction. Existing AQUA
4 Pennsylvania Wastewater customers will see a 14.32% rate increase because of the purchase
5 and AQUA Pennsylvania water customers will see a 4.58% rate increase in their water
6 service bills. With respect to the latter customer groups, the acquisition will also have an
7 immediate impact on the DSIC flow-through portion of their bills as the DSIC surcharge rate
8 is applied to a higher base bill. The argument that there is an efficiency in this acquisition is
9 hollow and it should be rejected.

10
11 **Q. WHAT IS YOUR CONCLUSION REGARDING THE IMPACT OF THE**
12 **PURCHASE PRICE, ASSUMING IT IS RECOGNIZED IN RATES?**

13 A. As a result of the purchase of the DELCORA assets, any existing obligations held by
14 DELCORA will be discharged. This includes satisfying the outstanding DELCORA debt
15 obligations. While this will eliminate DELCORA's capital costs, those costs will be replaced
16 by the revenue requirement associated with AQUA's purchase price, assuming that the full
17 amount of \$276,500,000 is recognized as rate base, and that revenue requirement greatly
18 exceeds the cost of existing DELCORA debt by nearly \$15 million dollars per year. This is
19 an ongoing capital cost that DELCORA customers, AQUA Pennsylvania Wastewater
20 customers and AQUA Pennsylvania water customers would never pay, absent this

SPMT Statement No. 2

1 transaction. It is a material and unnecessary expense for service that would never materialize
2 were it not for the proposed transaction.

3
4 **Q. WHAT IS YOUR CONCLUSION REGARDING THE REVENUE REQUIREMENT**
5 **ASSOCIATED WITH FUTURE CAPITAL IMPROVEMENTS TO THE DELCORA**
6 **SYSTEM?**

7 A. Future capital investments in the DELCORA system are described as being significant and,
8 according to the filing, could be on the order of \$1.1 billion. At the current cost of capital
9 for AQUA and for municipal authorities like DELCORA, the revenue requirement resulting
10 from an AQUA implementation of the same capital improvement plan would be more than
11 \$46 million per year more costly than if the same improvements were financed by a public
12 authority. This is an additional revenue requirement that will only result if the proposed
13 transaction is consummated and it is an expense that DELCORA, AQUA Pennsylvania
14 Wastewater and AQUA Pennsylvania water customers should not be forced to pay.

15
16 **Q. AQUA HAS ARGUED THAT THE ACQUISITION OF DELCORA WILL BENEFIT**
17 **DELCORA CUSTOMERS BY ALLOWING THE COST OF SERVICING**
18 **DELCORA CUSTOMERS TO BE SPREAD OVER A LARGER CUSTOMER**
19 **GROUP. DO YOU AGREE THAT THIS IS A BENEFIT?**

20 A. No. DELCORA has a proven track record of being able to own and operate a large regional
21 wastewater treatment system. While the prospective capital program is large and while this

SPMT Statement No. 2

1 program if implemented by DELCORA will result in rate increases to DELCORA
2 customers, the revenue requirement using public debt is almost half of what would result
3 from using investor-owned utility financing. While AQUA could transfer some of that cost
4 to its other water and sewer customers, there are not enough of these ratemaking sleights of
5 hand to eliminate or transfer a revenue requirement that is on the order of \$46 million
6 additional dollars per year. The proposed transaction results in greatly higher costs that could
7 be avoided and charges those unnecessary costs to existing DELCORA customers and to
8 other customer groups who receive no benefit from DELCORA assets. This is not a benefit
9 to the public.

10
11 **Q. ARE THERE ANY REGULATORY ISSUES IMPACTING CUSTOMERS LIKE**
12 **SPMT THAT ARE HARMFUL TO THE PUBIC INTEREST?**

13 A. Yes. SPMT is regulated under environmental laws as a Significant Industrial User (“SIU”)
14 and a Categorical User. The permitting arrangements for discharging into the publicly owned
15 DELCORA system differ from what they would be if SPMT discharged into the wastewater
16 system of an investor-owned utility. These issues are discussed in greater detail by SPMT
17 Witness Mr. Kevin Smith in SPMT Statement No. 3.

18
19 **Q. DOES THE CHANGE IN CLASSIFICATION FROM A PUBLICLY OWNED**
20 **TREATMENT WORKS (“POTW”) TO A PRIVATE SYSTEM, WHICH WOULD**
21 **OCCUR IF THE SYSTEM IS SOLD TO AQUA, HAVE ANY OTHER**

SPMT Statement No. 2

**IMPLICATIONS THAT COULD ADVERSELY AFFECT THE LIABILITY
SHOULDERED BY INDIRECT DISCHARGERS LIKE SPMT?**

A. Yes. Combined Sewer Overflows (“CSOs”) would continue after closing, but these would no longer be associated with a POTW. The CSO control program and regulations would no longer apply to these discharges. Combined sewers carry both domestic and industrial wastewater discharged to the DELCORA system or discharged to the municipal systems feeding into the DELCORA system along with storm water collected within the communities that have combined sewers. A combined sewer is a single sewer main that collects and transmits wastewater in addition to stormwater. During dry weather, combined sewers carry wastewater to the treatment plant for proper treatment and disposal. During storm events, combined sewers are designed to overflow at defined CSO points and discharge untreated wastewater and storm water to a receiving stream. Indirect dischargers like SPMT and other industrial and commercial customers of DELCORA could be held liable should any pollutants generated on their respective sites be discharged through a CSO point that is not permitted to a POTW. Given that the CSO control program would no longer apply, AQUA or some other private owner could be forced into a greatly expanded long term control program that is significantly more costly than the plan adopted by DELCORA.

**Q. CAN THE CHANGE IN OWNERSHIP OF THE DELCORA SYSTEM IMPACT
WASTEWATER INFRASTRUCTURE FUNDING FOR THE COMMONWEALTH
OF PENNSYLVANIA?**

SPMT Statement No. 2

1 A. Yes. The Clean Water Act formula for providing Federal funds to Pennsylvania is based on
2 a ratio of the total funds needed to make improvements to POTWs, like DELCORA, to the
3 total funds required nationally for the same purpose. By changing the ownership of
4 DELCORA from a public body to an investor-owned utility, the DELCORA system will no
5 longer be a POTW but instead will be a private system. Private system needs are not included
6 in the funding formula. The elimination of a system like DELCORA, which has significant
7 capital improvement needs, from the funding formula because the system is no longer a
8 POTW means that Pennsylvania's share of the Federal Clean Water Act funding will
9 ultimately be lower. This is funding made available to all POTWs on a priority needs basis,
10 so the reduction in funding may impact other POTW systems around the Commonwealth.
11 In addition, private systems cannot access federal funding made available to the
12 Commonwealth, so under AQUA ownership the customers of DELCORA would be put at a
13 great disadvantage because the system will not have access to low interest and no interest
14 loans available under the federal revolving loan program.

15
16 **Q. DO YOU BELIEVE THAT THE PROPOSED TRANSACTION REQUIRES**
17 **FEDERAL REVIEW BEFORE CLOSING CAN OCCUR?**

18 A. Yes, I believe that the United States Environmental Protection Agency and the federal Office
19 of Management and Budget must review and approve the proposed transaction and that until
20 this review is complete the Transfer Price, rate base and the initial balance of the proposed

SPMT Statement No. 2

1 rate stabilization trust cannot be evaluated because these values are not currently known and
2 measurable.

3
4 **Q. WHAT IS YOUR OVERALL CONCLUSION AND RECOMMENDATION**
5 **REGARDING THIS PETITION?**

6 A. The proposed acquisition is not in the public interest. As the transaction has been proposed,
7 it will result in significantly higher costs to provide wastewater service, it will burden
8 customers who do not benefit from DELCORA operations with costs they do not now bear,
9 and it will place at risk the businesses of Significant Industrial Users and Categorical Users
10 who currently discharge wastewater to the DELCORA system as permitted Indirect
11 Dischargers. Furthermore, it is my opinion that the Petition cannot be properly evaluated
12 because rate base and the amount of the initial contribution to the rate stabilization trust fund
13 are not known and measurable at this time. It is my recommendation that this petition be
14 denied.

15
16 **4. SYSTEM DESCRIPTION**

17 **Q. PLEASE DESCRIBE DELCORA.**

18 A. DELCORA is a large regional wastewater system operating in southeastern Pennsylvania.
19 DELCORA was created on October 20, 1971 by a resolution of the Council of Delaware
20 County under the Pennsylvania Municipality Authorities Act of 1945. The governing body

SPMT Statement No. 2

1 of DELCORA is a nine-member board whose members are appointed to staggered terms
2 by the Delaware County Council.¹ DELCORA's facilities serve residential, commercial,
3 institutional, and industrial customers in Delaware and Chester Counties. DELCORA
4 owns and operates a system consisting of 24 pump stations and associated force mains, and
5 180 miles of gravity collection system mains and interceptor sewers for the conveyance of
6 wastewater to DELCORA's Western Regional Treatment Plant (WRTP) located in the City
7 of Chester in Delaware County and to the Philadelphia Water Department's Southwest
8 Water Pollution Control Plant.² The DELCORA Western Service Area includes eighteen
9 (18) pumping stations which are owned and operated by DELCORA including the Central
10 Delaware Pump Station which can direct flow to either the WRTP, a permitted 44 MGD
11 activated sludge wastewater treatment plant, or the City of Philadelphia's Southwest Water
12 Pollution Treatment Plant. The DELCORA Eastern Service Area includes (6) six pumping
13 stations which are owned and operated by DELCORA. The Eastern Service Area
14 discharges to the Philadelphia Southwest Water Pollution Control Plant (SWWPCP) and
15 the WRTP.³ In addition to the WRTP, DELCORA owns and operates three (3) remote
16 Treatment Plants: Corinne Village (Pocopson Preserve) located in Pocopson Township;
17 Sheeder Tract (Riverside) located in Pocopson Township; and Springhill Farms located in

¹ Delaware County Regional Water Quality Control Authority, Audited Financial Statements, December 31, 2019; Page 3.

² Company Exhibit D; DELCORA Sewerage Facilities Engineering Assessment and Original Cost; Pennoni Associates, Inc.; Philadelphia, PA; December 13, 2019; Page 4 and Company Exhibit W1, Direct Testimony of Robert Willert; Page 4, Line 12.

³ Ibid.

SPMT Statement No. 2

Chadds Ford Township. The average annual flow for Corinne Village is 0.013 MGD; for Sheeder Tract is 0.021 MGD and for Springhill Farms is 0.042 MGD.⁴

DELCORA owns all or part of the collection systems in the following areas: City of Chester, Chester Township, Borough of Marcus Hook, Borough of Rose Valley, Upland Borough, Parkside Borough, Trainer Borough, Edgmont Township, and Pocopson Township.⁵ DELCORA serves approximately 16,000 customer connections;⁶ however, a number of these connections are points at which flow is delivered to DELCORA from municipally-owned wastewater collection networks in the DELCORA service area. DELCORA provides wholesale conveyance and treatment service to municipal and municipal authority customers within all or part of 49 municipalities⁷ that comprise Delaware County. DELCORA is a very large regional wastewater system that serves 197,000 Equivalent Dwelling Units (“EDU”).⁸ At 3 persons per EDU, the equivalent population served directly and indirectly by DELCORA exceeds 550,000.

Q. WHAT ARE DELCORA’S ANNUAL REVENUES?

A. In 2019, DELCORA generated total operating revenues of \$66,064,322. Major industries in DELCORA’s Western Region paid in \$7,056,587 of this amount.⁹ SPMT is one of these industries and DELCORA billed SPMT \$2,840,469 for service net of true-up refunds in 2019.

⁴ Ibid.

⁵ Company Exhibit W3, Direct Testimony of Michael DiSantis; Page 3, Lines 5-8.

⁶ Company Exhibit U2, Direct Testimony of William C. Packer; Page 9, Line 21.

⁷ Application; Page 3, Paragraph 8.

⁸ Op.Cit.; Packer; Page 9, Line 21.

⁹ Op.Cit.; Audit 2019; Page 14.

SPMT Statement No. 2

1 **Q. IN 2019, DID DELCORA PRODUCE POSITIVE NET INCOME?**

2 A. Yes. In 2019, DELCORA recorded net income of \$12,869,079, which included capital
3 contributions of \$352,848. DELCORA's Net Position increased from \$185,035,336 to
4 \$197,904,415 in 2019.¹⁰

5
6 **Q. DO DELCORA'S EXISTING DEBT INSTRUMENTS INCLUDE A RATE**
7 **COVENANT?**

8 A. Yes. DELCORA has outstanding bonds, and the associated indentures obligate it to
9 produce Net Revenues of at least 1.1 times the annual debt service requirements.¹¹

10
11 **Q. DID DELCORA SATISFY THIS OBLIGATION IN 2019?**

12 A. Yes. Net cash provided by operating activities in 2019 amounted to \$18,764,868.¹² The
13 annual debt service due in 2019 was \$6,142,896.¹³ Looking ahead, the principal and
14 interest amounts due in 2020 amount to \$11,668,646.¹⁴ This represents a coverage ratio
15 ranging from 3.0 to 1.6 at 2019 DELCORA rates.

16
17 **Q. WHAT IS THE VALUE OF DELCORA'S UTILITY PLANT ASSETS?**

18 A. At the end of 2019, DELCORA had \$387,802,188 in total capital assets. The accumulated
19 depreciation amounted to \$127,295,670 as of December 31, 2019. Therefore, the net plant

¹⁰ Ibid.

¹¹ Ibid.; Page 24.

¹² Ibid.; Page 15.

¹³ Ibid.; Page 23.

¹⁴ Ibid.; Page 24.

SPMT Statement No. 2

1 value for DELCORA's assets was \$260,506,518 at year end.¹⁵ DELCORA's 2019 Audit
2 also notes that the value of the system is recorded at original cost and that capital assets
3 have been financed primarily through proceeds from various bond issues, grants from the
4 Environmental Protection Agency and funds generated from ongoing operations.¹⁶ The
5 amount of the Federal grants is estimated at \$100,000,000.¹⁷ This contribution in aid of
6 construction reduces the value of the DELCORA net investment to \$160,506,518. It is
7 also my understanding that various municipal participants in the DELCORA system may
8 also have made contributions in aid of construction, so the actual value of the DELCORA
9 investment may be much lower.

10
11 **Q. IS DELCORA A LARGE WASTEWATER SYSTEM?**

12 A. Yes. Pennsylvania DEP classifies systems by size and those with flows greater than or
13 equal to 5 million gallons per day ("MGD") are characterized as "Major" facilities. There
14 are 124 such facilities in Pennsylvania and DELCORA is among the largest. In 2019,
15 DELCORA collected 66.27 MGD and either sent this flow to the City of Philadelphia for
16 treatment or treated and disposed of the flow at its WRTP.¹⁸ DELCORA is a very large
17 regional system serving all of Delaware County and parts of Chester County. By any
18 objective measure, DELCORA is larger than Aqua Pennsylvania Wastewater, Inc., the
19 AQUA entity that will actually acquire DELCORA if this transaction is approved.

¹⁵ Ibid; Page 22.

¹⁶ Ibid; Page 17.

¹⁷ Ibid; Page 3.

¹⁸ Ibid; Page 2.

SPMT Statement No. 2

Q. ARE YOU AWARE OF ANY IMPEDIMENTS TO DELCORA’S ABILITY TO FINANCE CAPITAL IMPROVEMENTS?

A. I am not aware of any impediments. In fact, DELCORA has described its efforts to plan for future improvements to its system to maintain compliance with environmental regulations and it has only raised a concern about future rates that would result from financing those improvements. Mr. Willert provides a succinct description of the planning that led DELCORA to its decision to leave the City of Philadelphia and expand the W RTP to treat all flows collected from the DELCORA Eastern and Western service areas and to manage the DELCORA Long Term Control Plan for combined sewer overflows.¹⁹ In addition, in materials provided by AQUA and DELCORA to SPMT to explain the proposed sale of DELCORA to AQUA, DELCORA never asserted that it was unable to finance the improvements needed to leave Philadelphia or implement the Long Term Control Plan.

Q. PLEASE DESCRIBE SPMT AND ITS FLOW CONTRIBUTION TO THE DELCORA SYSTEM.

A. The Marcus Hook Industrial Complex (“MHIC”) is owned and operated by Sunoco Partners Marketing & Terminals L.P., a subsidiary of Energy Transfer. MHIC is located in Marcus Hook, Pennsylvania on property fronting the Delaware River. SPMT discharges an average of 3.4 MGD industrial wastewater from the MHIC to DELCORA’s treatment plant located in Chester, PA. Wastewater is collected on-site in an extensive piping

¹⁹ Op.Cit.; Willert; Page 6, Line 4 through Page 9, Line 17.

SPMT Statement No. 2

1 network, it is stored in flow equalization tanks, it is subject to pretreatment in an SPMT
2 owned and operated wastewater treatment facility, and it is pumped to a single metering
3 point where the flow is measured and discharged into DELCORA's regional interceptor
4 system. At this point SPMT waste is commingled with wastewater from other DELCORA
5 customers and transported to the DELCORA WRTP for proper treatment and disposal.
6 SPMT is authorized to discharge industrial wastewater to DELCORA's facilities under
7 DELCORA's Industrial Pretreatment Program Wastewater Discharge Permit No. 1OT-03-
8 02.

9
10 **Q. HOW WILL THE FACILITIES OWNED AND OPERATED BY SPMT BE**
11 **IMPACTED BY THE PROPOSED TRANSACTION?**

12 A. The on-site facilities owned by SPMT at the MHIC will continue to be owned and operated
13 by SPMT. The facilities now owned by DELCORA at the point of SPMT's discharge to
14 DELCORA, the DELCORA interceptor system and the DELCORA WRTP will be sold to
15 AQUA and at closing will no longer be classified as a Publicly Owned Treatment Works
16 ("POTW") if the proposed transaction is approved.

17
18 **5. CAPITAL IMPROVEMENT PLAN**

19 **Q. HAS DELCORA DEVELOPED A CAPITAL IMPROVEMENT PLAN?**

20 A. Yes. DELCORA has faced a number of challenges related to changing regulatory
21 compliance requirements with respect to the Long Term Control Plan for combined sewer

SPMT Statement No. 2

1 overflows and greatly rising costs associated with the City of Philadelphia combined sewer
2 management program. These challenges are described clearly in Mr. Willert's direct
3 testimony. DELCORA has made a decision to leave the City of Philadelphia and expand
4 the W RTP to accommodate all flows generated within DELCORA's Delaware County
5 service area. According to DELCORA, its Eastern Region customers will benefit from
6 DELCORA's decision to exit Philadelphia. AQUA intends to implement the DELCORA
7 plan of improvements²⁰ if the proposed transaction is approved and consummated.

8
9 **Q. WHAT IS THE ESTIMATED COST OF THE CAPITAL IMPROVEMENT**
10 **PROGRAM?**

11 A. Mr. Bubel has presented a summary of the DELCORA recommended capital
12 improvements²¹ which AQUA indicates it will implement following closing. This capital
13 improvement plan addresses the DELCORA system capital needs through the year 2040
14 and the total estimated cost of this program is \$1,064,494,188.

15
16 **6. REVENUE REQUIREMENT ISSUES**

17 **Q. WHAT IS THE PROPOSED PURCHASE PRICE FOR THE DELCORA ASSETS?**

²⁰ Company Exhibit V, Direct Testimony of Mark J. Bubel, Sr.; Page 8, Lines 2-3.

²¹ Ibid; Appendix A.

SPMT Statement No. 2

1 A. AQUA has offered to acquire the assets of the DELCORA system for \$276,500,000 and it
2 has asked the Public Utility Commission (“PUC” or “Commission”) to recognize this
3 amount as rate base for the system on closing.

4
5 **Q. IF THE PUC APPROVES THE PROPOSED TRANSACTION AND RECOGNIZES**
6 **THE PURCHASE PRICE AS RATE BASE, WILL THERE BE AN IMPACT ON**
7 **REVENUE REQUIREMENT?**

8 A. Absolutely. The purchase price will become part of AQUA’s rate base and a return on and
9 return of that investment will ultimately be recovered from customers.

10
11 **Q. AT AQUA’S CURRENT AUTHORIZED RATES OF RETURN, WHAT WILL BE**
12 **THE ANNUAL REVENUE REQUIREMENT TO BE RECOVERED FROM**
13 **AQUA’S CUSTOMERS AS A RESULT OF THE ACQUISITION?**

14 A. I show on Schedule HJW-1 that AQUA’s annual revenue requirement will be \$29,264,020.
15 The proposed purchase price, including transaction costs, is \$277,250,000. Mr. Packer
16 shows the calculation of AQUA’s weighted cost of capital at 7.37%. (Packer Direct
17 Testimony, Appendix A, Page 1 of 11.) I have reproduced Mr. Packer’s calculation on
18 Schedule HJW-1. At closing, the purchase price and transactional costs will be recognized
19 as rate base if the PUC approves the transaction. Prior to taxes, the Company will need to
20 recover \$20,433,325 annually from its ratepayers. This amount must be grossed up to
21 account for taxes and assessments. I have also reproduced Mr. Packer’s calculation of the
22 Gross Revenue Conversion Factor to account for this on Schedule HJW-1. When this

SPMT Statement No. 2

factor is applied to the pre-tax revenue requirement, the annual amount that must be recovered from customers increases to \$29,264,020.

Q. HOW DOES AQUA'S REVENUE REQUIREMENT FOR THE DELCORA ACQUISITION COMPARE TO DELCORA'S CURRENT REVENUE REQUIREMENT FOR THE SAME SYSTEM ASSETS?

A. DELCORA's current revenue requirement, based on the cost of servicing its outstanding debt, is \$14,291,142. I have calculated this amount on Schedule HJW-1. In order to close the transaction, DELCORA's outstanding debt will need to be satisfied, so the amounts now paid by DELCORA as debt service plus the minimum coverage requirement needed to satisfy DELCORA's Indenture will be eliminated.

Q. DOES THAT MEAN THAT THE ACQUISITION WILL CAUSE THE DELCORA SYSTEM'S CURRENT CAPITAL REVENUE REQUIREMENT TO MORE THAN DOUBLE?

A. Yes, that is correct. DELCORA's debt service revenue requirement is \$14,972,879 per year less than the revenue requirement associated with AQUA's purchase price. This demonstrates that the proposed transaction is replacing DELCORA's lower outstanding debt and lower cost capital with a greater amount of capital financed at a higher cost rate. This increase in cost only occurs as a result of the approval of the proposed transaction. If this transaction is approved, the cost of providing wastewater service in DELCORA's

SPMT Statement No. 2

1 service area will increase by nearly \$15 million per year, or by more than twice the current
2 capital revenue requirement.

3
4 **Q. WOULD YOU EXPECT THE CONDITIONS OF SERVICE IN DELCORA'S**
5 **SERVICE AREA TO CHANGE POST-ACQUISITION IN ANY MATERIAL WAY**
6 **THAT WOULD JUSTIFY THIS INCREASE IN REVENUE REQUIREMENT?**

7 A. No. DELCORA is a large professional organization with a solid, decades-long track record
8 of providing wastewater service in Delaware County. AQUA intends to hire DELCORA's
9 employees and operate DELCORA as a stand-alone system,²² and no external assets now
10 owned and operated by AQUA will impact the quality of service in the DELCORA service
11 area. I do not believe that the service provided to residents and businesses in Delaware
12 County will change in any material way that could justify this \$15 million per year increase
13 in revenue requirement.

14
15 **Q. MR. WILLERT HAS TESTIFIED THAT DELCORA SOUGHT A PARTNERSHIP**
16 **ARRANGEMENT WITH AQUA TO HELP DEFRAID SOME OF THE COSTS**
17 **ASSOCIATED WITH PROVIDING WASTEWATER SERVICE TO DELCORA**
18 **CUSTOMERS. DOESN'T THAT MEAN THE REVENUE REQUIREMENT TO**
19 **BE RECOVERED FROM DELCORA CUSTOMERS WOULD DECREASE?**

20 A. No. As I have explained, the proposed acquisition would increase, not decrease, the
21 revenue requirement. AQUA's revenue requirement associated with the DELCORA

²² Op. Cit.; Bubel, Sr.; Page 4, Lines 22-23.

SPMT Statement No. 2

1 system is driven solely by the magnitude of the purchase price, AQUA's cost of capital
2 and the tax and assessment rates that must also be recovered in rates under AQUA
3 ownership. The revenue requirement associated with the purchase price and the
4 transactional costs is more than double the revenue requirement associated with
5 DELCORA debt. If the transaction is approved, more money will be collected from
6 customers. AQUA's payment of the purchase price to DELCORA will increase current
7 DELCORA customer rates, increase the rates of existing Aqua Pennsylvania Wastewater
8 customers, and even increase the rates of Aqua Pennsylvania water customers. In fact,
9 every customer group affected by this transaction will see material rate increases if the
10 acquisition is approved by the PUC. DELCORA customers will see a 12.55% rate
11 increase,²³ Aqua Pennsylvania Wastewater customers will see a 14.32% rate increase and
12 Aqua Pennsylvania water customers will see a 4.58% rate increase.²⁴ Some current
13 DELCORA customers are already AQUA water customers, so these customers will see the
14 combined impact of the DELCORA increase and the AQUA water rate increase.
15

16 **Q. WHAT DOES A 12.55% RATE INCREASE MEAN TO SPMT?**

17 A. SPMT has had a contractual relationship with DELCORA since 1973. The existing
18 contract defines the relationship of the parties, limits the amount of wastewater that can be
19 discharged by SPMT to the DELCORA system for treatment and sets out the parameters
20 used to define the costs that can be recovered from SPMT for service rendered. The costs

²³ Company Exhibit I12, Notice to DELCORA Western Regional Wholesale Industrial Customers

²⁴ Company Exhibit I1, Notice to AQUA Water and Wastewater Customers.

SPMT Statement No. 2

1 recovered from SPMT are limited to costs associated with the DELCORA Western Region
2 system. According to this contract, DELCORA issues quarterly estimated bills to SPMT
3 based on current DELCORA rates for service and the estimated flow emanating from the
4 MHIC. At the close of each year the charges to SPMT are subject to audit and a true-up
5 adjustment is made based on the results of the audit and actual performance. In 2019, the
6 net amount billed to SPMT was \$2,840,469. The estimated bill for 2020 is \$2,847,515.
7 The 12.55% increase resulting from the PUC approval of the proposed transaction would
8 increase the estimated bill to SPMT to \$3,204,878 and amount to an additional cost of
9 \$357,363 per year. In addition, one of the benefits of the existing contractual arrangement
10 is the annual true-up to actual DELCORA expenses and SPMT flows resulting from the
11 audit. Given how PUC tariffs are structured and how investor-owned utilities bill for
12 service, this annual true-up will be lost to SPMT and other similar customers.

13
14 **Q. DOES THIS INCREASE IN COST REFLECT THE IMPACT OF THE PROPOSED**
15 **IMPROVEMENTS TO THE DELCORA SYSTEM?**

16 A. No. As I noted earlier, Mr. Bubel has testified that AQUA will implement the DELCORA
17 capital improvement plan and the estimated cost of this program through 2040 is
18 \$1,064,494,188. This is an additional capital investment that would be made by AQUA if
19 the transaction is approved by the PUC and the return of and return on this investment must
20 be recovered from ratepayers along with assessments and taxes. The revenue requirement
21 to be recovered from ratepayers will be greater if the same program is implemented by
22 AQUA instead of DELCORA.

SPMT Statement No. 2

Q. HAVE YOU ESTIMATED THE CHANGE IN REVENUE REQUIREMENT THAT WOULD RESULT IF THIS PROGRAM IS UNDERTAKEN BY AQUA INSTEAD OF DELCORA?

A. Yes, I have. I have prepared three Schedules to illustrate this. Schedule HJW-2 shows the calculation of the annual revenues that would be needed by AQUA to recover these investments along with the operating costs that would also be recovered in rates. Schedule HJW-3 is a comparable calculation for DELCORA. Schedule HJW-4 compares the annual revenues to be collected from AQUA and DELCORA and it also shows the impact of the trust that AQUA and DELCORA propose to set up to subsidize rates in the early years following closing.

Q. WHAT ASSUMPTIONS HAVE YOU MADE IN PREPARING THIS ANALYSIS?

A. With respect to the AQUA portion of this analysis, I have made the following assumptions:

- a. The capital investments will be made as shown in Mr. Bubel's testimony;
- b. The rate of return will be constant and calculated using the capital structure and cost rates shown in Mr. Packer's testimony;
- c. The Gross Revenue Conversion Factor will be constant and calculated as shown in Mr. Packer's testimony;
- d. The depreciation rate will be the average rate presented in Mr. Packer's testimony;
- e. The starting annual revenues will be those shown in Mr. Packer's testimony for 2020; and

SPMT Statement No. 2

f. The starting operating expenses will be those shown in Mr. Packer's testimony for 2020 and this amount will increase annually by 1.5% through 2040. In addition, the year-over-year change in operating expenses for the WRTP will be that shown in the DELCORA response to SPMT-DELCORA-I-5. This accounts for the elimination in the treatment expense paid to Philadelphia and the additional new costs of operating the expanded WRTP.

For the DELCORA portion of the analysis, I have made these assumptions:

- a. The capital investments will be made as shown in Mr. Bubel's testimony;
- b. New debt will be financed at 3.35% for 30 years;
- c. Existing debt will not be refinanced at more competitive rates;
- d. The starting revenues will be the same as those used in the AQUA analysis; and
- e. Operating expenses will be the same as those used in the AQUA analysis.

For the comparisons shown in Schedule HJW-4 and Schedule HJW-5, I have used a discount rate of 3% for the Net Present Value calculation and I have assumed that the initial amount of the DELCORA rate stabilization trust will be a total of \$231,787,770.

Q. PLEASE EXPLAIN YOUR ANALYSIS IN SCHEDULE HJW-2.

A. This schedule calculates the additional revenues AQUA would require each year to achieve an authorized rate of return of 7.374% on the plant investment net of accumulated depreciation and accumulated deferred income tax. By 2029, about 75% of the projected plant investment will have been made with the largest annual expenses occurring in 2026 through 2028 as the WRTP is expanded and flows are redirected from Philadelphia to this

SPMT Statement No. 2

1 facility. Operating expenses change as I have noted earlier. "Rate Increase Revenues"
2 needed to produce the authorized rate of return are calculated for each year. Total
3 Revenues for each year include the present rate revenues for 2020 and the increase needed
4 to achieve a rate of return of 7.374%. This amount becomes the present rate revenues for
5 2021 and a new increase in revenues is calculated to achieve the authorized rate of return
6 given the new plant investments and changes in operating expenses. In this analysis,
7 AQUA's revenues would need to increase from the present level of \$70,978,127 to
8 \$152,158,031 by 2028 to fund the investments and maintain a rate of return of 7.374%.
9 This represents a 114% increase in revenues.

10
11 **Q. PLEASE EXPLAIN THE ANALYSIS ON SCHEDULE HJW-3.**

12 A. Schedule HJW-3 shows the changes in revenue that DELCORA would require to recover
13 the same operating expenses and the additional debt service needed to implement the
14 capital plan. I have started with the same present rate revenues as in the AQUA analysis
15 on Schedule HJW-2 and also the same initial operating expenses. Operating expenses
16 change in the same way in this analysis as in the AQUA analysis. DELCORA must
17 generate a surplus each year to satisfy its bond indenture. My analysis assumes that
18 DELCORA does this and holds the surplus amount in reserve to fund part of each
19 subsequent year's capital improvements. The amount required in excess of the surplus is
20 financed at 3.35% for 30 years and is reflected in the new debt service amounts shown in
21 Schedule HJW-3. I did not attempt to show the benefit of refinancing existing DELCORA
22 debt at lower interest rates but instead included the existing debt issues in the revenue

SPMT Statement No. 2

1 requirement until paid off. While the capital improvement plan for DELCORA is the same
2 as that used in the AQUA analysis, Schedule HJW-3 does not include the acquisition price
3 of \$276,500,000 nor the transactional costs of \$750,000 as these items do not need to be
4 funded if the acquisition does not proceed. These items are only addressed in the AQUA
5 analysis if the transaction is approved by PUC and AQUA and DELCORA proceed to
6 closing. In the DELCORA analysis, rate increases are implemented in 2021 through 2028
7 to maintain the coverage ratio at levels in excess of what is required by DELCORA's
8 indenture. In this analysis, DELCORA revenues must increase from the same starting point
9 of \$70,978,127 to \$105,865,754 by 2028. This is a 49% increase in revenues. It is less
10 than half of the increase that would be required under AQUA ownership.
11

12 **Q. IS IT YOUR OPINION THAT THE REVENUE REQUIREMENT ASSOCIATED**
13 **WITH THE DELCORA SYSTEM UNDER AQUA OWNERSHIP WILL BE**
14 **GREATER THAN UNDER CONTINUED DELCORA OWNERSHIP?**

15 A. Yes, that is my opinion. In 2028, the calculated revenues required under AQUA ownership
16 would exceed the revenues required under DELCORA ownership by over \$46 million per
17 year.
18

19 **Q. DID YOU MAKE AN ANNUAL COMPARISON OF THE REVENUES UNDER**
20 **AQUA AND DELCORA OWNERSHIP?**

21 A. I did and that comparison can be seen in Schedule HJW-4. In this comparison, I made the
22 additional assumption that revenues would not be reduced even if the calculation in

SPMT Statement No. 2

1 Schedule HJW-2 or Schedule HJW-3 showed that a reduction would be possible. It has
2 been my experience that regulated utilities and authorities would not implement small rate
3 decreases but would instead use surplus revenues for other authorized purposes in
4 anticipation of future rate increases or future capital needs. In Schedule HJW-4, the AQUA
5 revenue requirement increases annually through 2028 when it reaches \$152,158,031 and
6 the DELCORA revenue requirement increases to \$105,856,754 in the same year. At this
7 point the DELCORA revenue requirement will be \$46,292,277 per year lower than if the
8 system is sold to AQUA.

9
10 **Q. YOUR ANALYSIS COVERS THE SAME 20 YEAR PERIOD COVERED BY THE**
11 **CAPITAL IMPROVEMENT PLAN IN MR. BUBEL'S TESTIMONY. OVER**
12 **THAT PERIOD, WHAT IS THE PRESENT VALUE OF THE SAVINGS IF**
13 **DELCORA WERE TO RETAIN OWNERSHIP OF THE SYSTEM?**

14 A. The net present value of the savings for ratepayers would amount to \$462,871,937 for this
15 period were DELCORA to retain ownership of the system.

16
17 **Q. IS IT YOUR UNDERSTANDING THAT AQUA AND DELCORA HAVE**
18 **PROPOSED A RATE STABILIZATION MECHANISM TO MITIGATE THE**
19 **IMPACT OF HIGHER RATES ON DELCORA CUSTOMERS?**

20 A. Yes. It is my understanding that AQUA and DELCORA have proposed the establishment
21 of a rate stabilization trust to be used to pay part of AQUA's PUC authorized bills. I believe

SPMT Statement No. 2

1 the proposal is to use the funds in the trust to pay a portion of each customer's bill, directly
2 on the bill, until the trust funds are all paid back to AQUA.

3
4 **Q. HOW WILL THIS RATE STABILIZATION MECHANISM BENEFIT**
5 **CUSTOMERS?**

6 A. Assuming that this mechanism is applied equally to all customers, the trust should be able
7 to pay for enough of the annual revenue requirement to keep the annual payments the same
8 as they are now under DELCORA ownership until 2028 and at that point the trust funds
9 will be fully expended through payments to AQUA. This would be possible if none of the
10 trust funds are used to mitigate the rate impact on existing AQUA Pennsylvania
11 Wastewater customers and AQUA Pennsylvania water customers, who will bear a portion
12 of the revenue requirement. That is, customers outside of the existing DELCORA footprint
13 will be asked to shoulder part of the burden of the DELCORA revenue requirement but
14 will not see any benefit from trust fund payments of their bills. If this benefit is shared
15 with other customers, the trust will be expended sooner than 2028.

16
17 **Q. HAVE YOU PREPARED AN ANALYSIS OF THE IMPACT OF THE TRUST**
18 **PAYMENTS ON THE NET PRESENT VALUE SAVINGS THAT CUSTOMERS**
19 **WOULD REALIZE IF THE SYSTEM WERE SOLD TO AQUA?**

20 A. Yes. This analysis is shown in Schedule HJW-5. If the system is sold to AQUA and the
21 rate stabilization trust is established and used to pay a portion of each customer's bill, the
22 effective amount paid by each customer can be held to current payment levels until the

SPMT Statement No. 2

1 trust runs out of money. At that point, customers will experience “rate shock” because the
2 subsidy has expired and the portion of the bill due from customers will increase to 100%
3 of AQUA’s authorized rates. If the system is retained by DELCORA, the gradual rate
4 increases needed to finance the capital improvement plan will need to be implemented over
5 this same period. In Schedule HJW-5, the trust fund balance is zero in 2028. In 2028, the
6 portion of the revenue requirement that would be paid by customers would jump from
7 \$70,978,127 to \$143,804,351 as the trust is fully expended. In 2029, the revenue
8 requirement paid by customers would increase to the full amount of \$152,158,031 because
9 there would be no trust subsidy payments from 2029 on. By comparison, DELCORA rates
10 would increase gradually each year as the capital improvements are implemented.
11 Effectively, between 2021 and 2027, customers would pay more under DELCORA
12 ownership, but this would reverse dramatically in 2028 and 2029. Even if I account for the
13 higher payments in the early years before all of the funds in the trust are paid out to AQUA,
14 the net present value of the savings that customers would enjoy under continued
15 DELCORA ownership amounts to \$268,435,090.

16
17 **Q. IN THIS ANALYSIS, HOW DID YOU ESTIMATE THE OPENING BALANCE OF**
18 **THE TRUST?**

19 **A.** This amount is the sum of the purchase price (\$276,500,000) plus the DELCORA cash and
20 investments on hand at the end of 2019 (\$100,051,839) less the long-term debt
21 (\$143,011,834) and less the note payable to Edgmont Township (\$1,751,785). The
22 resulting amount is \$231,787,770. It is this amount that would be depleted and paid out to

SPMT Statement No. 2

1 AQUA to subsidize customer bills. Through this construct, the trust will return 84% of the
2 purchase price to AQUA in about nine years even though the purchase price will remain
3 embedded in AQUA's rate base.

4
5 **Q. HAVE YOU QUANTIFIED THE IMPACT OF THE APPROVAL OF THE SALE**
6 **TO AQUA ON SPMT?**

7 A. Yes. This analysis is shown in Schedule HJW-6.

8
9 **Q. WHAT ASSUMPTIONS HAVE YOU MADE IN THIS ANALYSIS?**

10 A. I have assumed that trust payments would be made to SPMT to hold its annual bill at the
11 DELCORA estimated amount for 2020 and that these payments would continue until the
12 trust expires. I have estimated that this will occur in 2028 and that the full impact of AQUA
13 rates will be reflected in the bill to SPMT in 2029. I have also estimated the bills to SPMT
14 from DELCORA assuming that the revenue increases reflected in Schedule HJW-3 would
15 be applied on an equal percentage basis to all DELCORA customers and to SPMT's billing.

SPMT Statement No. 2

1 **Q. WHAT ARE THE RESULTS OF THIS ANALYSIS?**

2 A. Under AQUA ownership, there would be no change in billings to SPMT through and
3 including the billings for 2027. Up to that point, SPMT would continue to pay \$2,847,515
4 per year with no annual true-up refunds. In 2028, the trust would subsidize only part of
5 the payment owed by SPMT because this is the year I calculated that the trust will expire.
6 At this point the SPMT bill will increase to \$5,769,172. This is a 102.6% increase in a
7 single year. In 2029, there will be no trust subsidies at all, and the SPMT bill will reflect
8 the full AQUA rates. For 2029, the estimated billing to SPMT is \$6,104,307, which
9 includes an additional increase of 5.8%. Overall, SPMT's bill will increase by \$3,256,792
10 per year. Compared to current DELCORA billings to SPMT, this is a 114% increase.

11
12 **Q. YOU HAVE ANALYZED THE IMPACT OF AQUA AND DELCORA**
13 **IMPLEMENTATION OF THE CAPITAL IMPROVEMENT PLAN THROUGH**
14 **2040. WHAT IS THE POTENTIAL COST TO SPMT THROUGH 2040 IF THE**
15 **COMMISSION APPROVES THE SALE OF THE SYSTEM TO AQUA?**

16 A. SPMT would pay an additional \$10,769,134 on a present value basis if AQUA acquires
17 the DELCORA system, assuming that the rate stabilization trust provides benefits to SPMT
18 through 2028. The net present value of wastewater billings under AQUA ownership is
19 \$70,979,509. Under DELCORA ownership, the net present value of the billings through
20 2040 would be \$60,210,376. Stated differently, under continued DELCORA ownership,
21 SPMT would realize a savings of \$10,769,134 on a present value basis.

SPMT Statement No. 2

Q. EARLIER IN YOUR TESTIMONY, YOU NOTED THAT SPMT AND DELCORA HAVE A CONTRACTUAL RELATIONSHIP GOVERNING THE DISCHARGE OF SPMT WASTEWATER TO THE DELCORA SYSTEM. DOES THAT CONTRACT ADDRESS THE RATE PAID BY SPMT FOR SERVICE?

A. Yes, it does. The contract limits the service charge that may be billed to SPMT to “rates which are uniform for all users categorized as “Wholesale Industrial Users” in the Western region and DELCORA, in its sole and reasonable discretion, shall allocate the costs of the system among classes of users based upon the respective burdens placed on the system by each class. The service charge for the Wholesale Industrial Users class shall be determined by annual resolution passed by the DELCORA Board of Directors. Charges will be reconciled at year end based on actual flows and loadings. DELCORA’s good faith determinations as to the elements of costs, classifications of its customers, size of reasonable reserves and like matters shall be conclusive.” (Company Exhibit F129, Article II, Paragraph 2.01, Emphasis added)

Q. IS YOUR ANALYSIS OF THE POTENTIAL IMPACT OF THE PROPOSED TRANSACTION ON SPMT CONSISTENT WITH THE RATE PROVISIONS OF THE CONTRACT BETWEEN SPMT AND DELCORA?

A. No. I assumed that if the transaction is approved, PUC rate setting would override the negotiated contract between SPMT and DELCORA thus depriving SPMT of the protections of a contractual arrangement that has existed since 1973. SPMT would lose the benefit of the annual true-up to actual DELCORA costs and the rate charged to SPMT

SPMT Statement No. 2

1 would include costs incurred to provide service to customers outside of the Western Region
2 of DELCORA.

3
4 **Q. IF THE PROVISIONS OF THE SPMT/DELCORA CONTRACT REMAINED IN**
5 **EFFECT, WOULD FUTURE SPMT CHARGES BE LOWER UNDER AQUA OR**
6 **DELCORA OWNERSHIP?**

7 A. I believe that the charges to SPMT would be lower under DELCORA ownership. More
8 than half of the proposed capital improvement plan is associated with redirecting the
9 Eastern Region flow to an expansion of the WRTP, where SPMT wastewater is treated.
10 Under the existing contract, 100% of the cost of the plant expansion and the installation of
11 a new interceptor system to direct the Eastern Region flow to the WRTP should be
12 allocated to the DELCORA Eastern Region customers. Similarly, 100% of the benefit of
13 leaving the City of Philadelphia (i.e., the elimination of an annual treatment charge in
14 excess of \$11 million and avoidance of the cost of sharing in a \$4.5 billion Philadelphia
15 CSO control program) should accrue to the Eastern Region customers. By allocating the
16 costs and benefits according to the contract, under either DELCORA or AQUA ownership,
17 the future costs billed to SPMT should be lower than what I have presented in Schedule
18 HJW-6. My analysis in Schedule HJW-6 ignores the contractual protections and shows
19 the impact of unitizing the rate by applying across-the-board rate adjustments to recover
20 the revenue requirement equally from all customer groups. If the system were left under
21 DELCORA ownership with the rate provisions of the contract implemented, SPMT costs,
22 in my opinion should be lower.

SPMT Statement No. 2

1 **Q. ARE YOU AWARE THAT DELAWARE COUNTY HAS CHALLENGED THE**
2 **FORMATION OF THE RATE STABILIZATION TRUST?**

3 A. Yes, that is my understanding.
4

5 **Q. HAVE YOU ESTIMATED THE IMPACT ON SPMT IF THE TRUST IS NOT**
6 **AVAILABLE TO SUBSIDIZE THE INCREASE IN RATES SPMT WOULD FACE**
7 **UNDER AQUA OWNERSHIP OF THE SYSTEM?**

8 A. Yes, this is also shown in Schedule HJW-6. In this analysis, I assumed that the revenue
9 requirement increases reflected in Schedule HJW-4 would be applied to DELCORA
10 customers as across-the-board increases and that there would be no subsidies from the
11 proposed rate stabilization trust. In this analysis, the annual charge would increase to the
12 same peak amount in 2029, but SPMT would not be shielded from the interim increases
13 needed to cover the increasing revenue requirement. The net present value under this
14 scenario is \$78,779,967 -- \$18,569,591 more than the net present value of wastewater
15 billings to SPMT under continued DELCORA ownership.
16

17 **Q. EARLIER IN YOUR TESTIMONY YOU NOTED THAT DELCORA OWNS ALL**
18 **OR PART OF THE WASTEWATER COLLECTION SYSTEMS INCLUDING**
19 **THOSE SYSTEMS IN THE CITY OF CHESTER, TRAINER BOROUGH AND**
20 **THE BOROUGH OF MARCUS HOOK. HAVE YOU REVIEWED THE ASSET**
21 **PURCHASE AGREEMENTS, WHICH WERE PROVIDED WITH THE**

SPMT Statement No. 2

**COMPANY’S PETITION, DESCRIBING THE CONDITIONS UNDER WHICH
THESE SYSTEM ASSETS WERE ACQUIRED BY DELCORA?**

A. Yes, I have reviewed these agreements, and each contains provisions limiting the charges to be levied within the respective service areas to charges associated with the Western Region system of DELCORA. These provisions are similar to the rate covenants in the agreement between SPMT and DELCORA. In addition, these agreements contain reversionary provisions regarding the disposition of the assets should DELCORA cease to operate the system.

**Q. IF DELCORA CEASES TO OPERATE THE SYSTEM, WHAT DOES THE
AGREEMENT WITH MARCUS HOOK SAY ABOUT THE DISPOSITION OF
THE ASSETS THAT WERE ACQUIRED BY DELCORA?**

A. According to the agreement, if DELCORA “ceases to operate the system being purchased by it hereunder, then the Sewer Properties, such as they may exist at such time, shall revert to [Marcus Hook’s] ownership, rather than to the County of Delaware or any other agency.”
(Company Exhibit F85, Paragraph 12.4)

**Q. HOW DOES THE AGREEMENT OF SALE OF THE TRAINER BOROUGH
ASSETS ADDRESS THE DISPOSITION OF THOSE ASSETS IF DELCORA
CEASES TO OPERATE THE SYSTEM?**

A. The Trainer Borough agreement indicates that when DELCORA “ceases to operate the system being purchased by it hereunder, then the Sewer Properties, such as they may exist

SPMT Statement No. 2

1 at such time, shall revert to the [Trainer's] ownership, unless [Trainer] declines to accept
2 such reversion, in which case they shall revert to the County of Delaware or any other
3 agency, as may be dictated by operation of law.” (Company Exhibit F137, Paragraph 12.4)
4

5 **Q. ARE THERE SIMILAR PROVISION REGARDING THE ASSETS THAT**
6 **DELCORA ACQUIRED FROM THE CITY OF CHESTER?**

7 A. Yes. The agreement with the City of Chester also indicates that if DELCORA “ceases to
8 operate the system being purchased by it hereunder, then the fixed assets and the Real
9 Property, other than the Treatment Plant and those facilities in the Collection System
10 described in Section 2 (d) shall revert to [the City of Chester's] ownership rather than to
11 the County of Delaware or any other agency.” (Company Exhibit F119, Paragraph 15.7)
12

13 **Q. WHY HAVE YOU HIGHLIGHTED THESE THREE SYSTEMS IN YOUR**
14 **TESTIMONY?**

15 A. Wastewater from the MHIC discharged by SPMT flows through the DELCORA system in
16 Marcus Hook, Trainer and Chester to the DELCORA WRTP located in Chester.
17

18 **Q. TO THE BEST OF YOUR UNDERSTANDING, WILL TRAINER, OR**
19 **ALTERNATIVELY THE COUNTY OF DELAWARE, MARCUS HOOK AND THE**
20 **CITY OF CHESTER BE COMPENSATED FOR THE FAIR MARKET VALUE OF**
21 **THEIR ASSETS ONCE DELCORA CEASES OPERATION OF THE SYSTEM?**

SPMT Statement No. 2

1 A. I do not believe that any arrangements have been made to compensate these communities
2 for the value of the assets. Rather, it is my understanding that the purchase price will be
3 paid to DELCORA and the full net proceeds of the sale will be swept into the
4 AQUA/DELCORA rate stabilization trust and ultimately be paid back to AQUA.

5
6 **Q. IN YOUR OPINION, WHAT ARE THE CONSEQUENCES OF THIS?**

7 A. If it is necessary to compensate these three communities for the assets, or for that matter
8 compensate any other communities who may have sold or provided assets to DELCORA
9 under similar terms, then there will be fewer dollars available for the AQUA/DELCORA
10 rate stabilization trust. If less money is put into the rate stabilization trust at the start, then
11 the trust will be consumed sooner. This means that customers who may see a near-term
12 benefit from rate stabilization trust payments being applied to their sewer bills will not see
13 that benefit for the period of time I have estimated in Schedule HJW-5. If the sale of the
14 system is approved SPMT and other customers will bear the full impact of higher AQUA
15 charges sooner than what has been suggested. As the starting balance of the
16 AQUA/DELCORA rate stabilization trust is reduced for any payments to the former
17 owners of these assets, then the impact on SPMT will approach the “AQUA without Trust”
18 estimates I have presented on Schedule HJW-6.

19
20 **Q. IF CERTAIN ASSETS LIKE THOSE ADDRESSED BY THE MARCUS HOOK,**
21 **TRAINER AND CITY OF CHESTER AGREEMENTS CANNOT BE SOLD TO**

SPMT Statement No. 2

1 **AQUA, IS IT YOUR OPINION THAT THE RATE BASE AMOUNT SHOULD BE**
2 **MODIFIED?**

3 A, Yes. It is my understanding that the engineer's estimate of the original cost of the assets
4 and the Certified Valuation Experts' appraisals include the value of assets that may revert
5 to the municipalities or the County of Delaware as though these assets are being sold to
6 DELCORA. If in fact assets cannot be sold, then the appraisals and the purchase price
7 should be reevaluated.

8
9 **Q. ARE THERE ANY OTHER ADVERSE IMPACTS THAT RESULT FROM**
10 **IGNORING THE CONTRACT PROVISIONS YOU HAVE HIGHLIGHTED**
11 **HERE?**

12 A. Yes. I would like to point out that the City of Chester is in a state of fiscal emergency as
13 declared by Governor Wolf on April 13, 2020. A Receiver has been appointed to guide
14 the City out of Act 47 distressed status. If the sale of the DELCORA system is approved
15 and this transaction proceeds without recognizing the asset reversionary provisions
16 applicable to the City of Chester, the City will be deprived of a potential financial benefit
17 at a time when it desperately needs financial help. In addition, the cost of service impacts
18 I have shown in Schedules HJW-4 and HJW-5 would also impact residents and businesses
19 located in the City at a time when 33.6% of the population of the City is below the federal
20 poverty level.²⁵

²⁵ United States Census Bureau at: <https://www.census.gov/quickfacts/chestercitypennsylvania>

SPMT Statement No. 2

Q. WHAT IS YOUR CONCLUSION GIVEN THIS ANALYSIS?

A. The approval of the sale to AQUA would be detrimental to all DELCORA ratepayers, including SPMT, because it would result in a much higher revenue requirement for the implementation of the very same capital improvement plan. The impact on SPMT alone exceeds \$10 million, even with the construct of the proposed rate stabilization trust in place. Without the trust, the impact on SPMT exceeds \$18 million. It is my opinion that the proposed transaction will result in unreasonable increases in rates because these increases can be avoided simply by maintaining public ownership of the system. As a result, I do not believe that approval of the sale is in the public interest. The Commission should deny AQUA's petition.

7. ADDITIONAL PUBLIC POLICY MATTERS**Q. ARE YOU AWARE OF ANY ADDITIONAL DETRIMENTS THAT WOULD BE IMPOSED ON SPMT BY THE PROPOSED TRANSACTION?**

A. Yes. The proposed transaction would adversely impact SPMT's permitting situation under the Resource Conservation and Recovery Act ("RCRA") and under the Clean Water Act ("CWA"). The permit protections available to indirect dischargers, like SPMT would be lost. Also, the potential impacts on the ultimate cost of the CSO Long Term Control Plan once the system loses its POTW designation could adversely impact the charges levied on SPMT. In addition, there may also be a loss of regulatory protections made by indirect discharges to a combined sewer system if that system is not classified as a POTW. Finally,

SPMT Statement No. 2

1 the conversion of a POTW to a private system may adversely impact federal funding to the
2 Commonwealth of Pennsylvania for Clean Water Act related infrastructure improvements.
3

4 **Q. PLEASE EXPLAIN THE RCRA AND CWA PERMITTING ISSUE.**

5 A. SPMT is a complex operation that is heavily regulated with respect to a variety of
6 interrelated and overlapping environmental regulations at both the Federal and State level.
7 The site has permits under RCRA and under the CWA. With regard to the SPMT
8 discharges to the DELCORA system, SPMT has an Industrial Pretreatment Permit issued
9 by DELCORA, a Publicly Owned Treatment Works (“POTW”). The regulatory conditions
10 under which SPMT operates will change significantly as a result of the loss of the POTW
11 designation that will occur if AQUA becomes the owner. The impact of this is described
12 in more detail by SPMT Witness Mr. Kevin Smith in SPMT Statement No. 3.
13

14 **Q. WHAT IS YOUR CONCERN REGARDING THE COMBINED SEWER
15 OVERFLOW CONTROL PROGRAM?**

16 A. The regulatory program associated with Combined Sewer Overflows (“CSO”) does not
17 apply to private entities. It only applies to POTWs. DELCORA’s existing NPDES Permit
18 includes the primary discharge from the wastewater treatment plant, regulated storm water
19 discharges from the treatment plant site, and 26 additional outfalls that are located on
20 combined stormwater and sanitary sewers. This permit expired on April 30, 2018 and a
21 new permit has not yet been issued by Pennsylvania DEP. It is not clear how these
22 discharge points will be regulated once the POTW designation for the DELCORA system

SPMT Statement No. 2

1 is lost if the sale to AQUA closes. The existing USEPA CSO control policy provides
2 guidance on how POTWs with combined sewers, like DELCORA, can meet the goals of
3 the CWA in a flexible, cost-effective manner. While the CSO control program recognizes
4 that some storm-related events will result in overflows and that the impact of these can be
5 minimized through the implementation of regulatory and operational controls, discharges
6 from a private system do not benefit from these guidelines and controls. For example, one
7 of the nine minimum controls in this program relies on the concept of maximizing the
8 volume of storm flows treated in a POTW to provide at least primary treatment prior to
9 discharge and would allow a secondary treatment bypass. This remedy is only available to
10 POTWs. As a result, a private system could be ordered to completely separate all sanitary
11 and storm sewers to eliminate the CSOs or provide full treatment for all flows including
12 storm flows. This could dramatically increase the capital cost of the DELCORA long-term
13 control plan if the POTW designation is lost. Such a result could have a crippling impact
14 as the capital improvement program would be much more costly than the program proposed
15 by DELCORA. In addition, indirect dischargers like SPMT could face additional liability
16 should any pollutants in their wastewater leave the system through AQUA-owned CSOs.

17
18 **Q. WHAT IS YOUR CONCERN REGARDING STATE FUNDING FOR CLEAN**
19 **WATER ACT INFRASTRUCTURE IMPROVEMENTS?**

20 A. Through the CWA, federal funds are appropriated to the States to help fund wastewater
21 infrastructure improvements. Each year, annual allotment tables are developed that
22 allocate the annual appropriation of funds to the states. In 2020, the allotment under Title

SPMT Statement No. 2

1 VI set aside \$63,583,000 for Pennsylvania out of a national total of \$1,638,826,000. Thus,
2 Pennsylvania's share was 3.9% of the total annual federal appropriation. This percentage
3 is derived from a formula that estimates the CWA needs for all POTWs. Private system
4 needs are not included in the formula. The formula is a simple ratio of the POTW needs
5 in the Commonwealth of Pennsylvania divided by the POTW improvement needs in the
6 United States. At present under DELCORA's ownership, the planned capital
7 improvements in excess of \$1 billion are included in the formula but will drop out once the
8 system is sold to an investor-owned entity such as AQUA, because the system will no
9 longer be a POTW. Removing over \$1 billion in improvements from the Pennsylvania
10 calculation will lower the ratio assigned to Pennsylvania in a future assessment of the
11 allocation formula. While the ratio is currently set in the CWA, future reassessments of
12 Pennsylvania's needs will exclude private system needs and this will ultimately lead to a
13 lower portion of the annual allotment of federal funds for Pennsylvania.

14
15 **Q. IS YOUR CONCERN LIMITED TO THE AMOUNT OF MONEY**
16 **PENNSYLVANIA RECEIVES FOR CLEAN WATER ACT IMPROVEMENTS?**

17 A. No. I have a specific concern about the impact of the loss of the POTW designation if the
18 DELCORA system is sold to a private entity.

19
20 **Q. WHAT IS THAT CONCERN?**

21 A. Section 1383 of the Clean Water Act allows the states to provide financing assistance to
22 priority projects through the revolving loan program. Loans can be made available at

SPMT Statement No. 2

below market rates under this program. However, these loans can only be made to POTWs. Private systems are excluded from the program. This is a detriment to the residents and businesses in Delaware County because these low interest funds, including interest free loans, will not be available to finance the necessary improvements to the system once it is sold to AQUA. If the sale of the system is approved and this becomes a private system, the capital improvements will be financed at much higher investor-owned utility capital costs, thereby burdening the ratepayers with a higher revenue requirement than that which would otherwise be possible if the system remained in public hands.

8. FEDERAL REVIEW AND APPROVAL

Q. ARE YOU AWARE OF EXECUTIVE ORDER 12803 (“E.O. 12803”)?

A. Yes. This is an Executive Order issued by President George H. W. Bush on April 30, 1992.

Q. PLEASE SUMMARIZE YOUR UNDERSTANDING OF E.O. 12803.

A. It is my understanding that E.O. 12803 was issued to facilitate the privatization through the outright sale or long-term lease of a variety of publicly owned infrastructure assets including wastewater systems. E.O. 12803 set out the guidelines to be used by federal agencies in their review and approval of privatization proposals. E.O. 12803 established a procedure to set the transfer price of the assets and to determine the disposition of the purchase price, including the amount to be refunded to the United States Treasury and units of local government where federal and local funds were used to finance the construction of the assets being privatized. The procedure for setting the transfer price distinguishes

SPMT Statement No. 2

1 between those transactions in which the assets are being transferred pursuant to a
2 competitive bidding process and those where no competitive bidding process is used. I
3 have included a copy of E.O. 12803 in Appendix C attached to this testimony.

4
5 **Q. DOES E.O. 12803 APPLY TO THE PROPOSED TRANSACTION?**

6 A. That is my understanding. The DELCORA Audit for 2019²⁶ indicates that federal funds
7 were used to finance the facilities. In addition, several of the acquisition and service
8 agreements like the 1973 Agreement between DELCORA and Sun Oil Company of
9 Pennsylvania²⁷ and the 2009 DELCORA-Southwest Delaware County Municipal
10 Authority Agreement²⁸ document the use of both federal and local funds for the
11 construction of the wastewater facilities. These assets are being privatized through the
12 outright sale to AQUA Pennsylvania Wastewater, Inc.

13
14 **Q. ARE THE DELCORA ASSETS BEING TRANSFERRED AS A RESULT OF A**
15 **COMPETITIVE BIDDING PROCESS?**

16 A. NO.

17
18 **Q. PLEASE REVIEW THE DEFINITION OF “TRANSFER PRICE” IN E.O. 12803 AS**
19 **THIS DEFINITION APPLIES TO THE PROPOSED TRANSACTION.**

²⁶ Op.Cit., DELCORA 2019, Page 3 and Page 17.

²⁷ Company Exhibit F-126, Attachment, Agreement dated 12/18/1973, Paragraph E, indicating that a federal grant received from USEPA in the amount of \$24,277,200 was used for construction at the WRTP.

²⁸ Company Exhibit F-110, Section 4.01.

SPMT Statement No. 2

1 A. In the case of the proposed transaction in which competitive bidding was not used, the
2 Transfer Price “means the appraised value of an infrastructure asset, as determined by the
3 head of the executive department or agency and the Director of the Office of Management
4 and Budget.”

5
6 **Q. TO THE BEST OF YOUR KNOWLEDGE AND BELIEF HAVE THE DIRECTOR**
7 **OF THE OFFICE OF MANAGEMENT AND BUDGET AND THE**
8 **ADMINISTRATOR OF THE UNITED STATES ENVIRONMENTAL**
9 **PROTECTION AGENCY DETERMINED THE APPRAISED VALUE OF THE**
10 **ASSETS THAT WILL BE TRANSFERRED UNDER THE PROPOSED**
11 **TRANSACTION?**

12 A. I do not believe that such an appraisal has been made.
13

14 **Q. WHAT IS YOUR UNDERSTANDING OF THE SIGNIFICANCE OF THIS WITH**
15 **RESPECT TO THIS PROCEEDING?**

16 A. Because federal funds have been used to construct the facilities, the Transfer Price must be
17 established by the Office of Management and Budget and the US Environmental Protection
18 Agency. Until this Transfer Price is determined, the actual purchase price of the assets is
19 not known or measurable. The Company has asked the Commission to set rate base as the
20 purchase price negotiated with DELCORA, but this amount may be higher or lower than
21 the Transfer Price defined in E.O. 12803. Until the Transfer Price is known, the negotiated
22 purchase price should not be relied upon to establish rate base.

SPMT Statement No. 2

Q. DOES E.O. 12803 REQUIRE THE APPROVAL OF THE PROPOSED TRANSACTION BY THE US ENVIRONMENTAL PROTECTION AGENCY?

A. It is my understanding that Section 3 (c) requires such an approval including the possible grant of an exception to the disposition requirements of the “Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.”

Q. DOES E.O. 12803 DICTATE THE DISPOSITION OF THE TRANSFER PRICE?

A. Yes. Section 3 (c) requires that the Transfer Price be distributed first to the state and local governments in the amount of the full unadjusted dollar amount contributed by state and local governments to construct the facilities. The remaining proceeds after repayment of this local share must then be used to allow the United States Treasury to recoup the full amount of federal grants associated with the asset less depreciation. Finally, any remaining proceeds are to be retained by state and local governments. It is apparent that this remaining share is the amount that must also be used to defease DELCORA outstanding debt.

Q. HOW DO YOU SEE THIS PROVISION OF E.O. 12803 IMPACTING THE PROPOSED TRANSACTION?

A. Neither the Transfer Price nor the amount of the locally funded shares have been established in this proceeding. The amount due to the United States Treasury, if any, is also not known. As a result, it is impossible to determine the amount that will actually be available to be retained by DELCORA and transferred to the proposed rate stabilization

SPMT Statement No. 2

1 trust fund. If the starting balance of the trust fund cannot be determined at this time, it is
2 not possible to assess the efficacy of the trust and its impact on any customer's wastewater
3 service charges.

4
5 **Q. WHAT ADDITIONAL CRITERIA MUST BE APPLIED IN THE FEDERAL**
6 **REVIEW OF THE PROPOSED TRANSACTION?**

7 A. Section 4 indicates that the US Environmental Protection Agency must approve the
8 transaction only if the proceeds retained by state and local governments are used to defease
9 debt or are used to invest in additional infrastructure. Furthermore, the review by the US
10 Environmental Protection Agency must determine that there is a mechanism in place to
11 ensure that the assets will continue to function as intended even if AQUA becomes
12 insolvent, and that users and the public will be protected by conditions that limit charges.

13
14 **Q. DO YOU BELIEVE THAT THE PROPOSED TRANSACTION SATISFIES THESE**
15 **CRITERIA?**

16 A. I do not believe all of these criteria can be met though the proposed transaction. First,
17 while the proceeds of the sale are intended to extinguish DELCORA debt, it is not apparent
18 that the prior repayment of the local funding shares or federal shares have been
19 accommodated. Second, the net amount of the purchase price less outstanding DELCORA
20 debt plus the DELCORA cash investments and cash on hand is being transferred to the
21 proposed DELCORA trust and these monies will be used to artificially depress customer
22 wastewater bills for a limited period of time. These funds, especially including the cash

SPMT Statement No. 2

1 investments and cash on hand could have been used by DELCORA to fund the construction
2 of part of its capital improvement plan. Instead, these funds amounting to approximately
3 \$100 million will be moved to the trust and ultimately be paid to AQUA as the trust funded
4 portion of the customer bills. There does not appear to be any other aspect of the proposed
5 transaction where sale proceeds are being invested in new infrastructure.
6

7 **Q. DO YOU BELIEVE THAT THE PROPOSED TRANSACTION CONTAINS**
8 **CONDITIONS THAT WILL LIMIT USER CHARGES?**

9 A. Yes. If the transaction is approved, AQUA rates will be regulated by the Commission.
10

11 **Q. DOES E.O. 12803 CONTAIN ANY OTHER PROVISIONS REGARDING**
12 **CUSTOMER RATES?**

13 A. Yes, Section 2 (d) requires that “Privatization transactions should be structured so as not
14 to result in unreasonable increases in user charges.”
15

16 **Q. DO YOU BELIEVE THAT THE PROPOSED TRANSACTION SATISFIES THIS**
17 **REQUIREMENT?**

18 A. I do not. DELCORA is a large regional wastewater authority serving nearly all of Delaware
19 County and parts of Chester County with a proven track record in the area of wastewater
20 management. As a POTW, DELCORA has access to financing at rates significantly lower
21 than the cost of capital available to AQUA and will likely be able to benefit from federal
22 loans and grants to the Commonwealth of Pennsylvania for improvements to POTWs.

SPMT Statement No. 2

1 DELCORA does not pay state or federal income tax and as a result will not need to recover
2 these costs in customer charges. AQUA has committed to implement the DELCORA
3 capital improvement plan and run the DELCORA system as a satellite system. Thus, the
4 service will be the same regardless of whether the system is or is not sold to AQUA.
5 However, if the DELCORA continues as a public entity, customer charges will be much
6 lower than if the system is sold to AQUA. Because AQUA ownership will bring much
7 higher rates and charges, it is my opinion that the increases in user charges that will result
8 because of AQUA ownership are unreasonable. Without the construct of the rate
9 stabilization plan, SPMT will pay \$18.6 million more on a net present value basis for the
10 same service than it would if DELCORA continues to own and operate the system. Even
11 with the rate stabilization mechanism depressing the amount of the payments through 2028,
12 SPMT will pay \$10.8 million more on a net present value basis for the same service.

13
14 **Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?**

15 A. Yes, however, I reserve the right to amend and supplement this testimony as additional
16 information becomes available through the course of this proceeding.

APPENDIX A - Qualifications

Of

Howard J. Woods, Jr., P.E.

KEY EXPERIENCE

Mr. Woods has over 43 years of experience in water and wastewater utility engineering and operations. In his career he has worked for US EPA, engineering consultants and in numerous senior engineering and operational roles at a large investor-owned utility. His experience is well rounded, covering all aspects of public water and wastewater operations and management including outsourcing, acquisitions, maintenance, water production, filtration, distribution, water quality, wastewater collection and treatment, regulatory compliance and safety.

Mr. Woods managed numerous water and wastewater management contracts. He has assisted clients in outsourcing management activities and transferring ownership of complete utility systems. He has advised clients on alternative contracting approaches and reduced operating costs by renegotiating plant operations contracts. He has helped clients reduce operating expenses and he has provided expert testimony in construction arbitrations, contamination incidents and utility rate and service proceedings.

EDUCATION

Master of Civil Engineering, Water Resources – Villanova University
Bachelor of Civil Engineering (cum laude) – Villanova University

ACCOMPLISHMENTS

- Directed and managed the procurement process leading to the sale of a municipal wastewater system in Southeastern Pennsylvania. The sale of the Upper Dublin Township Sanitary Sewer System will yield \$20,000,000 for a system serving approximately 8,000 connections and having annual revenues of \$3,000,000. Advised the Township on alternative outsourcing and contracting approaches, reduced interim operating expenses by 30% prior to the sale by renegotiating the plant operations contract.
- Prepared an analysis of ownership alternatives for Lower Makefield Township's sanitary sewer collection system. Managed a procurement process that lead to the receipt of a \$17 million bid for the potential sale of a system serving 10,700 residential and commercial customers.
- Assessed an existing public private partnership contract and future contracting alternatives for the Jersey City Municipal Utilities Authority (JCMUA). Recommended alternative contract terms and assisted JCMUA in negotiating a new ten-year operations agreement saving approximately \$3,000,000 per year.
- Assisted Greater Ouachita Water Company, a non-profit Louisiana water and sewer utility, in evaluating operating contract alternatives. Provided assistance in

ACCOMPLISHMENTS (CONTINUED)

- identifying qualified operators to be invited to bid a multi-year full-service operating contract. Assisted in evaluating bids and in contract negotiations.
- Completed an independent assessment of ownership and operating alternatives for the Township of Sparta water utility. The study evaluated current operating and financial conditions of the utility and considered two alternative service delivery approaches: contract operation and a sale of the system to an investor-owned utility.
 - Completed an assessment of the financial and operating impacts of a proposal by a Pennsylvania municipality to dissolve its municipal water and sewer authority. The authority served multiple political subdivisions and dissolution would have resulted in regulation by the Pennsylvania Public Utility Commission. The additional regulatory burdens identified and limitations on municipal financing capacity resulted in a recommendation to retain authority ownership and operations.
 - Completed an analysis of ownership alternatives for the Bristol Township Sewer Department. Reviewed capital needs and financing arrangements, rate structure and system revenues, operational costs and regulatory compliance issues. Assessed potential interest in the acquisition of the system by other municipal and investor-owned entities and assessed the possible impact of a sale on rates and service quality. The study recommended retention of the system by the Township and offered recommendations to reduce costs and improve staffing levels.
 - Completed the assessment of a potential water utility acquisition by a Pennsylvania Municipal Authority. Assisted the Authority in developing a bid proposal for the acquisition and assessing the impact on revenue requirement and consumer rates resulting from the acquisition.
 - Provided litigation support to Cornwall Borough Municipal Authority in its efforts to prevent Cornwall Borough from dissolving the Authority. Provided expert testimony on the service and financial impacts of dissolving the Authority. Developed capital plans for the Authority and provided expert testimony regarding the need to construct certain fire protection and other distribution improvements.
 - Completed an assessment of an investor-owned utility offer to acquire the assets of Pennsylvania Municipal Water & Sewer Authority. Evaluated the acquisition and rate proposal, developed independent assessments of the value of the assets consistent with Pennsylvania Act 12 and prepared recommendations for the Authority's use in considering the proposal.
 - Completed an evaluation of the revenue requirement associated with the decommissioning of a wastewater treatment plant and the diversion of wastewater to a regional treatment works for the North Wales Water Authority. Assessed the rate impact to customers of potentially retaining and improving an existing wastewater treatment plant and the rate impact of joining a regional treatment system. The evaluation supported the decision to regionalize the sewage treatment function.
 - Developed a risk assessment model for a Pennsylvania Municipal Utilities Authority to allow the Authority to prioritize investments on numerous wells threatened by

ACCOMPLISHMENTS (CONTINUED)

- regional perfluorinated compound contamination. The assessment balanced risk of contamination, cost and feasibility of providing treatment, the use of regional alternative supplies owned by the Authority and regional interconnections/system acquisitions.
- Assisted the Banco Gubernamental de Fomento para Puerto Rico, Autoridad para el Financiamiento de la Infraestructura de Puerto Rico and Pricewaterhouse-Coopers in developing a new operating contract for the Puerto Rico Aqueduct and Sewer Authority (PRASA). The contract was developed, bid and awarded in less than six months, cutting the normal procurement time by nearly two-thirds. The value of the contract was \$300 million per year.
 - Completed an independent assessment of the planning and engineering decision making for a major water treatment plant renovation project undertaken by Aquarion Water Company of Connecticut in Stamford Connecticut. Evaluated process selection decisions, project sizing and regulatory compliance issues and testified before the Connecticut Department of Public Utility Control on the findings of the evaluation.
 - Completed audits of water production operations and water quality management functions at Aquarion Water Company of Connecticut, Aquarion Water Company of Massachusetts and Aquarion Water Company of New Hampshire. Assessed operational procedures and staffing levels, reviewed risk management plans including emergency response plans and dam safety programs, evaluated programmed and preventative maintenance systems and developed recommendations to assist the Company in lowering the cost of service while reducing risk and improving reliability.
 - Completed an audit of the watershed and environmental management functions at Aquarion Water Company of Connecticut. Assessed watershed management, monitoring and operational procedures, reviewed compliance tracking systems, reviewed risk management strategies and developed recommendations to assist the Company in reducing risk and improving reliability and watershed protection efforts.
 - Completed a management audit of the water distribution function at Aquarion Water Company of Connecticut. Evaluated system monitoring and maintenance practices, assessed the impact of the use of contract maintenance and construction services to reduce Company workforce levels. Developed recommendations to improve the Company's programmed and preventative maintenance systems, corrosion control procedures and non-revenue water control programs.
 - Completed a management audit of the engineering and planning functions at Aquarion Water Company of Connecticut. Evaluated the Company's planning practices and procedures and developed recommendations to assure the efficient application of capital to the renewal, replacement and expansion of the Company's extensive utility plant assets.
 - Assisted Greater Ouachita Water Company, a Louisiana non-profit water and sewer utility, in identifying the cause of water quality complaints resulting from poor color removal. Recommended improvements to minimize capital modifications of the

ACCOMPLISHMENTS (CONTINUED)

chemical feed, filter backwash and spent wash water treatment systems.

- Completed a Comprehensive Technical Assistance (CTA) project for the City of New Brunswick (NJ) Water Utility. The CTA, which was Ordered to be completed by the New Jersey Department of Environmental Protection, developed operating procedures to rectify numerous performance limiting factors that contributed to several drinking water quality issues and Safe Drinking Water Act Rules compliance issues. Completion of the CTA satisfied a major component of the Consent Order.
- Provided ongoing technical and operations assistance to the Shelter Island Heights Property Owners Corporation related to the operation and maintenance of the community water and sewer utilities. Developed recommendations for asset maintenance and renewal as well as employee safety.
- Completed a Vulnerability Assessment for a municipally-owned public water system in northern New Jersey. Organized, planned and conducted the assessment using the RAM-WSM methodology. Evaluated existing physical protection systems at utility facilities, developed threat assessments and adversary sequence analyses, prepared recommendations to reduce risk.
- Completed an energy management evaluation for the Elmira (NY) Water Board and provided operator training on energy management strategies. Recommendations from the study allowed the client to reduce energy expenses by 30% through a series of operational modifications.
- Completed an energy management audit of the Pittsburgh Water and Sewer Authority and identified strategies for reducing power consumption. The results of this investigation provided the foundation for the Authority and its contract manager to develop and implement more effective maintenance and operations procedures to reduce energy costs.
- Served as an expert witness in a matter involving the diversion of service by a large commercial customer of Atlantic City Municipal Utilities Authority (ACMUA). Statistically analyzed customer water use and billing records by relating water use variables (e.g. weather, occupancy rates, and restaurant output) to recorded consumption. Identified periods of service diversion and assisted ACMUA in the collection of revenues and penalties due.
- Served as an expert witness in a matter involving excess billing of a large commercial customer of a New Jersey public utility. Statistically analyzed usage patterns over a ten-year period and identified periods of excess billing. Assisted the customer in negotiating a \$50,000 settlement of the dispute.
- Provided litigation support in a dispute involving cost of service allocations made by Erie City Water Authority (ECWA) in establishing rates covering a ten-year period beginning in 2004. Prepared an expert report addressing the cost allocation methods used by ECWA and demonstrated that the determination of the ECWA revenue requirement was fair and reasonable and that the allocation methods used to assign costs to various rate classes were done using reasonable professional judgment and standard professional care.

ACCOMPLISHMENTS (CONTINUED)

- Provided litigation support in a dispute involving water rates billed by Passaic Valley Water Commission to retail customers in the Borough of Lodi. Reviewed past rate setting practices and related rate covenants in the Lodi water system lease, prepared expert testimony and assisted the Passaic Valley Water Commission in developing rates consistent with the Court's Order.
- Developed a rate study and assisted in the renegotiation of a sewer service agreement between Ridgefield Borough and Palisades Park Borough. The rate study formed the basis of a settlement of ongoing litigation and provided a cost allocation methodology incorporated into a new service agreement between the municipalities.
- Developed rate studies for the Village of Ridgewood Water Utility for 2010 through 2016 to satisfy a Court Order to re-evaluate and re-adopt rate resolutions in response to a Complaint by Midland Park, Glen Rock and Wyckoff. Developed allocation factors for shared municipal services and developed the revenue requirement for each year for the Water Utility. Produced a final rate design consistent with the Court Order.
- Developed a model of the major water resources facilities in the Passaic, Pompton, Ramapo and Hackensack River Basins that allows the calculation of the safe and dependable yield of the Wanaque/Monksville, Point View and Oradell Reservoir systems under varying drought conditions. The model is being used by Passaic Valley Water Commission to evaluate long-term water supply management strategies and to plan for future water supply needs.
- Assisted New York City Department of Environmental Protection in compiling a report on the estimated safe yield of the City water supply reservoir system. A current assessment of safe yield was required by agreement of the Parties to the 1954 US Supreme Court Decree governing the use and export of water from the Delaware River Basin. Provided additional consulting assistance on plans to assure system reliability during planned repairs to the Roundout-West Branch Tunnel, an aqueduct that transports up to 800 million gallons of water per day to the City from the Delaware Basin reservoir system.
- Developed an analysis of the costs of the Hickory Log Creek Reservoir and the yield sharing arrangements between the City of Canton and the Cobb County-Marietta Water Authority. Developed recommended methods to assess the impact of US Army Corps of Engineers operating policies on future operating and capital cost allocations.
- Prepared a long-range water supply needs forecast for the Passaic Valley Water Commission. Analyzed water use patterns within the Commission's retail service area and for over two-dozen large contract customers. Produced population forecasts for the service area and individual water demand forecasts for each contract sale-for-resale customer using statistical and numeric forecasting techniques. The forecast projects total annual demand, average day, maximum month and maximum day demands and forms the basis for other ongoing facility and operations planning efforts.
- Prepared a long-range water supply needs forecast for the North Wales Water Authority. Analyzed water use patterns within the Authority's retail service and

ACCOMPLISHMENTS (CONTINUED)

identified the water supply requirement for the Authority's share in a regional water supply system. Produced customer forecasts for the service area and individual water demand forecasts for large industrial customers and existing and potential wholesale water customers. Applied statistical and numeric forecasting techniques to assess trends in unit water use for each customer class. The forecast projects total annual demand, average day, maximum month and maximum day demands and forms the basis for other ongoing facility and operations planning efforts.

- Developed a Water Allocation Permit renewal and extension application for the Passaic Valley Water Commission. Secured a new 25-year permit for the diversion of surface water from the Pompton and Passaic Rivers. The new water diversion permit for the Commission supports more flexible operations and more efficient source utilization. The Commission serves a retail service population of 325,000 and effectively serves an additional 260,000 people through sale-for-resale connections.
- Prepared a cost of service allocation study for Passaic Valley Water Commission, a regional water system that serves a large urban retail service population and a significant outlying area through direct retail and wholesale water sales. Allocated costs based on standard methodologies to Owner Cities, External Cities Retail and Wholesale classes of service. The Commission has annual revenues in excess of \$71 million.
- Prepared a cost of service allocation study for three Pennsylvania Municipal Utilities Authorities considering a joint water supply expansion project. Evaluated and allocated anticipated construction and operating costs for the plant expansion and assigned costs of existing facilities using a commodity-demand allocation method. Developed a recommended tariff design to allow for the fair recovery of prospective costs associated with the expanded facilities.
- Prepared a cost allocation study and tariff design study for Bedminster Municipal Utilities Authority. The study developed an integrated five-year financial plan for the Authority and allocated the revenue requirement among water and sewer services. Rates were developed to allow the Authority to properly recover costs from its various water and sewer customer classes.
- Developed a commercial rates study for Whitemarsh Township Authority that resulted in the modernization of the Authority's commercial rate structure. A system comprised of 33 different rate costs was replaced with a uniform rate structure including a fixed service charge based on water meter capacity ratios and volumetric changes for the quantity of water actually used.
- Developed a residential rates study for Whitemarsh Township Authority that evaluated the cost/benefits of converting a fixed-rate EDU tariff to a volumetric tariff. Developed recommendations for new rates for the ensuing five-years.
- Developed an initial tariff study for Branchville Borough. The Borough had constructed a new community sanitary sewer system to replace hundreds of on-lot disposal systems and small, individual wastewater treatment systems located throughout the Borough. Using engineer's estimates of operating costs, developed a

ACCOMPLISHMENTS (CONTINUED)

- total revenue requirement and allocated that revenue requirement to three classes of customer service. Developed an initial rate structure designed to recover the projected full revenue requirement.
- Prepared a cost of service allocation study for Southeast Morris County Municipal Utilities Authority, a regional water system that serves a suburban retail service population and several wholesale water customers. Allocated costs based on standard methodologies to various classes of residential, commercial industrial and wholesale service. Developed a plan to move each service class to full-cost pricing over time.
 - Developed a five-year comprehensive business plan for Passaic Valley Water Commission. This plan moved the Commission from an annual operating budget to a five-year budget that links operating costs, capital construction and debt service requirements to customer growth and revenue requirements and rates. The plan was instrumental in obtaining an improved bond rating and positioning the Commission to undertake a major capital improvement program.
 - Developed a five-year comprehensive business plan for the North Wales Water Authority. This plan established a rolling five-year operating and capital budget that links operating costs, capital construction and debt service requirements to customer growth and revenue requirements and rates. The plan was instrumental in maintaining current rates while also maintaining the Authority's AA bond rating.
 - Served as an expert witness in an arbitration involving a dispute between a New Jersey municipal water department and A.C. Schultes, Inc., a well contractor. Assisted A.C. Schultes in supporting its claim for a contract modification and the recovery of unanticipated expenses. The arbitrator awarded the contractor 100% of its cost claim.
 - Served as an expert witness in a matter involving the alleged contamination of a New Jersey municipal water system with heavy metals and organic chemicals. Reviewed over 38,000 discrete water quality sample results, analyzed the operational records of the system and developed a computer model (EPANET2) depicting water flow and water quality changes over a period spanning two decades. Assisted the client in successfully defeating a threatened class action lawsuit at the certification level.
 - Served as an expert witness in a matter involving the alleged contamination of nearly 600 private wells in an area near Fairbanks, Alaska. Evaluated alternatives for the provision of alternate water supplies including the extension of an investor-owned water system, a publicly-owned water system, and a variety of on-site treatment and supply options. Assisted in the defense of the former owner of the site where the contamination was later alleged to have originated.
 - Served as a mediator involving a dispute between the Long Beach Township Water Department and Don Siegel Construction Co., Inc., a pipeline installation contractor. Assisted the parties in resolving various construction cost claims and in interpreting the contract construction documents. Litigation over the disputes was avoided.

ACCOMPLISHMENTS (CONTINUED)

- Assisted a regional developer in obtaining wastewater planning approval for a project in an area determined to be in an “overload” condition by Pennsylvania DEP. This effort required the facilitation of negotiations between regional wastewater entities for wastewater conveyance and treatment services, expert consulting with a municipality and PA DEP concerning the municipality’s update to its Act 537 facilities plan, and coordination with other engineering consultants to secure final permit approvals.
- Developed a review of alternatives for the renovation or replacement of the Ridge Road Reservoir for Perkasio Regional Authority. Analyzed alternatives for reconstructing or replacing an in-ground water distribution reservoir. Developed a scope of services for a site geotechnical evaluation and assessed the potential cost of various renewal strategies.
- Reviewed engineering plans and operational practices in numerous water and wastewater rate adjustment proceedings and quality of service proceedings for the New Jersey Division of Rate Counsel. Assessed utility engineering design and construction plans, developed alternatives to utility proposed projects, and evaluated the utility companies' ability to render safe, adequate and proper water or wastewater service. Provides expert testimony in the following utility rate, franchise expansion and service quality proceedings:
 - Acacia Lumberton Manor Fire Service Complaint BPU
Docket No. WC01080495
 - Andover Utility Company
BPU Docket WR17070726
 - Applied Waste Water Management Rates
BPU Docket No. WR03030222
 - Applied Waste Water Management Base Rates
BPU Docket No. WR08080550
 - Applied Waste Water Management Franchise
BPU Docket No. WE03070530
 - Applied Waste Water Management Andover Franchise
BPU Docket No. WE04111466
 - Applied Waste Water Management Hillsborough Franchise
BPU Docket No. WE04101349
 - Applied Waste Water Management Oakland Franchise
BPU Docket No. WE04111467
 - Applied Waste Water Management Union Twp Franchise
BPU Docket No. WE050414
 - Applied Waste Water Management Tewksbury Franchise
BPU Docket No. WR08100908
 - Aqua NJ Freehold Franchise Extension Review
BPU Docket WE09120965
 - Aqua NJ Pine Hill Franchise
BPU Docket No. WE05070581

ACCOMPLISHMENTS (CONTINUED)

- Aqua NJ Upper Freehold Franchise
BPU Docket No. WE05100822
- Aqua NJ Readington Wastewater Franchise
BPU Docket No. WE07030224
- Aqua New Jersey Base Rate Case
BPU Docket No. WR07120955
- Aqua New Jersey Acquisition of Bloomsbury Water
BPU Docket WE09050360
- Aqua New Jersey Acquisition of Harkers Hollow Water
BPU Docket WM09020119
- Aqua New Jersey Base Rate Adjustment
BPU Docket No. WR09121005
- Aqua New Jersey Base Rate Adjustment
BPU Docket No. WR11120859
- Aqua New Jersey Base Rate Adjustment
BPU Docket WR14010019
- Aqua New Jersey Base Rate Adjustment
BPU Docket WR18121351
- Aqua New Jersey DSIC Foundational Filing
BPU Docket No. WR12070685
- Aqua New Jersey Byram Franchise & Acquisition
BPU Docket No. WE15080957
- Aqua New Jersey Cliffside Park Acquisition
BPU Docket No. WE16040307
- Aqua New Jersey Acquisition of Oakwood Village
BPU Docket WM16080739
- Aqua New Jersey Base Rate Adjustments
BPU Docket No. WR16010089
- Aqua NJ Distribution System Improvement Charge
Foundational Filing
BPU Docket No. WR16010090
- Atlantic City Sewerage Company Base Rate Adjustment
BPU Docket No. WR09110940
- Atlantic City Sewerage Company Base Rate Adjustment
BPU Docket WR11040247
- Atlantic City Sewerage Company Base Rate Adjustment
BPU Docket WR14101263
- Bayonne MUA – United Water NJ/ Kohlberg, Kravis, Roberts Joint
Venture Operations & Financing Agreement
BPU Docket No. WM12080777
- Bayview Water Company Rates
BPU Docket No. WR01120818
- Camden and United Water Environmental Services,
Inc. Management Services Agreement Modifications
BPU Docket No. WM12050457

ACCOMPLISHMENTS (CONTINUED)

- Borough of Haledon Rates
BPU Docket No. WR01080532
- City of Orange Privatization Review
BPU Docket No. WO03080614
- Crestwood Village Loan Approval
BPU Docket No. WF04091042
- Crestwood Village Water Co Base Rates
BPU Docket No. WR07090706
- Elizabethtown Water Co. v. Clinton Board of Adjustment
BPU Docket No. WE02050289
- Elizabethtown Water Company Rates
BPU Docket No. WR03070510
- Elizabethtown Water Company Franklin Franchise
BPU Docket No. WE05020125
- Elizabethtown Water Company Purchased Water Adjustment Clause
BPU Docket No. WR04070683
- Environmental Disposal Corporation Main Extension Agreement
BPU Docket No. WO04091030
- Environmental Disposal Corporation Rates
BPU Docket No. WR04080760
- Environmental Disposal Corporation Rates
BPU Docket No. WR07090715
- Environmental Disposal Corporation Change in Control
BPU Docket No. WM15040492
- Fayson Lake Water Company Rates
BPU Docket No. WR03040278
- Fayson Lake Water Company Base Rates
BPU Docket No. WR07010027
- Fayson Lake Water Company Base Rates
BPU Docket WR14050405
- Fayson Lake Water Company Base Rates
BPU Docket WR17101041
- Gordon's Corner Water Company Rates
BPU Docket No. WR03090714
- Gordons Corner Water Co Base Rate Adjustment
BPU Docket No. WR10060430
- Gordons Corner Water Co Base Rate Adjustment
BPU Docket No. WR12090807
- Gordons Corner Water Co Base Rate Adjustment
BPU Docket WR14040325
- Gordons Corner Water Co Base Rate Adjustment
BPU Docket WR18030268
- Jensens Deep Run Franchise Transfer
BPU Docket No. WE10070453

ACCOMPLISHMENTS (CONTINUED)

- Lake Valley Water Company Rates
BPU Docket No. WR04070722
- Mahwah Tank Maintenance Privatization
BPU Docket No. WO15050548
- Middlesex Water Company Rates
BPU Docket No. WR03110900
- Middlesex Water Company Rates
BPU Docket No. WR05050451
- Middlesex Water Company Base Rates
BPU Docket No. WR07040275
- Middlesex Water Co Transmission Main Prudency Review
BPU Docket No. WO08020098
- Middlesex Water Company Base Rates
BPU Docket No. WR09080666
- Middlesex Water Company DSIC Foundational Filing
BPU Docket No. WR12111021
- Middlesex Water Company Base Rates
BPU Docket No. WR12010027
- Middlesex Water Co DSIC Foundational Filing
BPU Docket No. WR14050508
- Middlesex Water Company Base Rate Adjustment
BPU Docket No. WR15030391
- Middlesex Water Company Base Rate Adjustment
BPU Docket No. WR17101049
- Montague Water Company Rates
BPU Docket No. WR03121034
- Montague Sewer Company Rates
BPU Docket No. WR03121035
- Montague Sewer Company Rates
BPU Docket No. WR05121056
- Montague Water Company Acquisition
BPU Docket No. WM10060432
- Montague Water & Sewer Company Rates
BPU Docket No. WR12110983
- Mount Holly Water Company Rates
BPU Docket No. WR03070509
- Mount Olive Villages Water & Sewer Franchise
BPU Docket No. WE03120970
- Mount Olive Villages Sewer Base Rate Adjustment
BPU Docket No. WR16050391
- Mount Olive Villages Water Base Rate Adjustment
BPU Docket No. WR16050390
- New Jersey American Water Company Rates
BPU Docket No. WR03070511

ACCOMPLISHMENTS (CONTINUED)

- New Jersey American Water Company Rates
BPU Docket No. WR06030257
- New Jersey American Water Acquisition of Mt. Ephraim and Approval of Municipal Consent
BPU Docket No. WE06060431
- New Jersey American Water Purchased Water Adjustment Clause
BPU Docket No. WR05110976
- New Jersey American Water Company – Mantua Franchise
BPU Docket No. WE07060372
- New Jersey American Water Co – Rocky Hill Franchise
BPU Docket No. WE07020103
- New Jersey American Water Company Rates
BPU Docket No. WR08010020
- New Jersey American Hopewell Township Franchise
BPU Docket No. WE07120981
- New Jersey American Water Co/City of Trenton
Joint Petition for Approval of the Sale of Water System
BPU Docket No. WE08010063
- New Jersey American Water Company Petition for Approval of a
Distribution System Improvement Charge (DSIC)
BPU Docket No. WO08050358
- New Jersey American Water Co Management Audit
BPU Docket No. WA09070510
- New Jersey American Water Base Rate Adjustment
BPU Docket No. WR10040260
- New Jersey American Water Company Franklin Franchise Review
BPU Docket No. WE11070403
- New Jersey American Water Company Base Rate Adjustment
BPU Docket No. WR11070460
- New Jersey American Water Company Base Rate Adjustment
BPU Docket No. WR15010035
- New Jersey American Water Company DSIC Foundational Filing
BPU Docket No. WR15060724
- New Jersey American Water – Eastampton Franchise Review
BPU Docket No. WE17020139
- New Jersey American Water – Shorelands Water Co Acquisition
BPU Docket No. WM16101036
- New Jersey American Water Co Howell Franchise Review
BPU Docket No. WE17111148
- New Jersey American Water Base Rate Adjustment
BPU Docket No. WR17090985
- New Jersey American Water Acquisition of Mt. Ephraim Sewer
BPU Docket WM19010117
- New Jersey Natural Gas Rates
BPU Docket No. GR07110889

ACCOMPLISHMENTS (CONTINUED)

- Oakwood Village Sewer Change in Control
BPU Docket No. WM07070535
- Oakwood Village Sewer System Change in Control
BPU Docket No. WM15091006
- Parkway Water Company Rates
BPU Docket No. WR05070634
- Pinelands Water Company Rates
BPU Docket No. WR03121016
- Pinelands Wastewater Company Rates
BPU Docket No. WR03121017
- Pinelands Water Company Rates
BPU Docket No. WR08040282
- Pinelands Wastewater Company Rates
BPU Docket No. WR08040283
- Pinelands Water Company Rates
BPU Docket No. WR120807342
- Pinelands Wastewater Company Rates
BPU Docket No. WR12080735
- Pinelands Water Company Rates
BPU Docket No. WR15101200
- Pinelands Wastewater Company Rates
BPU Docket No. WR15101202
- Pinelands Water Company Rates
BPU Docket No. WR19030417
- Pinelands Wastewater Company Rates
BPU Docket No. WR19030418
- Rahway Operational Services Agreement Review
BPU Docket No. WO16070678
- Rock GW, LLC Determination of Applicability of Board Regulation
BPU Docket No. WO08030188
- Rock GW, LLC Determination of Applicability of Board Regulation
BPU Docket No. WO10100739
- Roxbury Water Company Rates
BPU Docket No. WR09010090
- Roxciticus Water Company Change in Control
BPU Docket No. WM15080982
- SB Water & Sewer Company Acquisition
BPU Docket No. WM16030197
- Seabrook Water Company Franchise
BPU Docket No. WC02060340
- Seaview Harbor Water Company Change in Control
BPU Docket No. WM13100957
- Shorelands Water Company Rates
BPU Docket No. WR04040295

ACCOMPLISHMENTS (CONTINUED)

- Shorelands Water Company Base Rates
BPU Docket No. WR10060394
- Shore Water Company Rates
BPU Docket No. WR09070575
- South Jersey Water Supply Change in Control
BPU Docket No. WM07020076
- Suez Arlington Hills Wastewater Rates
BPU Docket No. WR16060510
- Suez Water NJ DSIC Foundational Filing
BPU Docket No. WR13030210
- Suez Water NJ Borstad Water Company Acquisition
BPU Docket No. WE15111247
- Suez Water New Jersey Base Rate Adjustment
BPU Docket No. WR15101177
- Suez Water Toms River Base Rate Adjustments
BPU Docket No. WR15020269
- Suez Water Toms River DSIC Foundational Filing
BPU Docket WR13111128
- Suez Water NJ – USG Cottonwood Agreement
BPU Docket No. WR15070856
- Suez Water NJ Electrical Efficiency Contract Eval.
BPU Docket No. WO17050494
- Suez Water Princeton Meadows Deferred Accounting
BPU Docket WF17030186
- SUEZ Water NJ Acquisition of West Milford MUA
BPU Docket WM17111189
- SUEZ Water NJ Base Rate Adjustment
BPU Docket WR18050593
- SUEZ Water NJ Acquisition of Independence MUA
BPU Docket WM18010008
- SUEZ Water NJ Acquisition of West Milford MUA
BPU Docket WM17111189
- SUEZ Water NJ Acquisition of East Brookwood
BPU Docket WM18040449
- United Water Acquisitions Evaluation
BPU Docket No. WM02060354
- United Water Arlington Hills Franchise
BPU Docket No. WE07020084
- United Water Arlington Hills Sewerage Base Rates
BPU Docket No. WR08100929
- United Water New Jersey Base Rates
BPU Docket No. WR07020135
- United Water New Jersey Base Rates
BPU Docket No. WR08090710

ACCOMPLISHMENTS (CONTINUED)

- United Water New Jersey Base Rates
BPU Docket No. WR11070428
 - United Water New Jersey DSIC Foundational Filing
BPU Docket No. WR12080724
 - United Water New Jersey Management Audit
BPU Docket: WA05060550
 - United Water New Jersey Affiliate Transaction Review – JPI Painting
BPU Docket No. WO10060410
 - United Water New Jersey Affiliate Transaction
Review – Utility Service Contract
BPU Docket No. WO10060409
 - United Water New Jersey Mt Arlington Franchise
Extension Review
BPU Docket No. WE09121006
 - United Water New Jersey Vernon Township Franchise
Extension Review
BPU Docket WE10110870
 - United Water New Jersey Vernon Township Franchise
Extension Review
BPU Docket WE11030155
 - United Water Great Gorge/Vernon Sewer Base Rates
BPU Docket No. WR10100785
 - United Water Toms River Base Rates
BPU Docket No. WR080830139
 - United Water Toms River Base Rates
BPU Docket No. WR12090830
 - United Water West Milford Sewerage Base Rates
BPU Docket No. WR08100928
 - Village Utility Inc Franchise and Initial Tariff
BPU Docket 180808926
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- Assisted the New Jersey Division of Rate Counsel in assessing drought conditions effecting water utilities in New Jersey during the 2002 drought. Analyzed proposals for water supply interconnections to mitigate drought impacts, developed position statements regarding pricing alternatives, and provided a critique of State water supply management initiatives prior to and during drought conditions.
 - Assisted the New Jersey Division of Rate Counsel in assessing the need for a Distribution System Improvement Charge (DSIC) to allow regulated water utilities to accelerate the recovery of capital investments in water distribution assets (BPU Docket WO10090655). Provided financial analyses of current and prospective distribution renovation programs. Reviewed and commented on draft language for a generic rule making.

ACCOMPLISHMENTS (CONTINUED)

- Assisted the Delaware Public Advocate in assessing drought conditions effecting water utilities in northern New Castle County during the 2002 drought (PSC Docket No. 323-02). Reviewed water utility operations prior to and during the drought emergency, assessed the effectiveness of use curtailments, developed recommendations to assure proper, cost-effective resources management for future drought conditions.
- Assisted the Delaware Public Service Commission in a determination of rate base for Artesian Water Company in PSC Docket 08-96. Evaluated selected plant facilities and proposed projects to determine the need to impute revenues for under-utilized facilities in establishing new base rates.
- Assisted the Delaware Public Service Commission in an evaluation of the Initial Tariff filing submitted by Tidewater Environmental Services, Inc. (PSC Docket No. 11-274WW) for wastewater service in a development known as “The Ridings.” Evaluated projected operating expenses and rate base claims and developed recommendations that avoided a potential 17.5% rate increase.
- Prepared an assessment of the water supply capacity certification and water conservation plan submitted by United Water Delaware in PSC Docket 09-282 on behalf of the Delaware Public Service Commission. Evaluated the capacity of the sources of supply available to the Company with respect to projected demands and the requirements of the Delaware Water Supply Self-Sufficiency Act of 2003. Assessed the effectiveness of water conservation activities and developed recommendations to improve the efficiency and effectiveness of Company conservation programs.
- Provided expert testimony on behalf of the Delaware Public Advocate in the matter of Inland Bays Preservation Company’s request for an increase in wastewater rates before the Delaware Public Service Commission (PSC Docket No. 09-327-WW). Evaluated plant facilities, proposed projects and the allocation of developer contributions in aid of construction to determine rate base. Assessed the level of operating expenses claimed in the filing and recommended adjustments to substantially lower the requested rate increase.
- Provided expert testimony on behalf of the Delaware Public Advocate in the matter of Tidewater Environmental Services, Inc.’s request for a base rate adjustment for seven of its regulated wastewater utility systems (PSC Docket No. 11-329WW). Established independent revenue requirements for each system to assure that costs and rates were properly matched for each independent group of customers served by the Company. Recommended an overall rate adjustment that was equivalent to 60% of the initial rate request and was within 12% of the final Ordered rates.
- Provided expert testimony on behalf of the Delaware Public Advocate in the matter of Tidewater Utilities, Inc.’s request for a base rate adjustment for its regulated water systems throughout Delaware (PSC Docket 13-466). Provided testimony on engineering and accounting issues related to the determination of the Company’s revenue requirement that resulted in a rate settlement equivalent to twenty percent of the Company’s filed rate request.

ACCOMPLISHMENTS (CONTINUED)

- Prepared a tariff design evaluation for the Pequannock River Basin Regional Sewer Authority to assess alternative rate structures for service to regional participating municipalities. Evaluated current budgeting and billing systems and alternatives to equitably allocate regional system costs to the participating municipalities.
- Provided expert testimony on behalf of the Village of Ridgewood Water Utility in a dispute regarding the regional allocation of costs to retail customers serviced beyond the corporate boundaries of the Village. Reviewed historical budgets and actual financial results, developed revised and updated cost allocations for shared services and provided recommendations on retail rates charged within and outside of the Village.
- Provided expert advice to the Borough of Ridgefield regarding the failure of a 36-inch diameter PCCP water main owned by an investor-owned utility. Assisted the Borough in negotiating a suitable restoration and replacement plan and in negotiations for the recovery of damages resulting from the break.
- Provided expert testimony on behalf of the Township of Newtown before the Pennsylvania Public Utility Commission (PUC Dkt. No. P-2012-2327738) in regard to a dispute between the Township and Newtown Artesian Water Company regarding the siting of a proposed new well. Evaluated current and future water supply needs, water quality and treatment needs and the revenue requirement of the proposed project relative to other alternatives.
- Managed 175 municipal and commercial water and wastewater contracts located in seven states for American Water Services/AmericanAnglian Environmental Technologies. Through these contracts, cost effective water and wastewater service was provided to over one million people. Contracts included the 160 MGD City of Buffalo, NY water system and the 30 MGD Scranton Sewer Authority wastewater operations. Directed an operations staff of 700 employees. Eliminated financial losses while improving safety and quality.
- Directed a marketing and business development staff for AmericanAnglian Environmental Technologies that secured the largest operations and maintenance contract awarded in the US in 1999 and the second best overall performance in the US market. Increased revenues by 28%. Evaluated potential contract operations and design/build projects to identify operating and capital savings on hundreds of potential contracts throughout the United States. Evaluations included Atlanta, Georgia, Scranton, Pennsylvania and Springfield, Massachusetts.
- Managed the operations of 16 water systems for New Jersey-American Water Company, a regulated investor-owned utility serving one million people throughout NJ. Coordinated the activities of a decentralized operations staff of 440 to provide reliable water service, ensure environmental compliance, control costs, manage and maintain system assets, reduce liability, provide site security and maintain a safe work place, and meet financial objectives. Responsible for the maintenance and operation of all source of supply, treatment, filtration and storage facilities, producing and

ACCOMPLISHMENTS (CONTINUED)

- distributing between 100 MGD and 220 MGD, as well as over 4,000 miles of water transmission and distribution facilities.
- Directed a team of engineering, legal, public relations and financial professionals that planned, designed, permitted and constructed a \$192,000,000 water treatment plant and pipeline system for New Jersey-American Water Company. The intake, constructed in environmentally sensitive areas, and the state of the art water filtration plant can be expanded to produce 100 MGD. The project is the principal source of surface water for nearly one million people in southern New Jersey and it was built to allow new regulatory controls on ground water use to go into effect. The project was completed within budget and on schedule.
 - Developed the financial model and contract language that allowed water lines to be extended to over 3,000 homes with contaminated private wells in Atlantic County, New Jersey. This program provided the financial assurances needed to construct several miles of water mains, eliminate federal tax liability and reduce costs by 34%.
 - Initiated and directed the first study of desalination for public water supply purposes in NJ for the City of Cape May. This project evaluated two desalination technologies and demonstrated that reverse osmosis could be used effectively to treat brackish water at a competitive cost. A full-scale plant has since been placed in service.
 - Developed long-range regional water supply plan for Monmouth County, New Jersey, a county that was adding as many as 1,000 water utility customers per year and seriously stressing the water supply. The plan evaluated alternative sources of water, conservation and regional reservoir development. The recommendations avoided \$30,000,000 in capital construction while ensuring a safe supply of water for a 15-year planning period. Negotiated supply sharing operating agreements with the New Jersey Water Supply Authority to implement the plan.
 - Directed a staff of engineers and consultants in preparing comprehensive plans for 60 water systems located throughout the United States. Communities served by these systems include: Pittsburgh, Pennsylvania and its surrounding suburbs; Charleston, West Virginia; Richmond, Indiana; E. Saint Louis, Illinois and Monterey, California. Evaluated alternatives and identified the least costly means of providing safe water service for each system. Assessed operations strategies to identify external threats to the reliability and efficiency of these systems. Identified specific capital facility needs and operations strategies for five, ten and fifteen-year planning horizons, defined the long-term role of each system in prompting regional water supply development, and assessed the impact of future State and Federal water quality regulations on system operations and needs.
 - Developed a formula for allocating ground water to 30 water suppliers in southern New Jersey for the New Jersey Department of Environmental Protection and negotiated an implementation agreement with effected suppliers. The New Jersey Legislature adopted the formula in the Water Supply Management Act Amendments of 1992. The allocation formula protects a regional aquifer from over-pumping.

ACCOMPLISHMENTS (CONTINUED)

- Developed a plan to convey storm water through a sixty-foot high railroad embankment in Prince Georges County, Maryland. Evaluated alternative methods and selected one that allowed an existing culvert to be modified to carry higher flow rates. Saved over \$500,000 in construction costs. The Washington Suburban Sanitary Commission and Prince Georges County adopted the design as a standard in their storm water design manual.
- Negotiated Lakewood, New Jersey's first three-year water and wastewater labor agreement in the face of an impending strike, departing from prior history of year-to-year contract agreements.
- Provided expert testimony in judicial proceedings involving utility rate adjustments before the New Jersey Board of Public Utilities, the Connecticut Department of Public Utility Control and the New York Public Service Commission. Testified on environmental and operations topics including: rate setting strategies, source of supply improvements, water resources management, treatment to mitigate contamination, staffing levels and operating practices. Testified as to the least costly means of operating and maintaining water and wastewater facilities.
- Served as a gubernatorial appointee to the New Jersey Water Supply Advisory Council under Governors Florio and Whitman. Advised the NJ Department of Environmental Protection on a variety of water resources management issues.
- Coordinated the response to an outbreak of giardiasis for the US Environmental Protection Agency. The outbreak affected 20% of the people served by a municipal water system in north-central Pennsylvania. Specified immediate control measures, short-term treatment techniques and long-term treatment improvements to resolve the immediate problem and prevent a recurrence.

AWARDS

John J. Gallen Memorial Award presented by the Villanova University College of Engineering (1988) in recognition of many significant achievements in the field of water supply and distribution, effective leadership in developing regional water supply systems and contributions in the development of comprehensive plans for water supply systems.

George Warren Fuller Award presented by the American Water Works Association (2013) for distinguished service to the water supply field in commemoration of the sound engineering skill, brilliant diplomatic talent and constructive leadership which characterized the life of George Warren Fuller.

REPRESENTATIVE CLIENTS

- A.C. Schultes, Inc.
- Aquarion Water Company of Connecticut
- Aquarion Water Company of Massachusetts
- Atlantic City Municipal Utilities Authority
- Bethlehem Water Authority
- BOC Gases
- Bucks County Water & Sewer Authority
- Camco Management
- Cedar Grove Township
- Consumers New Jersey Water Company
- Delaware Public Advocate
- Delaware Public Service Commission
- D. R. Horton – New Jersey
- Elmira Water Board
- Erie City Water Authority
- Greater Ouachita Water Company
- Harris Defense Group
- Jersey City Municipal Utilities Authority
- Lower Makefield Township
- New Jersey-American Water Company
- New Jersey Division of Rate Counsel
- New Jersey Water Supply Authority
- New York City Department of Environmental Protection
- North Penn Water Authority
- North Wales Water Authority
- Passaic Valley Water Commission
- Pequannock River Basin Regional Sewerage Authority
- Perkasio Borough
- Perkasio Borough Authority
- Pricewaterhouse Coopers, LLP
- Southeast Morris County Municipal Utilities Authority
- Sussex Shores Water Company
- Township of Sparta (NJ)
- U.S. Water, LLC
- Upper Dublin Township
- Village of Ridgewood (NJ)
- Williams Alaska Resource

PROFESSIONAL QUALIFICATIONS

Registered Professional Engineer in Delaware (2004), Maryland (1982), New Jersey (1984), New Mexico (1987), New York (1984) and Pennsylvania (1983).

Licensed to complete RAM-W vulnerability assessments (2002).

PROFESSIONAL ASSOCIATIONS

American Society of Civil Engineers, American Water Works Association (Trustee of New Jersey Section), American Water Resource Management Association, International Water Association, National Ground Water Association, National Fire Protection Association, Water Environment Federation, Tau Beta Pi.

PROFESSIONAL HISTORY

HOWARD J. WOODS, JR. & ASSOCIATES, LLC General Manager	2000 - Present
AMERICAN WATER WORKS COMPANY American Water Services, Inc. Senior Vice President - Operations	1983 - 2000 1999 - 2000
American Anglian Environmental Tech., L.P. Senior Vice President - Business Development	 1998 - 1999
American Water Works Service Co. Vice President - Special Projects	 1997 - 1998
New Jersey-American Water Co., Inc. Vice President - Operations	 1989 - 1997
American Water Works Service Co. Engineering Manager	 1988 - 1989
System Director of Planning	1986 - 1988
Division Manager of Operations	1984 - 1986
Division Director of Engineering	1983 - 1984
JOHNSON, MIRMIRAN & THOMPSON Project Engineer	1981 - 1983
U.S. ENVIRONMENTAL PROTECTION AGENCY Environmental Engineer	1977 - 1981

CONTACT INFORMATION

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Phone: 267-254-5667
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APPENDIX B – SCHEDULES

Schedule HJW-1: Purchase Price Revenue Requirement	B-1
Schedule HJW-2: Calculation of AQUA Revenues	B-2
Schedule HJW-3: Calculation of DELCORA Revenues	B-11
Schedule HJW-4: Comparison of Annual Revenue Requirements	B-23
Schedule HJW-5: Analysis of Rate Stabilization Trust	B-24
Schedule HJW-6: Projected SPMT Billings	B-25

Schedule HJW-1: Purchase Price Revenue Requirement

Purchase Price/Rate Base	\$ 276,500,000
Transactional Costs	\$ 750,000
Total Rate Base at Closing	\$ 277,250,000
Authorized Rate of Return	7.37%
Annual Revenue Requirement	\$ 20,433,325
Gross Revenue Conversion Factor	1.43
Amount Required in Revenues	\$ 29,264,020

DELCORA 2020 Debt Service	\$ 12,991,947
Minimum Coverage Ratio	1.1
DELCORA Revenue Requirement	\$ 14,291,142

Net Increase In Revenue Requirement	\$ 14,972,879
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Rate of Return	Ratio	Cost Rate	Weighted Cost
Debt	47.15%	4.43%	2.09%
Equity	52.85%	10.00%	5.29%
Total	100.00%		7.37%

Gross Revenue Conversion Factor

Dollar of Revenue	1.0000
Less: Gross Receipts (Revenue) Tax	0.00%
Less: Reg Assessment	0.62%
Less: Bad Debts	1.17%
State Taxable Income	0.982053
State Income Tax	9.9999%
Federal Taxable Income	0.883848772
Federal Tax Rate	21.00%
Federal Income Tax	0.185608
Net Revenue Dollar	0.69824052992
Gross Revenue Conversion Factor	1.43217123

Notes:

- (1) Purchase price from Petition, Paragraph 60.
- (2) Transactional costs from Petition, Paragraph 61.
- (3) Rate of Return from W. C. Packer Direct, Appendix A.
- (4) Gross Revenue Conversion Factor from W. C. Packer Direct, Appendix A.
- (5) DELCORA 2020 Debt service from 2019 Audit, Page 24.

SCHEDULE HJW-2: CALCULATION OF AQUA REVENUES

	2020	2021	2022	2023	2024	2025
Acquisition Rate Base	\$ 276,500,000					
Transactional Costs	\$ 750,000					
Capital Improvement Plan	\$ 25,944,320	\$ 27,414,995	\$ 32,374,301	\$ 62,658,066	\$ 41,954,066	\$ 50,142,442
Total Capital Additions Per Company Filing	\$ 303,194,320	\$ 330,609,315	\$ 362,983,616	\$ 425,641,682	\$ 467,595,748	\$ 517,738,190
Less Accumulated Depreciation	\$ (4,123,443)	\$ (12,743,172)	\$ (22,176,036)	\$ (32,901,340)	\$ (45,049,369)	\$ (58,449,911)
Less Accumulated Deferred Taxes	\$ (407,493)	\$ (1,259,325)	\$ (2,191,514)	\$ (3,251,427)	\$ (4,451,938)	\$ (5,776,226)
Eligible Net Investment	\$ 298,663,384	\$ 316,606,818	\$ 338,616,066	\$ 389,488,915	\$ 418,094,441	\$ 453,512,053
ROR	7.374%	7.374%	7.374%	7.374%	7.374%	7.374%
Return on Investment	\$ 22,023,438	\$ 23,346,587	\$ 24,969,549	\$ 28,720,913	\$ 30,830,284	\$ 33,441,979
Revenues	\$ 70,978,127	\$ 79,912,409	\$ 82,298,516	\$ 85,489,148	\$ 91,865,310	\$ 96,204,535
Rate Increase Revenues	\$ 8,934,282	\$ 2,386,107	\$ 3,190,632	\$ 6,376,162	\$ 4,339,225	\$ 4,928,865
Total Revenues	\$ 79,912,409	\$ 82,298,516	\$ 85,489,148	\$ 91,865,310	\$ 96,204,535	\$ 101,133,400
O&M (1.5%)	\$ 41,808,283	\$ 42,435,407	\$ 43,071,938	\$ 43,718,017	\$ 44,373,788	\$ 45,190,727
Depreciation	\$ 8,246,886	\$ 8,619,729	\$ 9,432,864	\$ 10,725,304	\$ 12,148,029	\$ 13,400,542
Taxes Other	\$ 1,585,974	\$ 1,609,764	\$ 1,633,910	\$ 1,658,419	\$ 1,683,295	\$ 1,708,544
Total Income Taxes	\$ 6,247,829	\$ 6,287,029	\$ 6,380,887	\$ 7,042,657	\$ 7,169,139	\$ 7,391,609
Operating Income	\$ 22,023,438	\$ 23,346,587	\$ 24,969,549	\$ 28,720,913	\$ 30,830,284	\$ 33,441,979
Income Deficiency	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Revenue Conversion Factor	1.43217123	1.43217123	1.43217123	1.43217123	1.43217123	1.43217123
Revenue Deficiency (Excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Rate Increases	12.59%	2.99%	3.88%	7.46%	4.72%	5.12%

SCHEDULE HJW-2: CALCULATION OF AQUA REVENUES

	2026	2027	2028	2029	2030
Acquisition Rate Base					
Transactional Costs					
Capital Improvement Plan	\$ 153,589,690	\$ 172,893,622	\$ 145,949,849	\$ 19,945,006	\$ 18,599,133
Total Capital Additions Per Company Filing	\$ 671,327,880	\$ 844,221,502	\$ 990,171,351	\$ 1,010,116,357	\$ 1,028,715,490
Less Accumulated Depreciation	\$ (74,621,209)	\$ (95,232,681)	\$ (120,180,424)	\$ (147,384,336)	\$ (175,112,450)
Less Accumulated Deferred Taxes	\$ (7,374,331)	\$ (9,411,230)	\$ (11,876,654)	\$ (14,565,040)	\$ (17,305,230)
Eligible Net Investment	\$ 589,332,339	\$ 739,577,592	\$ 858,114,274	\$ 848,166,980	\$ 836,297,810
ROR	7.374%	7.374%	7.374%	7.374%	7.374%
Return on Investment	\$ 43,457,367	\$ 54,536,452	\$ 63,277,347	\$ 62,543,833	\$ 61,668,601
Revenues					
Rate Increase Revenues	\$ 101,133,400	\$ 117,759,304	\$ 136,596,484	\$ 152,158,031	\$ 143,289,854
Total Revenues	\$ 16,625,904	\$ 18,837,179	\$ 15,561,547	\$ (8,868,176)	\$ (1,484,254)
O&M (1.5%)	\$ 117,759,304	\$ 136,596,484	\$ 152,158,031	\$ 143,289,854	\$ 141,805,600
Depreciation	\$ 46,737,629	\$ 47,630,841	\$ 48,545,136	\$ 39,433,437	\$ 39,641,265
Taxes Other	\$ 16,171,299	\$ 20,611,472	\$ 24,947,743	\$ 27,203,913	\$ 27,728,113
Total Income Taxes	\$ 1,734,173	\$ 1,760,185	\$ 1,786,588	\$ 1,813,387	\$ 1,840,588
Operating Income	\$ 9,658,837	\$ 12,057,534	\$ 13,601,217	\$ 12,295,284	\$ 10,927,033
Income Deficiency	\$ 43,457,367	\$ 54,536,452	\$ 63,277,347	\$ 62,543,833	\$ 61,668,601
Revenue Conversion Factor	\$ -	\$ -	\$ -	\$ -	\$ -
Revenue Deficiency (Excess)	\$ 1.43217123	\$ 1.43217123	\$ 1.43217123	\$ 1.43217123	\$ 1.43217123
Rate Increases	\$ -	\$ -	\$ -	\$ -	\$ -
	16.44%	16.00%	11.39%	-5.83%	-1.04%

SCHEDULE HIW-2: CALCULATION OF AQUA REVENUES

	2031	2032	2033	2034	2035
Acquisition Rate Base					
Transactional Costs					
Capital Improvement Plan	\$ 25,713,661	\$ 36,469,189	\$ 45,875,280	\$ 47,227,995	\$ 45,749,936
Total Capital Additions Per Company Filing	\$ 1,054,429,151	\$ 1,090,898,340	\$ 1,136,773,620	\$ 1,184,001,615	\$ 1,229,751,551
Less Accumulated Depreciation	\$ (203,443,217)	\$ (232,619,671)	\$ (262,916,009)	\$ (294,478,552)	\$ (327,305,596)
Less Accumulated Deferred Taxes	\$ (20,104,977)	\$ (22,988,297)	\$ (25,982,288)	\$ (29,101,410)	\$ (32,345,494)
Eligible Net Investment	\$ 830,880,958	\$ 835,290,373	\$ 847,875,323	\$ 860,421,653	\$ 870,100,461
ROR	7.374%	7.374%	7.374%	7.374%	7.374%
Return on Investment	\$ 61,269,162	\$ 61,594,312	\$ 62,522,326	\$ 63,447,493	\$ 64,161,208
Revenues	\$ 141,805,600	\$ 140,998,671	\$ 141,345,471	\$ 142,709,336	\$ 144,174,781
Rate Increase Revenues	\$ (806,929)	\$ 346,800	\$ 1,363,865	\$ 1,465,444	\$ 1,150,097
Total Revenues	\$ 140,998,671	\$ 141,345,471	\$ 142,709,336	\$ 144,174,781	\$ 145,324,877
O&M (1.5%)	\$ 39,857,406	\$ 40,082,193	\$ 40,315,970	\$ 40,559,099	\$ 40,811,953
Depreciation	\$ 28,330,767	\$ 29,176,454	\$ 30,296,339	\$ 31,562,543	\$ 32,827,043
Taxes Other	\$ 1,868,196	\$ 1,896,219	\$ 1,924,663	\$ 1,953,533	\$ 1,982,836
Total Income Taxes	\$ 9,673,139	\$ 8,596,293	\$ 7,650,039	\$ 6,652,114	\$ 5,541,838
Operating Income	\$ 61,269,162	\$ 61,594,312	\$ 62,522,326	\$ 63,447,493	\$ 64,161,208
Income Deficiency	\$ -	\$ -	\$ -	\$ -	\$ -
Revenue Conversion Factor	1.43217123	1.43217123	1.43217123	1.43217123	1.43217123
Revenue Deficiency (Excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Rate Increases	-0.57%	0.25%	0.96%	1.03%	0.80%

SCHEDULE HIW-2: CALCULATION OF AQUA REVENUES

	2036	2037	2038	2039	2040
Acquisition Rate Base					
Transactional Costs					
Capital Improvement Plan	\$ 23,647,504	\$ 25,518,368	\$ 21,511,659	\$ 21,074,140	\$ 20,240,969
Total Capital Additions Per Company Filing	\$ 1,253,399,055	\$ 1,278,917,423	\$ 1,300,429,082	\$ 1,321,503,222	\$ 1,341,744,191
Less Accumulated Depreciation	\$ (361,076,444)	\$ (395,515,948)	\$ (430,595,060)	\$ (466,253,340)	\$ (502,473,504)
Less Accumulated Deferred Taxes	\$ (35,682,849)	\$ (39,086,282)	\$ (42,552,924)	\$ (46,076,801)	\$ (49,656,205)
Eligible Net Investment	\$ 856,639,763	\$ 844,315,193	\$ 827,281,098	\$ 809,173,082	\$ 789,614,481
ROR	7.374%	7.374%	7.374%	7.374%	7.374%
Return on Investment	\$ 63,168,616	\$ 62,259,802	\$ 61,003,708	\$ 59,668,423	\$ 58,226,172
Revenues					
Rate Increase Revenues	\$ 145,324,877	\$ 143,923,738	\$ 142,339,740	\$ 140,263,994	\$ 138,014,136
Total Revenues	\$ (1,401,139)	\$ (1,583,998)	\$ (2,075,746)	\$ (2,249,858)	\$ (2,415,518)
O&M (1.5%)	\$ 143,923,738	\$ 142,339,740	\$ 140,263,994	\$ 138,014,136	\$ 135,598,617
Depreciation	\$ 41,074,921	\$ 41,348,407	\$ 41,632,833	\$ 41,928,636	\$ 42,236,271
Taxes Other	\$ 33,770,848	\$ 34,439,504	\$ 35,079,112	\$ 35,658,279	\$ 36,220,165
Total Income Taxes	\$ 2,012,578	\$ 2,042,767	\$ 2,073,408	\$ 2,104,509	\$ 2,136,077
Operating Income	\$ 3,896,775	\$ 2,249,261	\$ 474,933	\$ (1,345,712)	\$ (3,220,067)
Income Deficiency	\$ 63,168,616	\$ 62,259,802	\$ 61,003,708	\$ 59,668,423	\$ 58,226,172
Revenue Conversion Factor	\$ -	\$ -	\$ -	\$ -	\$ -
Revenue Deficiency (Excess)	\$ 1,432,17123	\$ 1,432,17123	\$ 1,432,17123	\$ 1,432,17123	\$ 1,432,17123
Rate Increases	\$ -	\$ -	\$ -	\$ -	\$ -
	-0.96%	-1.10%	-1.46%	-1.60%	-1.75%

SCHEDULE HJW-2: CALCULATION OF AQUA REVENUES

Income Taxes	2020	2021	2022	2023	2024	2025
Revenue	\$ 79,912,409	\$ 82,298,516	\$ 85,489,148	\$ 91,865,310	\$ 96,204,535	\$ 101,133,400
Expenses	\$ 41,808,283	\$ 42,435,407	\$ 43,071,938	\$ 43,718,017	\$ 44,373,788	\$ 45,190,727
Taxes Other	\$ 1,585,974	\$ 1,609,764	\$ 1,633,910	\$ 1,658,419	\$ 1,683,295	\$ 1,708,544
Interest	\$ 6,239,078	\$ 6,613,916	\$ 7,073,690	\$ 8,136,423	\$ 8,733,993	\$ 9,473,867
Depreciation	\$ 8,246,886	\$ 8,619,729	\$ 9,432,864	\$ 10,725,304	\$ 12,148,029	\$ 13,400,542
Deferred Tax	\$ 407,493	\$ 1,259,325	\$ 2,191,514	\$ 3,251,427	\$ 4,451,938	\$ 5,776,226
Taxable Income	\$ 21,624,695	\$ 21,760,374	\$ 22,085,232	\$ 24,375,720	\$ 24,813,493	\$ 25,583,494
SIT (9.99%)	\$ 2,160,307	\$ 2,173,861	\$ 2,206,315	\$ 2,435,134	\$ 2,478,868	\$ 2,555,791
FIT (21%)	\$ 4,087,522	\$ 4,113,168	\$ 4,174,573	\$ 4,607,523	\$ 4,690,271	\$ 4,835,818
Total Income Taxes	\$ 6,247,829	\$ 6,287,029	\$ 6,380,887	\$ 7,042,657	\$ 7,169,139	\$ 7,391,609
Accumulated Depreciation						
Capital Additions	\$ 303,194,320	\$ 27,414,995	\$ 32,374,301	\$ 62,658,066	\$ 41,954,066	\$ 50,142,442
Composite Depreciation Rate	2.7200%					
Depreciation Expense	\$ 8,246,886	\$ 745,688	\$ 880,581	\$ 1,704,299	\$ 1,141,151	\$ 1,363,874
1/2 Year Convention	\$ 4,123,443	\$ 372,844	\$ 440,290	\$ 852,150	\$ 570,575	\$ 681,937
Prior Additions		\$ 303,194,320	\$ 330,609,315	\$ 362,983,616	\$ 425,641,682	\$ 467,595,748
Depreciation Expense Prior Additions		\$ 8,246,886	\$ 8,992,573	\$ 9,873,154	\$ 11,577,454	\$ 12,718,604
Accumulated Depreciation	\$ 4,123,443	\$ 12,743,172	\$ 22,176,036	\$ 32,901,340	\$ 45,049,369	\$ 58,449,911
Deferred Taxes						
Capital Additions	\$ 303,194,320	\$ 27,414,995	\$ 32,374,301	\$ 62,658,066	\$ 41,954,066	\$ 50,142,442
MACRC Rate	4%					
Tax Depreciation (1/2 Year Convention)	\$ 6,063,886	\$ 548,300	\$ 647,486	\$ 1,253,161	\$ 839,081	\$ 1,002,849
Book Depreciation	\$ 4,123,443	\$ 372,844	\$ 440,290	\$ 852,150	\$ 570,575	\$ 681,937
Tax Depreciation > Book	\$ 1,940,444	\$ 175,456	\$ 207,196	\$ 401,012	\$ 268,506	\$ 320,912
Deferred Taxes at 21%	\$ 407,493	\$ 36,846	\$ 43,511	\$ 84,212	\$ 56,386	\$ 67,391
Prior Additions		\$ 303,194,320	\$ 330,609,315	\$ 362,983,616	\$ 425,641,682	\$ 467,595,748
Tax Depreciation		\$ 12,127,773	\$ 13,224,373	\$ 14,519,345	\$ 17,025,667	\$ 18,703,830
Book Depreciation		\$ 8,246,886	\$ 8,992,573	\$ 9,873,154	\$ 11,577,454	\$ 12,718,604
Tax Depreciation > Book		\$ 3,880,887	\$ 4,231,799	\$ 4,646,190	\$ 5,448,214	\$ 5,985,226
Deferred Taxes at 21%		\$ 814,986	\$ 888,678	\$ 975,700	\$ 1,144,125	\$ 1,256,897
Accumulated Deferred Taxes	\$ 407,493	\$ 1,259,325	\$ 2,191,514	\$ 3,251,427	\$ 4,451,938	\$ 5,776,226

SCHEDULE HJW-2: CALCULATION OF AQUA REVENUES

	2026	2027	2028	2029	2030
Income Taxes					
Revenue	\$ 117,759,304	\$ 136,596,484	\$ 152,158,031	\$ 143,289,854	\$ 141,805,600
Expenses	\$ 46,737,629	\$ 47,630,841	\$ 48,545,136	\$ 39,433,437	\$ 39,641,265
Taxes Other	\$ 1,734,173	\$ 1,760,185	\$ 1,786,588	\$ 1,813,387	\$ 1,840,588
Interest	\$ 12,311,153	\$ 15,449,776	\$ 17,926,007	\$ 17,718,208	\$ 17,470,261
Depreciation	\$ 16,171,299	\$ 20,611,472	\$ 24,947,743	\$ 27,203,913	\$ 27,728,113
Deferred Tax	\$ 7,374,331	\$ 9,411,230	\$ 11,876,654	\$ 14,565,040	\$ 17,305,230
Taxable Income	\$ 33,430,720	\$ 41,732,981	\$ 47,075,903	\$ 42,555,869	\$ 37,820,142
SIT (9.99%)	\$ 3,339,729	\$ 4,169,125	\$ 4,702,883	\$ 4,251,331	\$ 3,778,232
FIT (21%)	\$ 6,319,108	\$ 7,888,410	\$ 8,898,334	\$ 8,043,953	\$ 7,148,801
Total Income Taxes	\$ 9,658,837	\$ 12,057,534	\$ 13,601,217	\$ 12,295,284	\$ 10,927,033
Accumulated Depreciation					
Capital Additions	\$ 153,589,690	\$ 172,893,622	\$ 145,949,849	\$ 19,945,006	\$ 18,599,133
Composite Depreciation Rate					
Depreciation Expense	\$ 4,177,640	\$ 4,702,707	\$ 3,969,836	\$ 542,504	\$ 505,896
1/2 Year Convention	\$ 2,088,820	\$ 2,351,353	\$ 1,984,918	\$ 271,252	\$ 252,948
Prior Additions	\$ 517,738,190	\$ 671,327,880	\$ 844,221,502	\$ 990,171,351	\$ 1,010,116,357
Depreciation Expense Prior Additions	\$ 14,082,479	\$ 18,260,118	\$ 22,962,825	\$ 26,932,661	\$ 27,475,165
Accumulated Depreciation	\$ 74,621,209	\$ 95,232,681	\$ 120,180,424	\$ 147,384,336	\$ 175,112,450
Deferred Taxes					
Capital Additions	\$ 153,589,690	\$ 172,893,622	\$ 145,949,849	\$ 19,945,006	\$ 18,599,133
MACRC Rate					
Tax Depreciation (1/2 Year Convention)	\$ 3,071,794	\$ 3,457,872	\$ 2,918,997	\$ 398,900	\$ 371,983
Book Depreciation	\$ 2,088,820	\$ 2,351,353	\$ 1,984,918	\$ 271,252	\$ 252,948
Tax Depreciation > Book	\$ 982,974	\$ 1,106,519	\$ 934,079	\$ 127,648	\$ 119,034
Deferred Taxes at 21%	\$ 206,425	\$ 232,369	\$ 196,157	\$ 26,806	\$ 24,997
Prior Additions	\$ 517,738,190	\$ 671,327,880	\$ 844,221,502	\$ 990,171,351	\$ 1,010,116,357
Tax Depreciation	\$ 20,709,528	\$ 26,853,115	\$ 33,768,860	\$ 39,606,854	\$ 40,404,654
Book Depreciation	\$ 14,082,479	\$ 18,260,118	\$ 22,962,825	\$ 26,932,661	\$ 27,475,165
Tax Depreciation > Book	\$ 6,627,049	\$ 8,592,997	\$ 10,806,035	\$ 12,674,193	\$ 12,929,489
Deferred Taxes at 21%	\$ 1,391,680	\$ 1,804,529	\$ 2,269,267	\$ 2,661,581	\$ 2,715,193
Accumulated Deferred Taxes	\$ 7,374,331	\$ 9,411,230	\$ 11,876,654	\$ 14,565,040	\$ 17,305,230

SCHEDULE HIW-2: CALCULATION OF AQUA REVENUES

	2031	2032	2033	2034	2035
Income Taxes					
Revenue	\$ 140,998,671	\$ 141,345,471	\$ 142,709,336	\$ 144,174,781	\$ 145,324,877
Expenses	\$ 39,857,406	\$ 40,082,193	\$ 40,315,970	\$ 40,559,099	\$ 40,811,953
Taxes Other	\$ 1,868,196	\$ 1,896,219	\$ 1,924,663	\$ 1,953,533	\$ 1,982,836
Interest	\$ 17,357,103	\$ 17,449,216	\$ 17,712,115	\$ 17,974,208	\$ 18,176,399
Depreciation	\$ 28,330,767	\$ 29,176,454	\$ 30,296,339	\$ 31,562,543	\$ 32,827,043
Deferred Tax	\$ 20,104,977	\$ 22,988,297	\$ 25,982,288	\$ 29,101,410	\$ 32,345,494
Taxable Income	\$ 33,480,221	\$ 29,753,093	\$ 26,477,962	\$ 23,023,988	\$ 19,181,153
SIT (9.99%)	\$ 3,344,674	\$ 2,972,334	\$ 2,645,148	\$ 2,300,096	\$ 1,916,197
FIT (21%)	\$ 6,328,465	\$ 5,623,959	\$ 5,004,891	\$ 4,352,017	\$ 3,625,641
Total Income Taxes	\$ 9,673,139	\$ 8,596,293	\$ 7,650,039	\$ 6,652,114	\$ 5,541,838
Accumulated Depreciation					
Capital Additions	\$ 25,713,661	\$ 36,469,189	\$ 45,875,280	\$ 47,227,995	\$ 45,749,936
Composite Depreciation Rate					
Depreciation Expense	\$ 699,412	\$ 991,962	\$ 1,247,808	\$ 1,284,601	\$ 1,244,398
1/2 Year Convention	\$ 349,706	\$ 495,981	\$ 623,904	\$ 642,301	\$ 622,199
Prior Additions	\$ 1,028,715,490	\$ 1,054,429,151	\$ 1,090,898,340	\$ 1,136,773,620	\$ 1,184,001,615
Depreciation Expense Prior Additions	\$ 27,981,061	\$ 28,680,473	\$ 29,672,435	\$ 30,920,242	\$ 32,204,844
Accumulated Depreciation	\$ 203,443,217	\$ 232,619,671	\$ 262,916,009	\$ 294,478,552	\$ 327,305,596
Deferred Taxes					
Capital Additions	\$ 25,713,661	\$ 36,469,189	\$ 45,875,280	\$ 47,227,995	\$ 45,749,936
MACRC Rate					
Tax Depreciation (1/2 Year Convention)	\$ 514,273	\$ 729,384	\$ 917,506	\$ 944,560	\$ 914,999
Book Depreciation	\$ 349,706	\$ 495,981	\$ 623,904	\$ 642,301	\$ 622,199
Tax Depreciation > Book	\$ 164,567	\$ 233,403	\$ 293,602	\$ 302,259	\$ 292,800
Deferred Taxes at 21%	\$ 34,559	\$ 49,015	\$ 61,656	\$ 63,474	\$ 61,488
Prior Additions	\$ 1,028,715,490	\$ 1,054,429,151	\$ 1,090,898,340	\$ 1,136,773,620	\$ 1,184,001,615
Tax Depreciation	\$ 41,148,620	\$ 42,177,166	\$ 43,635,934	\$ 45,470,945	\$ 47,360,065
Book Depreciation	\$ 27,981,061	\$ 28,680,473	\$ 29,672,435	\$ 30,920,242	\$ 32,204,844
Tax Depreciation > Book	\$ 13,167,558	\$ 13,496,693	\$ 13,963,499	\$ 14,550,702	\$ 15,155,221
Deferred Taxes at 21%	\$ 2,765,187	\$ 2,834,306	\$ 2,932,335	\$ 3,055,647	\$ 3,182,596
Accumulated Deferred Taxes	\$ 20,104,977	\$ 22,988,297	\$ 25,982,288	\$ 29,101,410	\$ 32,345,494

SCHEDULE HIW-2: CALCULATION OF AQUA REVENUES

	2036	2037	2038	2039	2040
Income Taxes					
Revenue	\$ 143,923,738	\$ 142,339,740	\$ 140,263,994	\$ 138,014,136	\$ 135,598,617
Expenses	\$ 41,074,921	\$ 41,348,407	\$ 41,632,833	\$ 41,928,636	\$ 42,236,271
Taxes Other	\$ 2,012,578	\$ 2,042,767	\$ 2,073,408	\$ 2,104,509	\$ 2,136,077
Interest	\$ 17,895,205	\$ 17,637,744	\$ 17,281,902	\$ 16,903,626	\$ 16,495,047
Depreciation	\$ 33,770,848	\$ 34,439,504	\$ 35,079,112	\$ 35,658,279	\$ 36,220,165
Deferred Tax	\$ 35,682,849	\$ 39,086,282	\$ 42,552,924	\$ 46,076,801	\$ 49,656,205
Taxable Income	\$ 13,487,338	\$ 7,785,037	\$ 1,643,815	\$ (4,657,715)	\$ (11,145,147)
SIT (9.99%)	\$ 1,347,385	\$ 777,725	\$ 164,217	\$ (465,306)	\$ (1,113,400)
FIT (21%)	\$ 2,549,390	\$ 1,471,535	\$ 310,716	\$ (880,406)	\$ (2,106,667)
Total Income Taxes	\$ 3,896,775	\$ 2,249,261	\$ 474,933	\$ (1,345,712)	\$ (3,220,067)
Accumulated Depreciation					
Capital Additions	\$ 23,647,504	\$ 25,518,368	\$ 21,511,659	\$ 21,074,140	\$ 20,240,969
Composite Depreciation Rate					
Depreciation Expense	\$ 643,212	\$ 694,100	\$ 585,117	\$ 573,217	\$ 550,554
1/2 Year Convention	\$ 321,606	\$ 347,050	\$ 292,559	\$ 286,608	\$ 275,277
Prior Additions	\$ 1,229,751,551	\$ 1,253,399,055	\$ 1,278,917,423	\$ 1,300,429,082	\$ 1,321,503,222
Depreciation Expense Prior Additions	\$ 33,449,242	\$ 34,092,454	\$ 34,786,554	\$ 35,371,671	\$ 35,944,888
Accumulated Depreciation	\$ 361,076,444	\$ 395,515,948	\$ 430,595,060	\$ 466,253,340	\$ 502,473,504
Deferred Taxes					
Capital Additions	\$ 23,647,504	\$ 25,518,368	\$ 21,511,659	\$ 21,074,140	\$ 20,240,969
MACRC Rate					
Tax Depreciation (1/2 Year Convention)	\$ 472,950	\$ 510,367	\$ 430,233	\$ 421,483	\$ 404,819
Book Depreciation	\$ 321,606	\$ 347,050	\$ 292,559	\$ 286,608	\$ 275,277
Tax Depreciation > Book	\$ 151,344	\$ 163,318	\$ 137,675	\$ 134,874	\$ 129,542
Deferred Taxes at 21%	\$ 31,782	\$ 34,297	\$ 28,912	\$ 28,324	\$ 27,204
Prior Additions	\$ 1,229,751,551	\$ 1,253,399,055	\$ 1,278,917,423	\$ 1,300,429,082	\$ 1,321,503,222
Tax Depreciation	\$ 49,190,062	\$ 50,135,962	\$ 51,156,697	\$ 52,017,163	\$ 52,860,129
Book Depreciation	\$ 33,449,242	\$ 34,092,454	\$ 34,786,554	\$ 35,371,671	\$ 35,944,888
Tax Depreciation > Book	\$ 15,740,820	\$ 16,043,508	\$ 16,370,143	\$ 16,645,492	\$ 16,915,241
Deferred Taxes at 21%	\$ 3,305,572	\$ 3,369,137	\$ 3,437,730	\$ 3,495,553	\$ 3,552,201
Accumulated Deferred Taxes	\$ 35,682,849	\$ 39,086,282	\$ 42,552,924	\$ 46,076,801	\$ 49,656,205

SCHEDULE HJW-2: CALCULATION OF AQUA REVENUES

Rate of Return	Ratio	Cost	Weighted
Long Term Debt	47.15%	4.43%	2.0890%
Common Equity	52.85%	10.00%	5.2850%
	100.00%		7.3740%

Gross Revenue Conversion Factor

Dollar of Revenue	1.0000
Less: Gross Receipts (Revenue) Tax	-
Less: Reg Assessment	0.0062
Less: Bad Debts	0.0117
State Taxable Income	0.982053
State Income Tax	0.0982
Federal Taxable Income	0.883848772
Federal Tax Rate	21.00%
Federal Income Tax	0.185608
Net Revenue Dollar	0.69824052992
Gross Revenue Conversion Factor	1.43217123

SCHEDULE HJW-3: CALCULATION OF DELCORA REVENUES

	2020	2021	2022	2023
Acquisition Rate Base	\$ -			
Transactional Costs	\$ -			
Capital Improvement Plan	\$ 25,944,320	\$ 27,414,995	\$ 32,374,301	\$ 62,658,066
Total Capital Additions Per Filing	\$ 25,944,320	\$ 53,359,315	\$ 85,733,616	\$ 148,391,682
Existing Debt Service	\$ 12,991,497	\$ 12,997,009	\$ 12,386,515	\$ 12,383,915
Surplus Reinvested		\$ 14,592,373	\$ 16,822,887	\$ 19,696,215
Net Construction to be Financed		\$ 12,822,622	\$ 15,551,414	\$ 42,961,851
New Debt Service				
2021 Bond	\$	\$ 661,967	\$ 661,967	\$ 661,967
2022 Bond		\$	\$ 802,840	\$ 802,840
2023 Bond			\$	\$ 2,217,901
2024 Bond				
2025 Bond				
2026 Bond				
2027 Bond				
2028 Bond				
2029 Bond				
2032 Bond				
2033 Bond				
2034 Bond				
2035 Bond				
Total Debt Service	\$ 12,991,497	\$ 13,658,976	\$ 13,851,322	\$ 16,066,623

SCHEDULE HJW-3: CALCULATION OF DELCORA REVENUES

	2024	2025	2026	2027
Acquisition Rate Base				
Transactional Costs				
Capital Improvement Plan	\$ 41,954,066	\$ 50,142,442	\$ 153,589,690	\$ 172,893,622
Total Capital Additions Per Filing	\$ 190,345,748	\$ 240,488,190	\$ 394,077,880	\$ 566,971,502
Existing Debt Service	\$ 12,389,178	\$ 12,190,708	\$ 12,190,708	\$ 12,190,708
Surplus Reinvested	\$ 20,722,995	\$ 23,049,337	\$ 25,320,658	\$ 21,655,655
Net Construction to be Financed	\$ 21,231,071	\$ 27,093,105	\$ 128,269,032	\$ 151,237,967
New Debt Service				
2021 Bond	\$ 661,967	\$ 661,967	\$ 661,967	\$ 661,967
2022 Bond	\$ 802,840	\$ 802,840	\$ 802,840	\$ 802,840
2023 Bond	\$ 2,217,901	\$ 2,217,901	\$ 2,217,901	\$ 2,217,901
2024 Bond	\$ 1,096,052	\$ 1,096,052	\$ 1,096,052	\$ 1,096,052
2025 Bond		\$ 1,398,679	\$ 1,398,679	\$ 1,398,679
2026 Bond			\$ 6,621,875	\$ 6,621,875
2027 Bond				\$ 7,807,644
2028 Bond				
2029 Bond				
2032 Bond				
2033 Bond				
2034 Bond				
2035 Bond				
Total Debt Service	\$ 17,167,938	\$ 18,368,146	\$ 24,990,021	\$ 32,797,666

SCHEDULE HJW-3: CALCULATION OF DELCORA REVENUES

	2028	2029	2030	2031
Acquisition Rate Base				
Transactional Costs				
Capital Improvement Plan	\$ 145,949,849	\$ 19,945,006	\$ 18,599,133	\$ 25,713,661
Total Capital Additions Per Filing	\$ 712,921,351	\$ 732,866,357	\$ 751,465,490	\$ 777,179,151
Existing Debt Service	\$ 12,190,708	\$ 12,190,708	\$ 10,734,610	\$ 10,734,610
Surplus Reinvested	\$ 17,684,661	\$ 16,114,686	\$ 25,001,847	\$ 26,222,915
Net Construction to be Financed	\$ 128,265,188	\$ 3,830,320	\$ (6,402,714)	\$ (6,911,968)
New Debt Service				
2021 Bond	\$ 661,967	\$ 661,967	\$ 661,967	\$ 661,967
2022 Bond	\$ 802,840	\$ 802,840	\$ 802,840	\$ 802,840
2023 Bond	\$ 2,217,901	\$ 2,217,901	\$ 2,217,901	\$ 2,217,901
2024 Bond	\$ 1,096,052	\$ 1,096,052	\$ 1,096,052	\$ 1,096,052
2025 Bond	\$ 1,398,679	\$ 1,398,679	\$ 1,398,679	\$ 1,398,679
2026 Bond	\$ 6,621,875	\$ 6,621,875	\$ 6,621,875	\$ 6,621,875
2027 Bond	\$ 7,807,644	\$ 7,807,644	\$ 7,807,644	\$ 7,807,644
2028 Bond	\$ 6,621,677	\$ 6,621,677	\$ 6,621,677	\$ 6,621,677
2029 Bond		\$ 197,740	\$ 197,740	\$ 197,740
2032 Bond				
2033 Bond				
2034 Bond				
2035 Bond				
Total Debt Service	\$ 39,419,343	\$ 39,617,083	\$ 38,160,986	\$ 38,160,986

SCHEDULE HJW-3: CALCULATION OF DELCORA REVENUES

	2032	2033	2034	2035
Acquisition Rate Base				
Transactional Costs				
Capital Improvement Plan	\$ 36,469,189	\$ 45,875,280	\$ 47,227,995	\$ 45,749,936
Total Capital Additions Per Filing	\$ 813,648,340	\$ 859,523,620	\$ 906,751,615	\$ 952,501,551
Existing Debt Service	\$ 10,734,610	\$ 10,734,610	\$ 10,734,610	\$ 6,529,810
Surplus Reinvested	\$ 25,979,165	\$ 25,541,640	\$ 24,229,697	\$ 28,063,701
Net Construction to be Financed	\$ 3,578,056	\$ 20,333,640	\$ 22,998,298	\$ 17,686,235
New Debt Service				
2021 Bond	\$ 661,967	\$ 661,967	\$ 661,967	\$ 661,967
2022 Bond	\$ 802,840	\$ 802,840	\$ 802,840	\$ 802,840
2023 Bond	\$ 2,217,901	\$ 2,217,901	\$ 2,217,901	\$ 2,217,901
2024 Bond	\$ 1,096,052	\$ 1,096,052	\$ 1,096,052	\$ 1,096,052
2025 Bond	\$ 1,398,679	\$ 1,398,679	\$ 1,398,679	\$ 1,398,679
2026 Bond	\$ 6,621,875	\$ 6,621,875	\$ 6,621,875	\$ 6,621,875
2027 Bond	\$ 7,807,644	\$ 7,807,644	\$ 7,807,644	\$ 7,807,644
2028 Bond	\$ 6,621,677	\$ 6,621,677	\$ 6,621,677	\$ 6,621,677
2029 Bond	\$ 197,740	\$ 197,740	\$ 197,740	\$ 197,740
2032 Bond	\$ 184,717	\$ 184,717	\$ 184,717	\$ 184,717
2033 Bond	\$	\$ 1,049,722	\$ 1,049,722	\$ 1,049,722
2034 Bond		\$	\$ 1,187,285	\$ 1,187,285
2035 Bond			\$	\$ 913,050
Total Debt Service	\$ 38,345,702	\$ 39,395,424	\$ 40,582,709	\$ 37,290,959

SCHEDULE HJW-3: CALCULATION OF DELCORA REVENUES

	2036	2037	2038	2039
Acquisition Rate Base				
Transactional Costs				
Capital Improvement Plan	\$ 23,647,504	\$ 25,518,368	\$ 21,511,659	\$ 21,074,140
Total Capital Additions Per Filing	\$ 976,149,055	\$ 1,001,667,423	\$ 1,023,179,082	\$ 1,044,253,222
Existing Debt Service	\$ 6,529,810	\$ 6,529,810	\$ 6,529,810	\$ 6,529,810
Surplus Reinvested	\$ 31,073,294	\$ 30,780,584	\$ 30,476,909	\$ 30,161,842
Net Construction to be Financed	\$ (7,425,790)	\$ (12,688,006)	\$ (21,653,257)	\$ (30,740,958)
New Debt Service				
2021 Bond	\$ 661,967	\$ 661,967	\$ 661,967	\$ 661,967
2022 Bond	\$ 802,840	\$ 802,840	\$ 802,840	\$ 802,840
2023 Bond	\$ 2,217,901	\$ 2,217,901	\$ 2,217,901	\$ 2,217,901
2024 Bond	\$ 1,096,052	\$ 1,096,052	\$ 1,096,052	\$ 1,096,052
2025 Bond	\$ 1,398,679	\$ 1,398,679	\$ 1,398,679	\$ 1,398,679
2026 Bond	\$ 6,621,875	\$ 6,621,875	\$ 6,621,875	\$ 6,621,875
2027 Bond	\$ 7,807,644	\$ 7,807,644	\$ 7,807,644	\$ 7,807,644
2028 Bond	\$ 6,621,677	\$ 6,621,677	\$ 6,621,677	\$ 6,621,677
2029 Bond	\$ 197,740	\$ 197,740	\$ 197,740	\$ 197,740
2032 Bond	\$ 184,717	\$ 184,717	\$ 184,717	\$ 184,717
2033 Bond	\$ 1,049,722	\$ 1,049,722	\$ 1,049,722	\$ 1,049,722
2034 Bond	\$ 1,187,285	\$ 1,187,285	\$ 1,187,285	\$ 1,187,285
2035 Bond	\$ 913,050	\$ 913,050	\$ 913,050	\$ 913,050
Total Debt Service	\$ 37,290,959	\$ 37,290,959	\$ 37,290,959	\$ 37,290,959

SCHEDULE HJW-3: CALCULATION OF DELCORA REVENUES

2040

Acquisition Rate Base		
Transactional Costs		
Capital Improvement Plan	\$	20,240,969
Total Capital Additions Per Filing	\$	1,064,494,191
Existing Debt Service	\$	6,431,990
Surplus Reinvested	\$	29,834,938
Net Construction to be Financed	\$	(40,334,927)
New Debt Service		
2021 Bond	\$	661,967
2022 Bond	\$	802,840
2023 Bond	\$	2,217,901
2024 Bond	\$	1,096,052
2025 Bond	\$	1,398,679
2026 Bond	\$	6,621,875
2027 Bond	\$	7,807,644
2028 Bond	\$	6,621,677
2029 Bond	\$	197,740
2032 Bond	\$	184,717
2033 Bond	\$	1,049,722
2034 Bond	\$	1,187,285
2035 Bond	\$	913,050
Total Debt Service	\$	37,193,139

SCHEDULE HJW-3: CALCULATION OF DELCORA REVENUES

	2020		2021		2022		2023
Revenues	\$	70,978,127	\$	70,978,127	\$	74,527,033	\$ 78,253,385
Rate Increase Revenues	\$	-	\$	3,548,906	\$	3,726,352	\$ 3,912,669
Total Revenues	\$	70,978,127	\$	74,527,033	\$	78,253,385	\$ 82,166,054
O&M (1.5%)	\$	41,808,283	\$	42,435,407	\$	43,071,938	\$ 43,718,017
Taxes Other	\$	1,585,974	\$	1,609,764	\$	1,633,910	\$ 1,658,419
Operating Income	\$	27,583,870	\$	30,481,862	\$	33,547,537	\$ 36,789,618
Coverage Ratio		2.12		2.23		2.42	2.29
Debt Service	\$	12,991,497	\$	13,658,976	\$	13,851,322	\$ 16,066,623
Net Cash	\$	14,592,373	\$	16,822,887	\$	19,696,215	\$ 20,722,995
Rate Increases		0.00%		5.00%		5.00%	5.00%

SCHEDULE HJW-3: CALCULATION OF DELCORA REVENUES

	2024		2025		2026		2027	
Revenues	\$	82,166,054	\$	86,274,357	\$	90,588,075	\$	95,117,479
Rate Increase Revenues	\$	4,108,303	\$	4,313,718	\$	4,529,404	\$	4,755,874
Total Revenues	\$	86,274,357	\$	90,588,075	\$	95,117,479	\$	99,873,353
O&M (1.5%)	\$	44,373,788	\$	45,190,727	\$	46,737,629	\$	47,630,841
Taxes Other	\$	1,683,295	\$	1,708,544	\$	1,734,173	\$	1,760,185
Operating Income	\$	40,217,274	\$	43,688,804	\$	46,645,677	\$	50,482,326
Coverage Ratio		2.34		2.38		1.87		1.54
Debt Service	\$	17,167,938	\$	18,368,146	\$	24,990,021	\$	32,797,666
Net Cash	\$	23,049,337	\$	25,320,658	\$	21,655,655	\$	17,684,661
Rate Increases		5.00%		5.00%		5.00%		5.00%

SCHEDULE HJW-3: CALCULATION OF DELCORA REVENUES

	2028		2029		2030		2031	
Revenues	\$	99,873,353	\$	105,865,754	\$	105,865,754	\$	105,865,754
Rate Increase Revenues	\$	5,992,401	\$	-	\$	-	\$	-
Total Revenues	\$	105,865,754	\$	105,865,754	\$	105,865,754	\$	105,865,754
O&M (1.5%)	\$	48,545,136	\$	39,433,437	\$	39,641,265	\$	39,857,406
Taxes Other	\$	1,786,588	\$	1,813,387	\$	1,840,588	\$	1,868,196
Operating Income	\$	55,534,029	\$	64,618,929	\$	64,383,901	\$	64,140,151
Coverage Ratio		1.41		1.63		1.69		1.68
Debt Service	\$	39,419,343	\$	39,617,083	\$	38,160,986	\$	38,160,986
Net Cash	\$	16,114,686	\$	25,001,847	\$	26,222,915	\$	25,979,165
Rate Increases		6.00%		0.00%		0.00%		0.00%

SCHEDULE HJW-3: CALCULATION OF DELCORA REVENUES

	2032		2033		2034		2035	
Revenues	\$	105,865,754	\$	105,865,754	\$	105,865,754	\$	111,159,041
Rate Increase Revenues	\$	-	\$	-	\$	5,293,288	\$	-
Total Revenues	\$	105,865,754	\$	105,865,754	\$	111,159,041	\$	111,159,041
O&M (1.5%)	\$	40,082,193	\$	40,315,970	\$	40,559,099	\$	40,811,953
Taxes Other	\$	1,896,219	\$	1,924,663	\$	1,953,533	\$	1,982,836
Operating Income	\$	63,887,342	\$	63,625,122	\$	68,646,410	\$	68,364,253
Coverage Ratio		1.67		1.62		1.69		1.83
Debt Service	\$	38,345,702	\$	39,395,424	\$	40,582,709	\$	37,290,959
Net Cash	\$	25,541,640	\$	24,229,697	\$	28,063,701	\$	31,073,294
Rate Increases		0.00%		0.00%		5.00%		0.00%

SCHEDULE HJW-3: CALCULATION OF DELCORA REVENUES

	2036		2037		2038		2039	
Revenues	\$	111,159,041	\$	111,159,041	\$	111,159,041	\$	111,159,041
Rate Increase Revenues	\$	-	\$	-	\$	-	\$	-
Total Revenues	\$	111,159,041	\$	111,159,041	\$	111,159,041	\$	111,159,041
O&M (1.5%)	\$	41,074,921	\$	41,348,407	\$	41,632,833	\$	41,928,636
Taxes Other	\$	2,012,578	\$	2,042,767	\$	2,073,408	\$	2,104,509
Operating Income	\$	68,071,543	\$	67,767,868	\$	67,452,800	\$	67,125,896
Coverage Ratio		1.83		1.82		1.81		1.80
Debt Service	\$	37,290,959	\$	37,290,959	\$	37,290,959	\$	37,290,959
Net Cash	\$	30,780,584	\$	30,476,909	\$	30,161,842	\$	29,834,938
Rate Increases		0.00%		0.00%		0.00%		0.00%

SCHEDULE HJW-3: CALCULATION OF DELCORA REVENUES

2040

Revenues		
Rate Increase Revenues	\$	111,159,041
	\$	-
Total Revenues	\$	111,159,041
O&M (1.5%)	\$	42,236,271
Taxes Other	\$	2,136,077
Operating Income	\$	66,786,694
Coverage Ratio		1.80
Debt Service	\$	37,193,139
Net Cash	\$	29,593,555
Rate Increases		0.00%

Schedule HJW-4: Comparison of Annual Revenue Requirements

YEAR	AQUA		DELCORA		Variance
	Calculated	Implemented	Calculated	Implemented	
2020	\$ 79,912,409	\$ 79,912,409	\$ 70,978,127	\$ 70,978,127	\$ 8,934,282
2021	\$ 82,298,516	\$ 82,298,516	\$ 74,527,033	\$ 74,527,033	\$ 7,771,483
2022	\$ 85,489,148	\$ 85,489,148	\$ 78,253,385	\$ 78,253,385	\$ 7,235,763
2023	\$ 91,865,310	\$ 91,865,310	\$ 82,166,054	\$ 82,166,054	\$ 9,699,256
2024	\$ 96,204,535	\$ 96,204,535	\$ 86,274,357	\$ 86,274,357	\$ 9,930,178
2025	\$ 101,133,400	\$ 101,133,400	\$ 90,588,075	\$ 90,588,075	\$ 10,545,325
2026	\$ 117,759,304	\$ 117,759,304	\$ 95,117,479	\$ 95,117,479	\$ 22,641,826
2027	\$ 136,596,484	\$ 136,596,484	\$ 99,873,353	\$ 99,873,353	\$ 36,723,131
2028	\$ 152,158,031	\$ 152,158,031	\$ 105,865,754	\$ 105,865,754	\$ 46,292,277
2029	\$ 143,289,854	\$ 152,158,031	\$ 105,865,754	\$ 105,865,754	\$ 46,292,277
2030	\$ 141,805,600	\$ 152,158,031	\$ 105,865,754	\$ 105,865,754	\$ 46,292,277
2031	\$ 140,998,671	\$ 152,158,031	\$ 105,865,754	\$ 105,865,754	\$ 46,292,277
2032	\$ 141,345,471	\$ 152,158,031	\$ 105,865,754	\$ 105,865,754	\$ 46,292,277
2033	\$ 142,709,336	\$ 152,158,031	\$ 105,865,754	\$ 105,865,754	\$ 46,292,277
2034	\$ 144,174,781	\$ 152,158,031	\$ 111,159,041	\$ 111,159,041	\$ 40,998,989
2035	\$ 145,324,877	\$ 152,158,031	\$ 111,159,041	\$ 111,159,041	\$ 40,998,989
2036	\$ 143,923,738	\$ 152,158,031	\$ 111,159,041	\$ 111,159,041	\$ 40,998,989
2037	\$ 142,339,740	\$ 152,158,031	\$ 111,159,041	\$ 111,159,041	\$ 40,998,989
2038	\$ 140,263,994	\$ 152,158,031	\$ 111,159,041	\$ 111,159,041	\$ 40,998,989
2039	\$ 138,014,136	\$ 152,158,031	\$ 111,159,041	\$ 111,159,041	\$ 40,998,989
2040	\$ 135,598,617	\$ 152,158,031	\$ 111,159,041	\$ 111,159,041	\$ 40,998,989
NPV Savings					\$462,871,937

Schedule HJW-5: Analysis of the Rate Stabilization Trust

YEAR	Annual Excess Over Current DELCORA Revenues	Stabilization Trust Opening Balance \$ 231,787,770 Year End Balance	Trust Adjusted Collections from Customers	Excess Collected From Customers Under AQUA Ownership
2020	\$ 8,934,282	\$ 222,853,488	\$ 70,978,127	\$ -
2021	\$ 11,320,389	\$ 211,533,099	\$ 70,978,127	\$ (3,548,906)
2022	\$ 14,511,021	\$ 197,022,078	\$ 70,978,127	\$ (7,275,258)
2023	\$ 20,887,183	\$ 176,134,894	\$ 70,978,127	\$ (11,187,927)
2024	\$ 25,226,408	\$ 150,908,486	\$ 70,978,127	\$ (15,296,230)
2025	\$ 30,155,273	\$ 120,753,213	\$ 70,978,127	\$ (19,609,948)
2026	\$ 46,781,177	\$ 73,972,036	\$ 70,978,127	\$ (24,139,352)
2027	\$ 65,618,357	\$ 8,353,679	\$ 70,978,127	\$ (28,895,226)
2028	\$ 81,179,904	\$ -	\$ 143,804,351	\$ 37,938,598
2029	\$ 81,179,904	\$ -	\$ 152,158,031	\$ 46,292,277
2030	\$ 81,179,904	\$ -	\$ 152,158,031	\$ 46,292,277
2031	\$ 81,179,904	\$ -	\$ 152,158,031	\$ 46,292,277
2032	\$ 81,179,904	\$ -	\$ 152,158,031	\$ 46,292,277
2033	\$ 81,179,904	\$ -	\$ 152,158,031	\$ 46,292,277
2034	\$ 81,179,904	\$ -	\$ 152,158,031	\$ 40,998,989
2035	\$ 81,179,904	\$ -	\$ 152,158,031	\$ 40,998,989
2036	\$ 81,179,904	\$ -	\$ 152,158,031	\$ 40,998,989
2037	\$ 81,179,904	\$ -	\$ 152,158,031	\$ 40,998,989
2038	\$ 81,179,904	\$ -	\$ 152,158,031	\$ 40,998,989
2039	\$ 81,179,904	\$ -	\$ 152,158,031	\$ 40,998,989
2040	\$ 81,179,904	\$ -	\$ 152,158,031	\$ 40,998,989

<u>Trust Opening Balance</u>	
Acquisition Price	\$ 276,500,000
Plus:	
Unrestricted Cash & Investments	\$ 100,051,389
Less: Long Term Debt	\$ 143,011,834
Less: Notes	\$ 1,751,785
Net	\$ 231,787,770

NPV Savings \$268,435,090

Schedule HJW-6: Projected SPMT Billings

YEAR	AQUA with Trust			DELCORA		AQUA without Trust			
2020	\$	2,847,515		\$	2,847,515	\$	3,205,942	12.59%	
2021	\$	2,847,515	0.00%	\$	2,989,891	5.00%	\$	3,301,669	2.99%
2022	\$	2,847,515	0.00%	\$	3,139,385	5.00%	\$	3,429,671	3.88%
2023	\$	2,847,515	0.00%	\$	3,296,355	5.00%	\$	3,685,471	7.46%
2024	\$	2,847,515	0.00%	\$	3,461,172	5.00%	\$	3,859,553	4.72%
2025	\$	2,847,515	0.00%	\$	3,634,231	5.00%	\$	4,057,290	5.12%
2026	\$	2,847,515	0.00%	\$	3,815,942	5.00%	\$	4,724,292	16.44%
2027	\$	2,847,515	0.00%	\$	4,006,740	5.00%	\$	5,480,006	16.00%
2028	\$	5,769,172	102.60%	\$	4,247,144	6.00%	\$	6,104,307	11.39%
2029	\$	6,104,307	5.81%	\$	4,247,144	0.00%	\$	6,104,307	0.00%
2030	\$	6,104,307	0.00%	\$	4,247,144	0.00%	\$	6,104,307	0.00%
2031	\$	6,104,307	0.00%	\$	4,247,144	0.00%	\$	6,104,307	0.00%
2032	\$	6,104,307	0.00%	\$	4,247,144	0.00%	\$	6,104,307	0.00%
2033	\$	6,104,307	0.00%	\$	4,247,144	0.00%	\$	6,104,307	0.00%
2034	\$	6,104,307	0.00%	\$	4,459,501	5.00%	\$	6,104,307	0.00%
2035	\$	6,104,307	0.00%	\$	4,459,501	0.00%	\$	6,104,307	0.00%
2036	\$	6,104,307	0.00%	\$	4,459,501	0.00%	\$	6,104,307	0.00%
2037	\$	6,104,307	0.00%	\$	4,459,501	0.00%	\$	6,104,307	0.00%
2038	\$	6,104,307	0.00%	\$	4,459,501	0.00%	\$	6,104,307	0.00%
2039	\$	6,104,307	0.00%	\$	4,459,501	0.00%	\$	6,104,307	0.00%
2040	\$	6,104,307	0.00%	\$	4,459,501	0.00%	\$	6,104,307	0.00%
NPV	\$	70,979,509		\$	60,210,376		\$	78,779,967	
Savings With DELCORA				\$10,769,134			\$18,569,591		

APPENDIX C – E.O. 12803

5-4-92
Vol. 57 No. 86
Pages 19063-19248

federal register

Monday
May 4, 1992

Briefing on How To Use the Federal Register
For information on a briefing in Washington, DC, see
announcement on the inside cover of this issue.

Presidential Documents

Title 3—

Executive Order 12803 of April 30, 1992

The President

Infrastructure Privatization

By the authority vested in me as President by the Constitution and the laws of the United States of America, and in order to ensure that the United States achieves the most beneficial economic use of its resources, it is hereby ordered as follows:

Section 1. *Definitions.* For purposes of this order:

(a) "Privatization" means the disposition or transfer of an infrastructure asset, such as by sale or by long-term lease, from a State or local government to a private party.

(b) "Infrastructure asset" means any asset financed in whole or in part by the Federal Government and needed for the functioning of the economy. Examples of such assets include, but are not limited to: roads, tunnels, bridges, electricity supply facilities, mass transit, rail transportation, airports, ports, waterways, water supply facilities, recycling and wastewater treatment facilities, solid waste disposal facilities, housing, schools, prisons, and hospitals.

(c) "Originally authorized purposes" means the general objectives of the original grant program; however, the term is not intended to include every condition required for a grantee to have obtained the original grant.

(d) "Transfer price" means: (i) the amount paid or to be paid by a private party for an infrastructure asset, if the asset is transferred as a result of competitive bidding; or (ii) the appraised value of an infrastructure asset, as determined by the head of the executive department or agency and the Director of the Office of Management and Budget, if the asset is not transferred as a result of competitive bidding.

(e) "State and local governments" means the government of any State of the United States, the District of Columbia, any commonwealth, territory, or possession of the United States, and any county, municipality, city, town, township, local public authority, school district, special district, intrastate district, regional or interstate governmental entity, council of governments, and any agency or instrumentality of a local government, and any federally recognized Indian Tribe.

Sec. 2. *Fundamental Principles.* Executive departments and agencies shall be guided by the following objectives and principles: (a) Adequate and well-maintained infrastructure is critical to economic growth. Consistent with the principles of federalism enumerated in Executive Order No. 12612, and in order to allow the private sector to provide for infrastructure modernization and expansion, State and local governments should have greater freedom to privatize infrastructure assets.

(b) Private enterprise and competitively driven improvements are the foundation of our Nation's economy and economic growth. Federal financing of infrastructure assets should not act as a barrier to the achievement of economic efficiencies through additional private market financing or competitive practices, or both.

(c) State and local governments are in the best position to assess and respond to local needs. State and local governments should, subject to assuring continued compliance with Federal requirements that public use be on reasonable and nondiscriminatory terms, have maximum possible freedom to

make decisions concerning the maintenance and disposition of their federally financed infrastructure assets.

(d) User fees are generally more efficient than general taxes as a means to support infrastructure assets. Privatization transactions should be structured so as not to result in unreasonable increases in charges to users.

Sec. 3. *Privatization Initiative.* To the extent permitted by law, the head of each executive department and agency shall undertake the following actions:

(a) Review those procedures affecting the management and disposition of federally financed infrastructure assets owned by State and local governments and modify those procedures to encourage appropriate privatization of such assets consistent with this order;

(b) Assist State and local governments in their efforts to advance the objectives of this order; and

(c) Approve State and local governments' requests to privatize infrastructure assets, consistent with the criteria in section 4 of this order and, where necessary, grant exceptions to the disposition requirements of the "Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments" common rule, or other relevant rules or regulations, for infrastructure assets; provided that the transfer price shall be distributed, as paid, in the following manner: (i) State and local governments shall first recoup in full the unadjusted dollar amount of their portion of total project costs (including any transaction and fix-up costs they incur) associated with the infrastructure asset involved; (ii) if proceeds remain, then the Federal Government shall recoup in full the amount of Federal grant awards associated with the infrastructure asset, less the applicable share of accumulated depreciation on such asset (calculated using the Internal Revenue Service accelerated depreciation schedule for the categories of assets in question); and (iii) finally, the State and local governments shall keep any remaining proceeds.

Sec. 4. *Criteria.* To the extent permitted by law, the head of an executive department or agency shall approve a request in accordance with section 3(c) of this order only if the grantee: (a) Agrees to use the proceeds described in section 3(c)(iii) of this order only for investment in additional infrastructure assets (after public notice of the proposed investment), or for debt or tax reduction; and

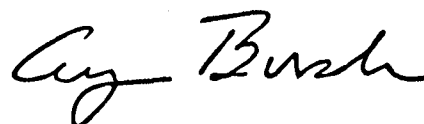
(b) Demonstrates that a market mechanism, legally enforceable agreement, or regulatory mechanism will ensure that: (i) the infrastructure asset or assets will continue to be used for their originally authorized purposes, as long as needed for those purposes, even if the purchaser becomes insolvent or is otherwise hindered from fulfilling the originally authorized purposes; and (ii) user charges will be consistent with any current Federal conditions that protect users and the public by limiting the charges.

Sec. 5. *Government-wide Coordination and Review.* In implementing Executive Order Nos. 12291 and 12498 and OMB Circular No. A-19, the Office of Management and Budget, to the extent permitted by law and consistent with the provisions of those authorities, shall take action to ensure that the policies of the executive departments and agencies are consistent with the principles, criteria, and requirements of this order. The Office of Management and Budget shall review the results of implementing this order and report thereon to the President 1 year after the date of this order.

Sec. 6. *Preservation of Existing Authority.* Nothing in this order is in any way intended to limit any existing authority of the heads of executive departments and agencies to approve privatization proposals that are otherwise consistent with law.

Sec. 7. *Judicial Review.* This order is intended only to improve the internal management of the executive branch, and is not intended to create any right or benefit, substantive or procedural, enforceable by a party against the

United States, its agencies or instrumentalities, its officers or employees, or any other person.

A handwritten signature in cursive script, reading "George H. W. Bush".

THE WHITE HOUSE,
April 30, 1992.

[FR Doc. 92-10495

Filed 4-30-92; 4:17 pm]

Billing code 3195-01-M

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania :
Wastewater, Inc. pursuant to Sections 1102, :
1329 and 507 of the Public Utility Code for : Docket No. A-2019-3015173
approval of the acquisition by Aqua of the :
wastewater system assets of the Delaware :
County Regional Water Quality Control :
Authority :

SPMT Statement No. 3

**DIRECT TESTIMONY OF KEVIN W. SMITH
ON BEHALF OF
SUNOCO PARTNERS MARKETING & TERMINALS, L.P.**

Dated: September 29, 2020

Q. PLEASE STATE YOUR NAME, EMPLOYMENT POSITION, AND ON WHOSE BEHALF YOU ARE TESTIFYING.

A. I am Kevin W. Smith. I am an Environmental Compliance Specialist with Sunoco Partners Marketing & Terminals L.P./ Energy Transfer (SPMT) and I am testifying on SPMT's behalf.

Q. WHAT ARE THE ISSUES YOU WILL ADDRESS IN YOUR DIRECT TESTIMONY?

A. I will address environmental permitting issues that Aqua's Application and direct testimony completely fail to address **[BEGIN HIGHLY CONFIDENTIAL]** [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] **[END**

HIGHLY CONFIDENTIAL]

Q. WHAT IS THE PERMITTING ISSUE TO WHICH YOU REFER?

A. **[BEGIN HIGHLY CONFIDENTIAL]** [REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]
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[REDACTED]
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10 [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

11 [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

12 [REDACTED]

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5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED] [REDACTED]

16 [REDACTED] [END HIGHLY CONFIDENTIAL]

17 [REDACTED]

18 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

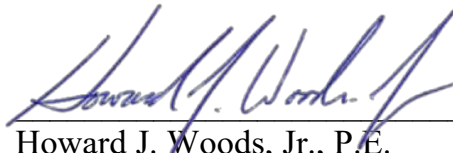
19 A. Yes.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania	:	A-2019-3015173
Wastewater, Inc. pursuant to Sections 1102,	:	
1329 and 507 of the Public Utility Code for	:	
approval of the acquisition by Aqua of the	:	
wastewater system assets of the Delaware	:	
County Regional Water Quality Control	:	
Authority	:	

**VERIFICATION OF
HOWARD J. WOODS, JR., P.E.
FOR
SUNOCO PARTNERS MARKETING & TERMINALS, L.P.**

I, Howard J. Woods, Jr., P.E., on behalf of Sunoco Partners Marketing & Terminals, L.P. ("SPMT"), hereby verify that the documents preliminarily identified as SPMT Statement No. 2-SR was prepared by me or under my direct supervision and control. Furthermore, the facts contained therein are true and correct to the best of my knowledge, information and belief and I expect to be able to prove the same at an Evidentiary Hearing in this matter. This Verification is made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.


Howard J. Woods, Jr., P.E.
Consultant for Sunoco Partners
Marketing & Terminals, L.P.

Dated: November 2, 2020

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania	:	
Wastewater, Inc. pursuant to Sections 1102,	:	
1329 and 507 of the Public Utility Code for	:	Docket No. A-2019-3015173
approval of the acquisition by Aqua of the	:	
wastewater system assets of the Delaware	:	
County Regional Water Quality Control	:	
Authority	:	

SURREBUTTAL TESTIMONY OF

HOWARD J. WOODS, JR., P.E.

**ON BEHALF OF
SUNOCO PARTNERS MARKETING & TERMINALS L.P.
SPMT Statement No. 2-SR**

In Response to the Rebuttal Testimonies of
William C. Packer, Aqua Statement No. 2-R
Mark J. Bubel, Sr., Aqua Statement No. 4-R
&
John Pileggi, Aqua Statement No. 6-R

November 2, 2020

SPMT Statement No. 2-SR

Summary and Table of Contents

1. Identification of Testimony	1
2. Selling DELCORA to Aqua will undoubtedly result in an unnecessarily higher revenue requirement that will be passed on to customers. The record demonstrates that on a stand-alone basis, a sale to Aqua will unjustly increase rates for service. Furthermore, Aqua’s aggressive acquisition strategy and its capital investment plans outside of the DELCORA footprint will result in costs being passed back to DELCORA customers and these are costs that would not be incurred absent the proposed acquisition.....	2
3. Additional cost items disclosed in rebuttal and higher cost inflation rates will impact the estimated revenue requirement for both Aqua and DELCORA but this new information will not reduce the gap between the higher Aqua revenue requirement and the DELCORA revenue requirement. Even with these items considered in the analysis, ratepayers will be asked to pay more for the same service if the system is sold to Aqua.....	12
4. The proposed rate stabilization trust relies on funds that must be reserved for the construction of facilities needed to maintain regulatory compliance and satisfy the terms of the Federal Consent Decree related to Combined Sewer Overflows. As a result, these funds will not be available to subsidize DELCORA customer sewer bills under Aqua ownership. The trust will not be available for more than a few years and customers, including SPMT, will be exposed to higher than necessary Aqua rates if the system is sold.	16
5. Executive Order 12803 requires State and local contributions to DELCORA assets to be refunded without adjustment and this will further diminish the value of the proposed rate stabilization trust. Because of this requirement, SPMT cannot be certain that any payments from the proposed rate stabilization mechanism will materialize. However, with or without these payments, SPMT expects that it will pay significantly more for wastewater service under Aqua ownership than under continued DELCORA ownership.	20
6. Removing DELCORA’s capital improvement needs from the total needs for all Publicly Owned Treatment Works (“POTW”) in the Commonwealth of Pennsylvania will reduce the ratio of Pennsylvania needs to all POTW needs in the United States. This lower ratio will result in the Commonwealth receiving a lesser percentage of the total Federal appropriation for POTW improvements. This is a detriment to the Commonwealth and all residents who continue to receive wastewater service from POTW systems.	25

SPMT Statement No. 2-SR

7. Many significant regulatory approvals and a number of outstanding contract assignments will need to be obtained before all of the assets owned by DELCORA can be transferred to Aqua. Some of these approvals, notably the approval of the transfer under Executive Order 12803, may require the repayment of contributions made by State and local governments. This will adversely impact the proposed rate stabilization trust thereby diminishing the interim rate benefit that customers might enjoy if the system is sold. In addition, some assets should be permanently designated as Non-Assignable Assets under the Asset Purchase Agreement. If this is done, the expert valuations should be revisited. 27

8. The proposed transaction is not in the public interest for all of the reasons previously stated. The Public Utility Commission should reject the proposal and deny the application. Should the Commission decide otherwise, conditions should be placed on the approval to retain the current environmental regulatory and permit regime inherent in all POTW systems and to preserve the contractual commitments made by DELCORA and its large industrial customers, like SPMT..... 34

SPMT Statement No. 2-SR

1. Identification of Testimony

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Howard J. Woods, Jr. and my address is 49 Overhill Road, East Brunswick, New Jersey 08816-4211.

Q. BY WHOM ARE YOU EMPLOYED?

A. I am an independent consultant and Sunoco Partners Marketing & Terminals L.P. (“SPMT”) has engaged me in this matter.

Q. ARE YOU THE SAME HOWARD J. WOODS, JR. WHO SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. I submitted Direct Testimony on behalf of SPMT on September 29, 2020.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. My surrebuttal testimony responds to portions of the rebuttal testimony sponsored by Mr. William C. Packer in Aqua Statement No. 2-R, Mr. Mark J. Bubel, Sr., P.E. in Aqua Statement No. 4-R and John Pileggi in Aqua Statement No. 6-R.

SPMT Statement No. 2-SR

1 **Q. ARE YOU SPONSORING ANY EXHIBITS OR SCHEDULES WITH YOUR**
2 **SURREBUTTAL TESTIMONY?**

3 A. Yes. I will be making reference to several interrogatory responses and I have attached
4 copies of these as SPMT Exhibit HJW-1SR.
5

6 **Q. WHAT IS THE SUBJECT MATTER OF YOUR SURREBUTTAL TESTIMONY?**

7 A. My surrebuttal testimony addresses some of the issues raised by Mr. Packer and Mr. Pileggi
8 with regard to the prospective estimates of future revenue requirements and the alleged
9 public benefits of rate setting strategies that may be available to Aqua Pennsylvania
10 Wastewater Inc. I will also offer my opinion regarding the potential benefit of the proposed
11 rate stabilization trust in response to the rebuttal testimonies of Mr. Packer and Mr. Pileggi
12 as well as additional discovery responses provided by DELCORA after my Direct
13 Testimony was filed. My surrebuttal testimony also addresses the potential impact of Non-
14 Assignable Assets raised by Mr. Packer in his rebuttal testimony and related environmental
15 permitting issues raised by Mr. Bubel in his rebuttal testimony.
16

17 **2. Selling DELCORA to Aqua will undoubtedly result in an unnecessarily**
18 **higher revenue requirement that will be passed on to customers. The**
19 **record demonstrates that on a stand-alone basis, a sale to Aqua will**
20 **unjustly increase rates for service. Furthermore, Aqua's aggressive**
21 **acquisition strategy and its capital investment plans outside of the**
22 **DELCORA footprint will result in costs being passed back to DELCORA**

SPMT Statement No. 2-SR

1 **customers and these are costs that would not be incurred absent the**
2 **proposed acquisition.**
3

4 **Q. IN HIS REBUTTAL TESTIMONY DID MR. PACKER OFFER AN OPINION**
5 **REGARDING THE ACCURACY AND PRECISION OF THE RATE**
6 **PROJECTIONS OFFERED BY VARIOUS INTERVENING PARTIES AND AQUA**
7 **IN THIS MATTER?**

8 A. Yes, Mr. Packer made a general statement about this on Page 27 of this Rebuttal Testimony
9 at Lines 8 through 13. To paraphrase, Mr. Packer noted the difficulty in predicting future
10 capital needs as well as the difficulty in anticipating future environmental regulatory
11 requirements a decade or more into the future.
12

13 **Q. DO YOU AGREE WITH MR. PACKER ON THIS POINT?**

14 A. Yes, I do. I have over 40 years of experience developing capital improvement plans and
15 related financial plans for water and wastewater utilities that are both investor-owned
16 utilities like Aqua and municipally owned systems like DELCORA. Long-range forecasts
17 of domestic and industrial water use, the efficacy of inflow and infiltration controls, capital
18 needs for assets that simply wear out and new regulatory initiatives are all difficult to
19 predict yet each of these issues and more will impact the system revenue requirement at
20 any point in time.

SPMT Statement No. 2-SR

1 **Q. BECAUSE OF THOSE DIFFICULTIES, DO YOU BELIEVE THAT THE**
2 **COMMISSION SHOULD DISREGARD THE VARIOUS TESTIMONIES THAT**
3 **HAVE BEEN OFFERED BY THE PARTIES ON THIS ISSUE?**

4 A. No. As a body of evidence, I believe that the testimonies offered by the intervenors in this
5 matter need to be considered by the Commission together with the testimony provided by
6 Aqua and DELCORA. Based on information provided in the Application and in discovery,
7 intervenor witnesses who have very substantial experience in these matters have all
8 independently reached the same conclusion that prospective wastewater rates under Aqua
9 ownership will be higher than rates that are likely to be needed under continued DELCORA
10 ownership. The difference in projected rate outcomes arise from different assumptions as
11 to how long the proposed finite rate stabilization trust fund to subsidize current DELCORA
12 customer bills will last, whether the cost of service should or should not be allocated on a
13 stand-alone basis, and the amount and method of allocating costs incurred to provide
14 service within the DELCORA footprint to other Aqua Pennsylvania Wastewater customers
15 and to Aqua Pennsylvania Water customers.

16
17 **Q. DO YOU BELIEVE THAT THE ACQUISITION OF THE DELCORA SYSTEM**
18 **SHOULD BE ANALYZED ON A STAND-ALONE BASIS?**

19 A. Yes. I believe this is the only way to truly assess how the change in ownership will affect
20 the public, including DELCORA's industrial customers like SPMT. The change in
21 ownership will have a significant detrimental effect, as I established in my direct testimony.
22 The validity of the "stand-alone" approach is validated by and consistent with the

SPMT Statement No. 2-SR

1 independent analysis of the experts for the Bureau of Investigation and Enforcement
2 (“I&E”) and the Office of Consumer Advocate (“OCA”), who recommend that, if the
3 Commission approves the acquisition, the Commission must require the Company to
4 develop a stand-alone revenue requirement and cost allocation study for submission in the
5 next rate case following the acquisition (I&E Statement No. 1, Page 18, Lines 15-20 and
6 OCA Statement No. 1, Page 31 Line 3 through Page 32, Line 7).

7
8 **Q. HAVE AQUA AND DELCORA DEMONSTRATED THE IMPACT OF THE**
9 **ACQUISITION ON A STAND-ALONE BASIS?**

10 A. No. In fact, the Application requests only the Commission’s authorization for Aqua to
11 charge existing DELCORA rates on closing (Application Paragraph 36 and Exhibit G),
12 with the exception that Aqua will not provide customers with the benefit of the annual true-
13 up of flows and charges based on an annual audit as DELCORA would have done (Aqua
14 Statement 2-R, Packer, Page 51, Lines 11-23).

15
16 **Q. PLEASE EXPLAIN WHAT YOU MEAN WHEN YOU SAY AQUA WILL**
17 **IMPLEMENT DELCORA RATES WITHOUT THE ANNUAL TRUE-UP OF**
18 **FLOWS AND CHARGES.**

19 A. The potential negative impact of abandoning DELCORA’s current true up approach is
20 described by Joseph Possenti, Jr. in his response to AQUA-XII-3 (SPMT Exhibit HJW-
21 1SR, Page 1) on behalf of Lower Chichester Township. In his example, but-for
22 DELCORA’s true up mechanism, Lower Chichester would have been charged a higher

SPMT Statement No. 2-SR

1 effective rate. Similarly, but-for DELCORA's true up mechanism, SPMT would have paid
2 much higher rates during the period 2017-2019. Because of the true up, however, SPMT
3 was issued bill credits in the annual true-ups for 2017, 2018 and 2019 in the amounts of
4 \$181,295, \$421,025 and \$284,057, respectively, when audited flows and expenses were
5 used to perform the true-up to actual flow and actual cost. In 2018, had the true up for
6 SPMT been done by holding the unit rate constant at \$2.72 per thousand gallons and only
7 adjusting the flow to actual, SPMT would have seen a deficit bill of \$49,640 instead of a
8 credit of \$421,025. So, while Aqua has asked for approval to implement DELCORA rates
9 on closing, Aqua is not intending to implement those rates in the same manner as
10 DELCORA. This will have a negative impact on customers like SPMT and others like
11 Lower Chichester Township.

12
13 **Q. WHAT ASSUMPTION DOES MR. PACKER MAKE CONCERNING THE**
14 **SHIFTING OF COSTS TO SERVE DELCORA CUSTOMERS TO AQUA**
15 **CUSTOMERS IN OTHER AQUA SERVICE AREAS?**

16 A. In refusing to show the impact of the acquisition on a stand-alone basis, Mr. Packer's
17 projection purports to demonstrate that rate equalization among service areas will shift the
18 cost to serve DELCORA customers to Aqua customers in other Aqua service areas, thereby
19 diluting the impact of the acquisition on DELCORA customers' rates. Obviously,
20 however, rate equalization is a two-way street, and Mr. Packer is only pointing out the
21 potential for costs being transferred out of the DELCORA footprint, but not back in. He
22 does this by limiting his DELCORA acquisition rate impact analysis to a wastewater

SPMT Statement No. 2-SR

1 customer base that includes only DELCORA customers and Aqua Wastewater's 38,000
2 existing customers. Thus, in his rebuttal, Mr. Packer has specifically excluded the use of
3 transferring DELCORA costs to statewide Aqua Pennsylvania Water customers using Act
4 11 (Aqua Statement 2-R, Packer, Page 35, Lines 10-11). Nevertheless, on multiple
5 occasions he indicates that his projections allocate costs to other Aqua Pennsylvania
6 Wastewater customers through normal allocations resulting from a common ratebase and
7 uniform tariff rates (for example: Aqua Statement 2-R, Packer, Page 35, Lines 3-8; Aqua
8 Statement 2-R, Packer, Page 36, Lines 18-23; Aqua Statement 2-R, Packer, Page 38, Lines
9 1-2; Aqua Statement 2-R, Packer, Page 45, Lines 13-14; Aqua Statement 2-R, Packer, Page
10 52, Line 22 through Page 53, Line 3).

11
12 **Q. DO YOU BELIEVE THAT THIS IS AN EQUITABLE WAY TO ASSESS THE**
13 **PROPOSED TRANSACTION?**

14 A. No, I do not.

15
16 **Q. PLEASE EXPLAIN.**

17 A. By limiting his analysis of the impact of a DELCORA acquisition by assuming a larger
18 wastewater utility entity that includes only the DELCORA customers and the
19 approximately 38,000 wastewater customers in the Company's existing footprint, Mr.
20 Packer skews his result, because we know that Aqua is in the process of purchasing,
21 assimilating, and re-investing in many other municipal wastewater systems in addition to
22 DELCORA. Initially, the DELCORA acquisition will cause rates to Aqua's existing

SPMT Statement No. 2-SR

1 38,000 wastewater customers to increase by 14.32% (Filing Exhibit I-1). On an equivalent
2 dwelling unit basis, DELCORA represents approximately 197,000 customers and
3 therefore, the DELCORA system is much larger than the existing Aqua Pennsylvania
4 Wastewater footprint. However, Mr. Packer also notes that his company is planning to
5 grow by making other acquisitions similar to the DELCORA acquisition (Aqua Statement
6 2-R, Packer, Page 35, Lines 12-13). It is through this growing customer base that Mr.
7 Packer explains that DELCORA costs may be shared to the benefit of DELCORA
8 customers. However, this analysis does not take into account the adverse impact of the
9 Company's investment activities outside of DELCORA on the prospective rates that will
10 be charged back to DELCORA customers.

11
12 **Q. WHAT ACTIVITIES DO YOU BELIEVE WILL ADVERSELY IMPACT**
13 **DELCORA CUSTOMER RATES?**

14 A. The Company is continuing to use Act 12 to acquire systems at costs above depreciated
15 original cost net of contributions in aid of construction. This will inevitably put significant
16 upward pressure on rates. For example, Mr. D'Ascendis has a table in his rebuttal
17 testimony (Aqua Statement 9-R, D'Ascendis, Page 8, Table 1) showing recent and pending
18 acquisitions. Since Aqua Pennsylvania Wastewater's current Zone 1 rates took effect on
19 May 24, 2019, Mr. D'Ascendis' table shows that Aqua acquired the Cheltenham Township
20 wastewater system at a cost of \$50,300,000 and the East Norriton Wastewater system at a
21 cost of \$21,000,000. Mr. D'Ascendis' table also shows the pending acquisitions of the
22 New Garden Township Wastewater system at a cost of \$29,500,000 and the Lower

SPMT Statement No. 2-SR

1 Makefield Township wastewater system at a cost of \$53,000,000. In Cheltenham
2 Township, Aqua notified its existing wastewater customers that this acquisition of
3 Cheltenham would result in a 5.83% rate increase. In East Norriton, Aqua notified its
4 existing wastewater customers that rates would increase as a result of this acquisition by
5 2.43%. In New Garden, Aqua notified its existing wastewater customers that rates would
6 increase by 3.10%. The cumulative impact of these three acquisitions alone is a nearly 12%
7 increase in the cost of service for existing Aqua Pennsylvania Wastewater customers. In
8 Lower Makefield, Aqua announced that it reached an agreement to acquire the Township's
9 wastewater utility on September 24, 2020. I do not believe that Aqua has issued the
10 required notice of the rate increase that will result from this acquisition. In addition to
11 these systems, news reports indicate that Aqua is attempting to acquire the Norristown
12 wastewater system at a reported cost of \$82,000,000. Aqua's assertions that costs from
13 DELCORA can be spread to other Aqua customer groups ignore the cumulative impact of
14 this aggressive acquisition strategy on DELCORA customers.

15 In addition to its Act 12 acquisition activities, Aqua Pennsylvania Wastewater is
16 continuing to aggressively invest in capital additions to its existing systems. In its response
17 to SPMT-AQUA I-13, Aqua indicated that it had a Total Net Utility Plant Balance of
18 \$282,892,438 (SPMT Exhibit HJW-1SR, Page 11) and that it served 38,202 customers
19 (SPMT Exhibit HJW-1SR, Page 12) as of December 31, 2019. In its response to SPMT-
20 AQUA I-14, the Company also stated that it would be investing approximately
21 \$25,000,000 per year in new plant to service these customers (SPMT Exhibit HJW-1SR,
22 Page 13). In only five years, this rate of investment represents a 44% increase in utility

SPMT Statement No. 2-SR

1 plant and an average investment of \$3,272 per existing customer. This level of investment
2 will certainly put upward pressure on Aqua Pennsylvania Wastewater rates. To the best of
3 my knowledge and belief, these investments do not include additional capital needs that
4 will arise in the footprint of the new acquisitions I noted earlier.

5 While Mr. Packer suggests that some amount of DELCORA's revenue requirement
6 may be transferred out to other Aqua Pennsylvania Wastewater Customers, he does not
7 offer an opinion regarding the likely costs incurred in other Aqua Pennsylvania Wastewater
8 operations that will, through natural allocations of ratebase and expenses, be transferred
9 back onto DELCORA customer bills. This is likely to occur early on because of the
10 Company's aggressive Act 12 acquisition posture and investment strategy. In responding
11 to SPMT-AQUA III-5, Aqua indicated that the planned investment in new facilities within
12 Aqua's existing wastewater service areas serving 38,000 customers would add 1.9% to the
13 2020 DELCORA revenue requirement (SPMT Exhibit HJW-1SR, Page 14). Of course,
14 this does not take into account the impact of Aqua's acquisition of and re-investment in the
15 multiple other systems it is acquiring. In my opinion, we simply do not have a complete
16 record in this proceeding to fully understand the impact on DELCORA customers resulting
17 from other Company activities. For that reason alone, I believe it is appropriate and
18 necessary to evaluate the proposed DELCORA acquisition as a stand-alone enterprise
19 where other customers of the Company are not being asked to shoulder the burden of the
20 acquisition and, similarly, DELCORA customers are not being asked to bear the burden of
21 acquisitions and investments made outside of the DELCORA footprint. Clearly, rate
22 equalization among service areas is a two-way street but Mr. Packer is only pointing out

SPMT Statement No. 2-SR

1 the potential benefit to DELCORA customers from costs being transferred out, not back
2 in.

3
4 **Q. HAS OSBA ADDRESSED THE ISSUE OF UNIFORM TARIFF RATES AND**
5 **WHAT POSITION HAVE THEY TAKEN?**

6 A. OSBA Witness Mr. Brian Kalcic has recommended that the Commission begin moving
7 DELCORA rates to the statewide average in the next base rate case (OSBA Statement No.
8 1, Page 8, Lines 10-14).

9
10 **Q. IS THIS RECOMMENDATION CONSISTENT WITH THE WAY MR. PACKER**
11 **HAS DESCRIBED THE BENEFITS OF THE PROPOSED ACQUISITION THAT**
12 **WOULD FLOW FROM UNIFORM RATES?**

13 A. No. Mr. Packer has claimed that following the acquisition and depletion of the rate
14 stabilization trust, costs from DELCORA would be transferred out to other customer
15 groups at a rate of about 10% of the DELCORA revenue requirement (Aqua Statement 2-
16 R, Packer, Page 34, Lines 19-21). By contrast, Mr. Kalcic is describing the true workings
17 of uniform tariff rates where differentials in rates between service areas exist. He describes
18 how DELCORA rates would move toward the average rate for each class of service. He
19 notes that a DELCORA, non-industrial customer using 6,600 gallons per month would see
20 a bill of \$46.44 after taking into effect the 12.55% rate increase resulting from the
21 acquisition price and that this bill would be \$41.42 less than what an Aqua Zone 1 customer
22 pays. That is, the Aqua bill for a customer in Zone 1 for the same service provided by

SPMT Statement No. 2-SR

1 DELCORA is \$87.86 per month or roughly 89% more than what DELCORA charges for
2 the same service. (OSBA Statement No. 1, Kalcic, Page 6, Lines 17-22).

3
4 **Q. WHAT IS YOUR OPINION ABOUT THESE TWO DISPARATE APPROACHES?**

5 A. As I noted in my Direct Testimony, while Aqua claims that this proposed acquisition will
6 produce efficiencies, no customer group will benefit if the proposal is approved. Aqua has
7 already notified its customers that the acquisition will cause a 14.32% rate increase as a
8 result of the DELCORA acquisition and Mr. Packer proposes to push more future costs
9 onto other customers. On the other hand, Mr. Kalcic would have the Commission limit
10 future rate increases in Aqua's existing service area and penalize the DELCORA customers
11 by shifting more of that external cost onto their bills in the interest of rate equalization. If
12 Mr. Packer has his way, customers outside of the DELCORA footprint will pick up as
13 much as 10% of DELCORA's revenue requirement but if Mr. Kalcic's position prevails,
14 DELCORA customer rates will be increased even further to burden DELCORA customers
15 with costs they would not incur absent approval of the proposed transaction. By approving
16 the proposed transaction and moving to uniform statewide rates, DELCORA customers are
17 penalized; they will not realize a benefit.

18
19 **3. Additional cost items disclosed in rebuttal and higher cost inflation rates**
20 **will impact the estimated revenue requirement for both Aqua and**
21 **DELCORA but this new information will not reduce the gap between the**
22 **higher Aqua revenue requirement and the DELCORA revenue**
23 **requirement. Even with these items considered in the analysis,**

SPMT Statement No. 2-SR

1 **ratepayers will be asked to pay more for the same service if the system is**
2 **sold to Aqua.**
3

4 **Q. IN HIS REBUTTAL TESTIMONY MR. PILEGGI POINTS TO COSTS THAT**
5 **YOU MAY NOT HAVE CONSIDERED THAT WOULD DECREASE THE GAP**
6 **BETWEEN DELCORA RATES AND POST-ACQUISITION AQUA RATES.**
7 **SPECIFICALLY, HE DISCLOSES PAYMENTS THAT DELCORA WOULD**
8 **NEED TO MAKE TO PHILADELPIA AS DELCORA’S SHARE OF THE**
9 **PHILADELPHIA COMBINED SEWER OVERFLOW LONG TERM CONTROL**
10 **PLAN. DO THESE COSTS AFFECT YOUR ANALYSIS?**

11 **A.** Yes. In his Rebuttal Testimony at Page 3, Lines 10 through 15, Mr. Pileggi states: “Witness
12 Faryniarz¹ does not take into account the significant increase in costs from the Philadelphia
13 Water Department’s Long Term Control Plan (the “PWD LTCP”) that are projected to be
14 approximately \$86 million between 2020 and 2028. The PWD LTCP costs are in addition
15 to the approximately \$450 million in capital costs being incurred to build infrastructure to
16 divert flow from Philadelphia to Chester between 2020 and 2028.”
17

18 **Q. IN YOUR ANALYSIS, DID YOU ACCOUNT FOR THESE COSTS IN EITHER**
19 **THE CALCULATION OF AQUA REVENUES IN SCHEDULE HJW-2 OR THE**
20 **CALCULATION OF DELCORA REVENUES IN SCHEDULE HJW-3?**

¹ In the Rebuttal Testimonies offered by Mr. Packer and Mr. Pileggi, Aqua and DELCORA have, where possible, directed a common response to the Direct Testimony offered by Mr. Faryniarz and me.

SPMT Statement No. 2-SR

1 A. No. After reviewing Mr. Pileggi's Rebuttal Testimony, I revisited Mr. Bubel's Direct
2 Testimony regarding the projected capital improvement plan. As I remembered, these
3 additional expenses are not included in the capital plan in Mr. Bubel's Appendix A. As a
4 result, I am certain that my analysis does not account for these additional expenses as a
5 capital investment of either party. In addition, I did not include a line item for payments
6 of a contribution in aid of construction as an operating expense in either analysis.
7

8 **Q. HOW WOULD INCLUDING THESE PAYMENTS TO PHILADELPHIA IMPACT**
9 **YOUR ANALYSIS?**

10 A. The revenue requirement for both entities would increase, but the gap between the two
11 would remain about the same, so my conclusion that DELCORA customers will suffer
12 higher rates post acquisition remains the same. With respect to DELCORA, I would need
13 to include the expenditure of an additional \$86 million between 2020 and 2028, or an
14 average of \$9.6 million per year. In order to maintain the same coverage ratio, I would
15 need to increase rates by an average of 1% to 2% per year above the 5% annual increases
16 shown in Schedule HJW-3, assuming that DELCORA capitalizes these payments. If these
17 payments cannot be capitalized but instead must be expensed, rates would need to be raised
18 an average of 12% in 2021 and 2022 but rate increases for the years 2023-2028 would be
19 equal to or less than what I initially calculated. The cumulative impact of the 2021 and
20 2022 rate increases will be sufficient in this analysis to sustain the payments until they
21 cease in 2028.

SPMT Statement No. 2-SR

1 Assuming that these payments are contractually obligated, Aqua post-acquisition
2 would need to make the same payments to Philadelphia going through 2028. Because these
3 payments would not result in used and useful utility plant that would benefit DELCORA
4 customers, I would treat these costs as an additional operating expense incurred by Aqua
5 in 2021 through 2028. This would require Aqua's rates to be increased by nearly 20% in
6 2021, following the 12.55% increase resulting from the acquisition, and by 2028, the
7 difference between the Aqua revenue requirement and the lower DELCORA revenue
8 requirement would be approximately \$47.3 million per year, an amount that is somewhat
9 higher than the \$46.2 million variance shown in Schedule HJW-4 in my Direct Testimony
10 (SPMT Statement No. 2, Schedule HJW-4). In 2029, both the DELCORA and Aqua
11 revenue requirements would decline because the ongoing operating payments for service
12 to Philadelphia would cease along with these additional PWD LTCP payments that Mr.
13 Pileggi describes in his rebuttal testimony. However, as I noted in my Direct Testimony,
14 it is unlikely that either entity would implement a rate decrease at that point in time but
15 instead would retain the additional net income to fund capital reserves and rate stabilization
16 in the case of DELCORA, or absorb cost increases in other operating areas and support
17 return to shareholder equity in the case of Aqua. Essentially, the revenue requirement for
18 both entities would increase and the gap between the two would remain about the same.

19
20 **Q. IN HIS REBUTTAL TESTIMONY, DID MR. PILEGGI TAKE ISSUE WITH THE**
21 **YEAR-OVER-YEAR INFLATION IN OPERATING EXPENSES IN YOUR**
22 **ANALYSIS?**

SPMT Statement No. 2-SR

1 A. Yes, he opined that the year-over-year inflation in operating expenses in my analysis is too
2 low.

3
4 **Q. WHAT IS YOUR RESPONSE TO THIS OBSERVATION?**

5 A. I used the same inflation factor in my analysis of DELCORA O&M and Aqua O&M. Both
6 DELCORA and Aqua are large utilities capable of generating meaningful economies of
7 scale in the procurement of labor, materials and services. DELCORA is one of the largest
8 regional wastewater authorities in Pennsylvania. It is financially sound, and it does not
9 need to be rescued from financial or operational failure through an Act 12 acquisition. In
10 the area of managing operating expenses, it is my opinion that the organizations are equals.
11 A higher inflation factor in the analysis of operating expenses would need to be applied
12 equally to the analysis of Aqua and DELCORA revenue requirements. Here, again, the
13 revenue requirement for both entities would be higher, but the gap between the two would
14 essentially remain about the same.

15
16 **4. The proposed rate stabilization trust relies on funds that must be**
17 **reserved for the construction of facilities needed to maintain regulatory**
18 **compliance and satisfy the terms of the Federal Consent Decree related**
19 **to Combined Sewer Overflows. As a result, these funds will not be**
20 **available to subsidize DELCORA customer sewer bills under Aqua**
21 **ownership. The trust will not be available for more than a few years and**
22 **customers, including SPMT, will be exposed to higher than necessary**
23 **Aqua rates if the system is sold.**
24

SPMT Statement No. 2-SR

1 **Q. NOW, PLEASE TURN YOUR ATTENTION TO THE PROPOSED RATE**
2 **STABILIZATION TRUST MECHANISM. HAS MR. PACKER CONFIRMED**
3 **THAT THE TRUST PAYMENTS WILL SPAN A FINITE PERIOD OF TIME**
4 **FOLLOWING CLOSING?**

5 **A.** Yes. Mr. Packer notes the obvious, that the customer assistance payments will not last
6 forever (Aqua Statement 2-R, Packer, Page 13, Lines 14-15). However, it appears from my
7 analysis of new information that they may not materialize at all and, if they do, may be
8 very short-lived.

9
10 **Q. IN YOUR ANALYSIS DID YOU CALCULATE AN OPENING BALANCE FOR**
11 **THE TRUST AND DID YOU ESTIMATE THE TIME PERIOD IN WHICH THE**
12 **TRUST WOULD BE DEPLETED?**

13 **A.** Yes. In Schedule HJW-5, I calculated the opening balance at \$231,787,770 (SPMT
14 Statement No. 2, Schedule HJW-5). I also estimated that the trust funds would be fully
15 expended in 2028 and at year end, the surviving balance would be zero dollars. I believe
16 that this projection of the expected life of the trust is generally in agreement with Mr.
17 Packer's projections.

18
19 **Q. AFTER YOU FILED YOUR DIRECT TESTIMONY, DID DELCORA PROVIDE**
20 **ANY ADDITIONAL INFORMATION THAT WOULD IMPACT YOUR**
21 **ANALYSIS OF THE RATE STABILIZATION TRUST?**

SPMT Statement No. 2-SR

1 A. Yes. In responding to SPMT-DELCORA III-1 (SPMT Exhibit HJW-1SR, Page 15),
2 DELCORA indicated that as of August 30, 2020, the balances in its Renewal and
3 Replacement Fund amounted to \$24,027,172. In addition, the balance in the Revenue Fund
4 was \$43,496,759 and, according to the response to SPMT-DELCORA III-2 (SPMT Exhibit
5 HJW-1SR, Page 17), approximately \$30,000,000 of this amount was collected to
6 implement the Combined Sewer Overflow Long Term Control Plan required by the
7 Consent Decree. The total of the amount from the Renewal and Replacement Fund and
8 \$30,000,000 from the Revenue Fund is \$54,027,172 and these funds would need to be
9 retained by DELCORA to implement the respective plans. If the system were sold to Aqua,
10 these funds would be disbursed by DELCORA to Aqua as Contributions in Aid of
11 Construction to implement the LTCP and fund other compliance related projects (SPMT-
12 DELCORA III-8, SPMT Exhibit HJW-1SR, Page 18). In fact, according to the response
13 to this data request, up to \$100 million will be disbursed from the Rate Stabilization Trust
14 directly to Aqua to implement the LTCP. That being the case, the opening balance of the
15 Trust available for customer rate subsidization shown on Schedule HJW-5 (SPMT
16 Statement No. 2, Schedule HJW-5) should be reduced by \$100,000,000. That means the
17 opening balance will be \$131,787,770, not \$231,787,770.

18
19 **Q. WHAT IS THE EFFECT OF A LOWER STARTING BALANCE IN YOUR**
20 **CALCULATIONS?**

21 A. The Trust funds available to subsidize customer rates will run out in 2026, two years
22 sooner. However, if the additional costs for the PWD LTCP described by Mr. Pileggi are

SPMT Statement No. 2-SR

1 accounted for in Aqua's operating expenses, the Rate Stabilization Trust will be depleted
2 even sooner. With these additional costs accounted for, the Trust will be depleted in 2024.
3 Furthermore, if Mr. Pileggi's criticism of the year over year inflation factor is used to
4 increase the projected operating expenses, the Rate Stabilization Trust won't even last until
5 2024.

6
7 **Q. ASSUMING THAT THE RATE STABILIZATION TRUST IS DEPLETED IN 2024,**
8 **NOT 2028, WHAT IS THE IMPACT ON SPMT?**

9 A. The benefit of the rate stabilization subsidies would be much less. Essentially, without the
10 Trust subsidies, the full impact of Aqua rates would be seen sooner in the net amount that
11 SPMT would pay under Aqua rates.

12
13 **Q. IN SCHEDULE HJW-6, YOU CALCULATED THE NET PRESENT VALUE OF**
14 **WASTEWATER BILLINGS OVER THE 2020 THROUGH 2040 PERIOD AND**
15 **YOU SHOWED A NET SAVINGS TO SPMT OF \$10,769,134 RESULTING FROM**
16 **CONTINUED DELCORA OWNERSHIP. IF THE TRUST WERE DEPLETED BY**
17 **2024 RATHER THAN 2028, WHAT IS THE IMPACT ON SPMT?**

18 A. If the Trust stops subsidizing Aqua's tariffed rates in 2024, the Net Present Value of
19 wastewater service would increase from \$70,979,509 to \$74,163,501. In other words, if
20 the Trust lasts only to 2024, the detriment to SPMT is roughly \$3 million greater if the
21 system is sold to Aqua instead of being retained by DELCORA.

SPMT Statement No. 2-SR

1 **5. Executive Order 12803 requires State and local contributions to**
2 **DELCORA assets to be refunded without adjustment and this will**
3 **further diminish the value of the proposed rate stabilization trust.**
4 **Because of this requirement, SPMT cannot be certain that any payments**
5 **from the proposed rate stabilization mechanism will materialize.**
6 **However, with or without these payments, SPMT expects that it will pay**
7 **significantly more for wastewater service under Aqua ownership than**
8 **under continued DELCORA ownership.**
9

10 **Q. IN HIS REBUTTAL TESTIMONY, DID MR. BUBEL ADDRESS COMPLIANCE**
11 **WITH EXECUTIVE ORDER 12803?**

12 A. Yes. Mr. Bubel indicated that Aqua and DELCORA will approach the United States
13 Environmental Protection Agency (“EPA”) to obtain a waiver of the requirements of the
14 Executive Order with respect to prior construction grants issued by EPA to DELCORA
15 (Aqua Statement No. 4-R, Bubel, Page 13, Lines 1-2 and Page 12, Lines 11-13).
16

17 **Q. IN YOUR OPINION, DOES THIS APPROACH ADEQUATELY DESCRIBE**
18 **WHAT IS REQUIRED TO COMPLY WITH THE EXECUTIVE ORDER?**

19 A. I agree that Mr. Bubel’s description of the proposed response is a good start. Because EPA
20 awarded the construction grants that are noted in the Executive Order, it is logical to begin
21 the process of getting this approval with EPA. However, the Executive Order notes that
22 the Office of Management & Budget (“OMB”) also has a role in this process. OMB must
23 determine the Transfer Price for the assets and then must determine the residual value after
24 adjustments for depreciation that must be paid back to the United States Treasury.
25

SPMT Statement No. 2-SR

1 **Q. DOES THE EXECUTIVE ORDER DESCRIBE A HIERARCHY OF PAYMENTS**
2 **THAT MUST BE MADE IN CONSUMATING AN APPROVED TRANSACTION?**

3 A. Yes. Section 3 (c) directs that the Transfer Price be distributed as follows: (i) State and
4 local governments shall first recoup in full the unadjusted dollar amount of their portion of
5 total project costs (including any transaction and fix-up costs they incur) associated with
6 the infrastructure asset involved; (ii) if proceeds remain, then the Federal Government shall
7 recoup in full the amount of Federal grant awards associated with the infrastructure asset,
8 less the applicable share of accumulated depreciation on such asset (calculated using the
9 Internal Revenue Service accelerated depreciation schedule for the categories of assets in
10 question); and (iii) finally, the State and local governments shall keep any remaining
11 proceeds.”
12

13 **Q. DID MR. BUBEL ADDRESS HIERARCHY OF PAYMENTS IN HIS REBUTTAL**
14 **TESTIMONY?**

15 A. No.
16

17 **Q. FROM SPMT’S PERSPECTIVE, WHAT IS THE SIGNIFICANCE OF THIS**
18 **REQUIREMENT?**

19 A. Wastewater emanating from the Marcus Hook Industrial Complex flows through sewers in
20 Marcus Hook, Trainer and the City of Chester. These municipalities have reversionary
21 provisions in their agreements with DELCORA that transfer the ownership of those sewers
22 to the municipalities or to Delaware County when DELCORA is no longer operating the

SPMT Statement No. 2-SR

1 sewers. In addition, the Municipal Protestants in this proceeding have raised issues
2 regarding past contributions in aid of construction to the assets now owned and operated
3 by DELCORA. In addition to grants that may have been obtained directly from the former
4 EPA Construction Grants Program, there may also have been State contributions to assets
5 now owned by DELCORA. Section 3(c)(i) puts State and local governments first in line
6 to receive the proceeds Aqua pays DELCORA and specifies that these governmental units
7 are entitled to receive the full unadjusted dollar amount of their portion of total project
8 costs (including any transaction and fix-up costs they incur) associated with the
9 infrastructure asset involved. Assuming that the Transfer Price set by OMB is equal to the
10 negotiated purchase price of \$276,500,000, the State and local government contributions
11 to the assets must be paid back first, in full and without adjustment. Next, the Federal
12 share, adjusted for accelerated depreciation must be paid back to the US Treasury. Next
13 the DELCORA debt must be defeased and, finally, the remaining proceeds are to be
14 retained by “the State and local governments” – here, DELCORA. That means
15 DELCORA, and thus the proposed rate stabilization trust, is last in line to receive any
16 portion of the negotiated purchase price of \$276,500,000. Because of the mandated
17 repayment hierarchy under EO 12803, there can be no certainty that any funds will be
18 available for the proposed trust, or that any subsidization of Aqua rates will actually
19 materialize.

20
21 **Q. IS THE OMB TRANSFER PRICE KNOWN?**

SPMT Statement No. 2-SR

1 A. No. Aqua and DELCORA apparently have not yet asked EPA and OMB to establish the
2 Transfer Price. This amount could be more or less than the negotiated purchase price.
3

4 **Q. IS THE AMOUNT DUE TO STATE AND LOCAL GOVERNMENTS KNOWN?**

5 A. I do not see any evidence in this proceeding that quantifies the total amount due to be repaid
6 to all State and local government units. The Municipal Protestants have noted that they
7 contributed to the construction of specific assets. For example, Ms. Nelson, testifying on
8 behalf of the Southwest Delaware County Municipal Authority (“SDCMA”), indicated that
9 SDCMA’s share of the cost of the Chester Ridley Creek Pump Station was \$10.3 million
10 and that SDCMA incurred an additional expense of \$1.6 million in decommissioning costs
11 (SDCMA Statement 1, Nelson, Page 4, Lines 5-9). This is just one of 49 municipalities in
12 the DELCORA system. In the EPA/OMB review and approval process, these and other
13 similar contributions will need to be accounted for and refunded.
14

15 **Q. IS THE AMOUNT DUE TO THE UNITED STATES TREASURY KNOWN?**

16 A. At this point, Aqua and DELCORA apparently do not have a determination from EPA and
17 OMB. Based on my experience as a former employee of EPA, the direct construction
18 grants program was winding down in the late 1970’s and early 1980’s. If grants were
19 obtained at the end of the direct construction grants program and OMB applies accelerated
20 depreciation rates to these grants as directed by the Executive Order, it is most likely that
21 there will be zero surviving value that would need to be repaid to the US Treasury.

SPMT Statement No. 2-SR

1 However, it is apparent from Mr. Bubel's rebuttal testimony that this question has not yet
2 been asked or answered.

3
4 **Q. IS THE OUTSTANDING DEBT AMOUNT KNOWN?**

5 A. Yes. As I noted in Schedule HJW-6 in my Direct Testimony (SPMT Statement No. 2),
6 Long Term Debt at the end of 2019 was \$143,011,834 and there was an additional
7 outstanding note in the amount of \$1,751,785.

8
9 **Q. HAVE YOU ESTIMATED THE FINAL PROCEEDS THAT COULD BE**
10 **RETAINED BY DELCORA TO FUND THE RATE STABILIZATION TRUST?**

11 A. I have not been able to estimate the amount of State or local contributions that will need to
12 be repaid and I do not know the value of the Transfer Price that will be set by OMB.
13 However, if we assume that the purchase price and the Transfer Price are the same at
14 \$276,500,000 and, as I noted earlier in this surrebuttal testimony, that DELCORA will need
15 to retain \$100,000,000 to fund the construction of compliance related assets and the Long
16 Term Control Plan, the opening balance of the rate stabilization trust is likely to be no
17 higher than \$131,787,770. Payments made to refund local contributions in aid of
18 construction, consistent with Section 3(c)(i) of the Executive Order would reduce this
19 amount even further. Given Ms. Nelson's testimony, SDCMA alone could be due \$11.9
20 million and if this payment were made first, the funds available for the rate stabilization
21 trust would be reduced to \$119,887,770.

SPMT Statement No. 2-SR

1 **Q. IF THE STATE AND OTHER UNITS OF LOCAL GOVERNMENT HAVE A**
2 **MATERIAL CLAIM ON THE TRANSFER PRICE, WHAT IMPACT WILL THAT**
3 **HAVE ON THE RATE STABILIZATION TRUST PAYMENTS TO SPMT?**

4 A. To the extent that the amount available to fund the rate stabilization trust is materially
5 reduced by payments made to refund State and local contributions, the subsidization of
6 Aqua's tariffed rates will diminish. This is already a time limited benefit and it is clear that
7 over the period of the proposed capital investments, SPMT will pay significantly more for
8 wastewater service if the system is sold to Aqua.

9
10 **6. Removing DELCORA's capital improvement needs from the total needs**
11 **for all Publicly Owned Treatment Works ("POTW") in the**
12 **Commonwealth of Pennsylvania will reduce the ratio of Pennsylvania**
13 **needs to all POTW needs in the United States. This lower ratio will result**
14 **in the Commonwealth receiving a lesser percentage of the total Federal**
15 **appropriation for POTW improvements. This is a detriment to the**
16 **Commonwealth and all residents who continue to receive wastewater**
17 **service from POTW systems.**
18

19 **Q. DID MR. BUBEL ADDRESS THE ISSUE OF STATE FUNDING IN HIS**
20 **REBUTTAL TESTIMONY?**

21 A. Yes. Mr. Bubel has focused on the internal issue of funding wastewater system
22 improvements. He correctly notes that the sale of DELCORA to Aqua will remove the
23 DELCORA capital needs from the Commonwealth's estimated total improvement needs
24 for POTW systems (Aqua Statement No. 4-R, Bubel, Page 8, Lines 17-20). After a sale of

SPMT Statement No. 2-SR

1 the system, these needs would be funded by Aqua and the DELCORA system would no
2 longer have access to Federal improvement funds provided through the state revolving loan
3 programs. However, Mr. Bubel does not address the impact this will have on the future
4 calculation of Federal appropriations to Pennsylvania. Pennsylvania's current allotment of
5 the annual Federal Clean Water Act appropriation for wastewater system improvements is
6 3.9%, as I noted in my Direct Testimony. Let me illustrate the impact of the sale of
7 DELCORA by focusing on the potential impact of removing a single year's capital needs
8 from the calculation of the appropriation. Let's assume that the total annual need for
9 Pennsylvania is \$400,000,000. The comparable US need with Pennsylvania's ratio at 3.9%
10 would be roughly \$10,256,410,000. Now, let's remove a one-year \$30,000,000 need for
11 DELCORA from both the numerator (\$400,000,000 - \$30,000,000) and denominator
12 (\$10,256,410,000 - \$30,000,000) and recalculate the ratio. In doing so, we will find that
13 the Pennsylvania ratio is reduced from 3.9% to 3.6%. Pennsylvania will receive a smaller
14 share of the Federal Clean Water Act construction fund appropriation as a result of this
15 sale.

16
17 **Q. IF THE DELCORA IMPROVEMENT NEEDS ARE REMOVED FROM THE**
18 **CALCULATION OF THE AVAILABLE FEDERAL FUNDS AMOUNT, HOW**
19 **WILL IMPROVEMENTS TO THE DELCORA SYSTEM BE FINANCED IF THE**
20 **SYSTEM IS SOLD TO AQUA?**

21 **A.** As Mr. Bubel points out in his Rebuttal testimony, these improvements will be financed
22 by Aqua because federal Clean Water Act funds cannot be used by private systems. Aqua's

SPMT Statement No. 2-SR

1 cost of capital is higher than DELCORA's cost of capital, so this is also a detriment to
2 DELCORA's customers, and any external Aqua customer, all of whom will be asked to
3 pay this higher cost.

4 **7. Many significant regulatory approvals and a number of outstanding**
5 **contract assignments will need to be obtained before all of the assets**
6 **owned by DELCORA can be transferred to Aqua. Some of these**
7 **approvals, notably the approval of the transfer under Executive Order**
8 **12803, may require the repayment of contributions made by State and**
9 **local governments. This will adversely impact the proposed rate**
10 **stabilization trust thereby diminishing the interim rate benefit that**
11 **customers might enjoy if the system is sold. In addition, some assets**
12 **should be permanently designated as Non-Assignable Assets under the**
13 **Asset Purchase Agreement. If this is done, the expert valuations should**
14 **be revisited.**
15

16 **Q. HAS MR. BUBEL DISCUSSED THE CONSENT DECREE GOVERNING THE**
17 **COMBINED SEWER OVERFLOW LONG TERM CONTROL PLAN IN HIS**
18 **REBUTTAL TESTIMONY?**

19 **A.** Yes. Mr. Bubel notes that United States District Court for the Eastern District of
20 Pennsylvania will need to consent to the substitution of Aqua for DELCORA with regard
21 to the requirements and obligations of the Consent Decree (Aqua Statement No. 4-R,
22 Bubel, Page 7, Lines 3 -1 13). Mr. Bubel also states that Aqua has been in discussions with
23 DELCORA and they have approached EPA and Pennsylvania DEP to discuss the
24 substitution; however, he does not indicate that the Decree parties have filed the joint
25 application to the United States District Court to approve the substitution.
26

SPMT Statement No. 2-SR

1 **Q. DELCORA’S PUBLICLY OWNED TREATMENT WORKS (“POTW”) STATUS**
2 **FOR THE DELCORA WESTERN REGION WASTEWATER TREATMENT**
3 **PLANT WILL BE LOST UPON THE TRANSFER OF THE ASSETS TO AQUA.**
4 **HOW WILL THAT LOSS OF POTW STATUS AFFECT THE COMBINED**
5 **SEWER OVERFLOW PROGRAM?**

6 A. As Mr. Bubel asserts in his Rebuttal Testimony (Aqua Statement No. 4-R, Bubel, Page 7,
7 Lines 14-17), the parties to the Consent Decree (EPA, DEP, DELCORA and Aqua) can
8 jointly petition the United States District Court to substitute Aqua for DELCORA under
9 the Decree and obligate Aqua to implement the Long Term Control Plan. However, it is
10 my understanding that the Clean Water Act does not permit EPA to implement the
11 Combined Sewer Overflow requirements where private combined point source discharges
12 are concerned but instead must impose Best Available Technology requirements on these
13 discharges. I would anticipate that this is an issue that could take an extended period of
14 time to resolve.

15
16 **Q. ARE YOU AWARE OF ANY OTHER GOVERNMENTAL APPROVALS**
17 **RELATED TO ENVIRONMENTAL PERMITS NEEDED BEFORE DELCORA**
18 **ASSETS ARE TRANSFERRED TO AQUA?**

19 A. It is my understanding that the NPDES permit governing the Western Region Wastewater
20 Treatment Plant and the 26 Combined Sewer Overflow control points expired (Application
21 Exhibit N-1) and DELCORA is operating under DEP’s permit shield. I do not believe that
22 DEP has the ability to assign an expired permit. Instead DEP must issue a new permit to

SPMT Statement No. 2-SR

1 DELCORA prior to the transfer of the related assets and it is that new permit that could
2 ultimately be assigned to Aqua.

3
4 **Q. DOES THE PROPOSED TRANSFER OF THE DELCORA WESTERN REGION**
5 **WASTEWATER TREATMENT PLANT TO AQUA HAVE ANY IMPLICATIONS**
6 **FOR SIGNIFICANT INDUSTRIAL USERS AND CATEGORICAL USERS IN THE**
7 **WESTERN REGION OF DELCORA?**

8 A. Generally speaking, yes. If the Western Region Wastewater Treatment Plant is sold to
9 Aqua, this facility will no longer be classified as a POTW. When this loss of POTW status
10 occurs, the Federal Significant Industrial User permit program will no longer be effective
11 and Pennsylvania DEP will need to implement a permitting regime that effectively replaces
12 the Federal program. SPMT Witness Mr. Kevin Smith discusses the specific implications
13 of this loss of POTW status for the Marcus Hook Industrial Complex. It is likely that this
14 will impact all of the 55 entities listed in the response to SPMT-DELCORA I-10 (SPMT
15 Exhibit HJW 1-SR, Pages 19 and 20). These are the 55 industries, commercial facilities
16 and governmental units that DELCORA has classified as Significant Industrial Users.

17
18 **Q. IN YOUR EXPERIENCE DOES DEP HAVE ANY OTHER REQUIREMENTS**
19 **REGARDING LOCAL PLANS AND APPROVALS THAT MUST BE ADDRESSED**
20 **PRIOR TO THE TRANSFER OF THE ASSETS?**

21 A. Yes. I assisted Upper Dublin Township in the sale of its wastewater system to Bucks
22 County Water and Sewer Authority ("BCWSA"). At the time, DEP required Upper Dublin

SPMT Statement No. 2-SR

1 Township to submit a revised Act 537 Plan indicating that the wastewater system would
2 be sold to BCWSA and that BCWSA would be the owner and operator of the wastewater
3 assets used to provide conveyance and treatment capacity for the areas of Upper Dublin
4 served by the system. In this matter, I do not believe that any of the Delaware County or
5 Chester County municipalities served by DELCORA has submitted new Act 537 Plans to
6 DEP for final approval. These submittals and approvals take time when the municipality
7 supports the change; in this case, it does not appear that the process has even been initiated,
8 and we have a number of municipalities that obviously oppose the sale of DELCORA to
9 Aqua.

10
11 **Q. PLEASE SUMMARIZE YOUR UNDERSTANDING OF SECTION 2.06 OF THE**
12 **ASSET PURCHASE AGREEMENT (“APA”).**

13 A. This section of the APA addresses the very issue that has been raised by the Municipal
14 Protestants with respect to assets that may not be ready to transfer to Aqua at closing.
15 Section 2.06 of the APA (Filing Exhibit B-1, Page 15) states that the transfer of assets
16 requiring governmental approvals, including the consent of parties to existing agreements
17 with DELCORA, will be held as assets owned by DELCORA until the required approvals
18 are obtained. During the pendency of the transfer, the assets will be owned and operated
19 by DELCORA as these assets are currently operated, and both DELCORA and Aqua will
20 cooperate to implement a mutually beneficial operating plan to address those assets. Any
21 assets treated in this fashion are deemed “Non-Assignable Assets.”

SPMT Statement No. 2-SR

1 **Q. HAS MR. PACKER ADDRESSED SECTION 2.06 OF THE APA IN HIS**
2 **TESTIMONY WITH RESPECT TO THE CONTENTION BY THE MUNICIPAL**
3 **AND INDUSTRIAL PROTESTANTS THAT CERTAIN ASSETS MAY NOT BE**
4 **TRANSFERRED AT CLOSING IF THE PROPOSED TRANSACTION IS**
5 **APPROVED?**

6 A. Yes. Mr. Packer testified that under the conditions claimed by the Municipal and Industrial
7 Protestants, the Non-Assignable Assets will continue to be owned by DELCORA (Aqua
8 Statement No. 2-R, Packer, Page 66, Lines 7 – 16).

9
10 **Q. COULD THE WESTERN REGION WASTEWATER TREATMENT PLANT BE**
11 **DESIGNATED AS A NON-ASSIGNABLE ASSET?**

12 A. Yes. And I believe it should be so designated, on a permanent basis. Doing so would
13 preserve the plant's POTW designation because the asset would continue to be owned by
14 DELCORA, a local government unit. Aqua could operate the DELCORA owned POTW.
15 This is a tried and true means of operation used in many public-private partnership
16 arrangements around the country. While the assignable collection system assets could be
17 transferred without the same regulatory implications that would result from the transfer of
18 the treatment plant, the retention of the Western Region Wastewater Treatment Plant as a
19 DELCORA-owned asset would preserve the status quo with regard to DELCORA's
20 NPDES permit, the SIU permits and the applicability of the Federal Combined Sewer
21 Overflow program.

SPMT Statement No. 2-SR

1 **Q. ARE THERE OTHER ASSETS THAT SHOULD BE RETAINED BY DELCORA,**
2 **ASSUMING THE ACQUISITION IS APPROVED?**

3 A. Yes. If DELCORA were to permanently retain ownership of its 26 Combined Sewer
4 Overflow Regulator points, but not the local collection sewers that feed into these points,
5 by designating the Regulators as Non-Assignable Assets, the regulatory regime for
6 handling Combined Sewer Overflows would stay the same, and there would be no
7 requirement for Aqua to make the potentially enormous expenditure of funds to implement
8 best available technology to address the CSO issue.

9
10 **Q. IF THESE ASSETS ARE PERMANENTLY DESIGNATED AS NON-**
11 **ASSIGNABLE ASSETS, IS IT YOUR OPINION THAT THE \$276,500,000 RATE**
12 **BASE CLAIM SHOULD BE APPROVED?**

13 A. No. The Western Region Wastewater Treatment Plant and the 26 Combined Sewer
14 Regulators are significant assets. The value of these assets in Exhibit D, the Engineering
15 Assessment and Asset Inventory, would need to be removed from the assets being sold.
16 Likewise, the Valuation Experts would need to be given the opportunity to revise their
17 valuations and only then would the Commission be in a position to evaluate the Purchase
18 Price as required by Act 12.

19
20 **Q. WHAT IS YOUR OPINION REGARDING THE COLLECTION SYSTEM ASSETS**
21 **FOR WHICH AQUA HAS NOT YET OBTAINED AN ASSIGNMENT OF THE**
22 **CONTRACT FROM THE DELCORA CONTRACTING PARTIES?**

SPMT Statement No. 2-SR

1 A. To the extent that these assets may ultimately be transferred to Aqua as contemplated by
2 APA Section 2.06, the value of those assets should be held in escrow. If other entities have
3 a valid claim on the assets, it is possible that DELCORA may need to compensate those
4 entities from the purchase price to allow the assets to be transferred to Aqua. These funds
5 should not be swept into the proposed rate stabilization trust, nor should the assets be
6 recorded as utility plant in service and rate base until this issue is resolved. However, if
7 there are assets that will never be transferred, the value of these assets should be treated in
8 the same manner that I have suggested for the Western Region Wastewater Treatment
9 Plant. The value should be removed from the asset inventory and the Valuation Experts
10 should be given the opportunity to adjust their appraisals accordingly.

11
12 **Q. IF SOME ASSETS ARE RETAINED PERMANENTLY BY DELCORA AND THE**
13 **PURCHASE PRICE IS REDUCED, WOULD YOUR CONCERNS ABOUT**
14 **PROSPECTIVE RATES BE AMELIORIATED?**

15 A. No. First, such a change in the scope of the acquisition would impact the proposed rate
16 stabilization trust. The change would necessarily reduce the starting balance of the trust
17 and that means that the benefit of the trust will be reduced. While I do not see the rate
18 stabilization trust as a material benefit, it is the only cost benefit I see from the proposed
19 transaction. The impact on future rates is driven by the magnitude of the proposed capital
20 improvement plan and rate setting policies of the Commission. Neither Aqua nor
21 DELCORA has suggested that the capital improvement plan would be any different or any
22 less costly under Aqua ownership. If the same plan is implemented by an entity that has a

SPMT Statement No. 2-SR

1 much higher cost of capital and must also collect State and Federal income tax in its
2 revenues, the result will be a higher revenue requirement. In addition, Aqua's aggressive
3 strategies regarding Act 12 acquisitions outside of the DELCORA service area and its
4 aggressive capital investment strategies will undoubtedly result in costs being transferred
5 to DELCORA customers and these are costs that DELCORA customers would not bear
6 absent the proposed transaction. As one of the largest regional wastewater authorities in
7 Pennsylvania, it is my opinion that DELCORA does not need to be rescued by Aqua. I
8 believe that DELCORA has the financial, managerial and technical capacity to implement
9 the capital plan it laid out within the existing regulatory framework for POTW systems at
10 lower rates and without adversely impacting industrial customers within Delaware County.
11 Indeed, this appears to be Aqua's opinion, since Aqua is retaining DELCORA management
12 and control of the DELCORA system rather than folding DELCORA into the existing
13 Aqua structure.

- 14
- 15 **8. The proposed transaction is not in the public interest for all of the reasons**
16 **previously stated. The Public Utility Commission should reject the**
17 **proposal and deny the application. Should the Commission decide**
18 **otherwise, conditions should be placed on the approval to retain the**
19 **current environmental regulatory and permit regime inherent in all**
20 **POTW systems and to preserve the contractual commitments made by**
21 **DELCORA and its large industrial customers, like SPMT.**
22

SPMT Statement No. 2-SR

1 **Q. WHAT CONCLUSION HAVE YOU REACHED WITH REGARD TO THIS**
2 **MATTER AND WHAT RECOMMENDATION DO YOU HAVE FOR THE**
3 **COMMISSION?**

4 A. It continues to be my opinion that the proposed transaction is not in the public interest and
5 it should not be approved.
6

7 **Q. DO YOU HAVE ANY CONTINGENT RECOMMENDATIONS SHOULD THE**
8 **COMMISSION DECIDE TO AUTHORIZE THE PROPOSED ACQUISITION?**

9 A. Yes. While I do not recommend approval of this acquisition, should the Commission
10 decide otherwise, I recommend the following provisions be included in the final Order
11 issued in this matter. These conditions will result in DELCORA retaining its POTW status,
12 thereby preserving the current environmental regulatory and permit regime that enables the
13 ongoing day-to-day operations of both the DELCORA system and DELCORA's large
14 industrial customers, such as SPMT. These conditions also will preserve the contractual
15 commitments DELCORA has made to SPMT:

16 I. The Commission should condition approval of the Application on DELCORA
17 retaining ownership of the Western Region Wastewater Treatment Plant and the
18 26 Combined Sewer Overflow Regulators; to accomplish this under the terms
19 of the Asset Purchase Agreement, these DELCORA assets could be designated
20 as Non-Assignable Assets in the context of Section 2.06 of the Asset Purchase
21 Agreement, except that the designation would be permanent, not transitional;

SPMT Statement No. 2-SR

1 II. The Commission should condition approval of the Application on removing the
2 value of the Western Region Wastewater Treatment Plant and the 26 Combined
3 Sewer Overflow Regulators from Aqua's post-acquisition rate base, as these
4 assets will be retained by DELCORA; and

5 III. The Commission should condition approval of the Application on DELCORA
6 retaining SPMT as a DELCORA customer under the existing contract between
7 the parties, consistent with Section 2.06 of the Asset Purchase Agreement.

8 I would like to draw further attention to the Testimonies of SPMT Witnesses Human and
9 Smith. Should this transaction be approved and should the transfer of ownership of the
10 Western Region Wastewater Treatment Plant occur prior to the point in time when all new
11 unappealable permits required for Aqua's own operation of the treatment works as a private
12 system and for all of the new or revised permits needed for the Significant Industrial Users
13 ("SIU") are in place, Messrs. Smith and Human note that great harm could come to the
14 regional economy and to specific SIUs. As a minimum alternative to proposed conditions
15 I-III, the Commission should condition approval of the Application on implementing
16 Conditions I-III on a transitional basis, such that:

17
18 A. DELCORA may not transfer ownership of the Western Region Wastewater Treatment
19 Plant and the 26 Combined Sewer Overflow Regulators to Aqua until Aqua is able to
20 demonstrate to the Commission's satisfaction that under Aqua ownership of the
21 Western Region Wastewater Treatment Plant and the 26 Combined Sewer Overflow
22 Regulators, SPMT is able to operate SPMT's MHIC in compliance with EPA and PA

SPMT Statement No. 2-SR

1 DEP environmental permitting requirements, consistent with the provisions of Section
2 2.06 of the Asset Purchase Agreement;

3 B. Aqua may not include the value of DELCORA's Western Region Wastewater
4 Treatment Plant and the 26 Combined Sewer Overflow Regulators in its rate base until
5 the Commission has approved the transfer of those assets from DELCORA to Aqua
6 consistent with the provisions of Section A of these alternative proposed conditions;
7 and

8 C. Service to SPMT shall continue under SPMT's contract with DELCORA until the
9 effective date of rates in Aqua's first rate case following the transfer of ownership of
10 the Western Region Wastewater Treatment Plant and the 26 Combined Sewer
11 Overflow Regulators from DELCORA to Aqua consistent with the provisions of
12 Section A of these alternative proposed conditions.

13
14 **Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?**

15 A. Yes, however, I reserve the right to amend and supplement this testimony as additional
16 information becomes available through the course of this proceeding.

SPMT Statement No. 2-SR

SPMT Exhibit HJW-1SR: Interrogatory Responses

1. AQUA XII-3.....	1
2. SPMT-AQUA Set I-13.....	2
3. SPMT-AQUA Set I-14.....	13
4. SPMT-AQUA Set III-5.....	14
5. SPMT-DELCORA Set III-1.....	15
6. SPMT-DELCORA Set III-2.....	17
7. SPMT-DELCORA Set III-8.....	18
8. SPMT-DELCORA Set 1-10.....	19

Application of Aqua Pennsylvania Wastewater, Inc.
Pa. PUC Docket No. A-2019-3015173
Answers of Lower Chichester Township
To Interrogatories of Aqua Pennsylvania Wastewater Inc.
Set XII

Aqua-XII-3. Ref: Page 6, lines 1-3: Please explain how moving from DELCORA's estimates of costs and consumption to Aqua's reconciliation of actual consumption will produce costs for Lower Chichester that "could be very different" from amounts budgeted? Provide all documents, analyses, studies, reports, etc. that support your answer.

Answer

DELCORA reconciles both consumption and costs and calculates a new cost per 1000 gallons. In years with increased usage, the cost per 1000 gallons usually goes down. In years with decreased usage, the cost per 1000 gallons usually goes up.

This is shown in DELCORA's response to Lower Chichester Township's interrogatory I-3. For instance in 2019, the Township's budgeted usage was 182,500 1000 gallons at a rate of \$2.66 per 1000 gallons, or a total of \$485,450. Actual Township usage totaled 205,226 1000 gallons for the year, but the rate was lowered to \$2.47, or a total of \$506,908. Aqua has stated that it will charge based on actual usage, but will not adjust the rate based on actual per-unit costs. So in 2019, it would have billed Township usage of 205,266 1000 gallons at a rate of \$2.66 per 1000 gallons, or a total of \$546,008 (\$60,558, or 12.5%, more than the budget).

Responsible witness: Joseph Possenti, Jr.
Dated: October 13, 2020

Respondent: William C. Packer
Date: 9/04/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SUNOCO PARTNERS MARKETING & TERMINALS L.P.

SET I INTERROGATORIES TO AQUA

SPMT-AQUA-I-13 Provide a schedule showing the number of AQUA wastewater customers, the year-end utility plant and accumulated depreciation balances in each of the last five years.

RESPONSE

Please see SPMT-AQUA-I-13 Attachment 1.

(Company Name)

200. COMPARATIVE BALANCE SHEET ASSETS AND OTHER DEBITS

Balances at Beginning of Year must be consistent with balances at end of previous year

Line No.	Account Number and Title (a)	Schedule No. (b)	Balance Beginning of Year (c)	Balance End of Year (d)	Increase/Decrease (e)
1	UTILITY PLANT		XXX	XXX	XXX
2	101.0 Utility Plant in Service	201	83,707,285	101,860,179	18,152,894
3	102.0 Utility Plant Leased To Others	202			
4	103.0 Property Held for Future Use	203	3,213,292	3,213,292	-
5	104.0 Utility Plant Purchased or Sold		3,896,213	168,930	(3,727,283)
6	105.0 Construction Work in Progress	204	5,474,575	2,559,967	(2,914,608)
7	106.0 Completed Construction Not Classified				
8	Total Utility Plant		96,291,365	107,802,368	11,511,003
9	ACCUMULATED DEPRECIATION		XXX	XXX	XXX
10	108.1 Utility Plant in Service	205	23,507,841	27,886,000	4,378,159
11	108.2 Utility Plant Leased to Others	205			
12	108.3 Property Held for Future Use	205			
13	Total Accumulated Depreciation		23,507,841	27,886,000	4,378,159
14	ACCUMULATED AMORTIZATION		XXX	XXX	XXX
15	110.1 Utility Plant In Service	201			
16	110.2 Utility Plant Leased to Others	202			
17	Total Accumulated Amortization				
18	UTILITY PLANT ADJUSTMENTS		XXX	XXX	XXX
19	114.0 Utility Plant Acquisition Adjustments	206	(3,947,590)	(8,152,896)	(4,205,306)
20	115.0 Accumulated Amortization of Utility Plant Acquisition Adjustments		1,388,294	1,714,452	326,158
21	116.0 Other Utility Plant Adjustments				
22	Total Utility Plant Adjustments		(2,559,296)	(6,438,444)	(3,879,148)
23	117.0 Pending Reclass of Utility Plant	205			
24	TOTAL NET UTILITY PLANT		70,224,228	73,477,924	3,253,696
25	OTHER PROPERTY AND INVESTMENTS		XXX	XXX	XXX
26	OTHER PROPERTY		XXX	XXX	XXX
27	121.0 Non-Utility Property				
28	122.0 Accumulated Depreciation & Amortization of Non-Utility Property				
29	Total Other Property				
30	INVESTMENTS		XXX	XXX	XXX
31	123.0 Investments in Affiliated Companies	210			
32	124.0 Utility Investments	210			
33	125.0 Other Investments	210			
34	126.0 Sinking Funds	210			
35	127.0 Other Special Funds	210			
36	Total Investments				
37	TOTAL OTHER PROPERTY AND INVESTMENTS				

610. Territory Served

Report below the number of customers at the end of the year in respondent's distribution system in which service is furnished, setting forth by counties the number of customers and average number of customers during the year.

County Code	Name of Pennsylvania County (a)	Number Of Customers At End Of Year (b)	Average Number Of Customers During Year (c)
01	Adams	164	
02	Allegheny		
03	Armstrong		
04	Beaver		
05	Bedford		
06	Berks		
07	Blair		
08	Bradford		
09	Bucks	214	
10	Butler		
11	Cambria		
12	Cameron		
13	Carbon	976	
14	Centre		
15	Chester	2,874	
16	Clarion		
17	Clearfield	2,105	
18	Clinton		
19	Columbia		
20	Crawford		
21	Cumberland		
22	Dauphin		
23	Delaware	7,108	
24	Elk		
25	Erie		
26	Fayette		
27	Forest		
28	Franklin		
29	Fulton		
30	Greene		
31	Huntingdon		
32	Indiana		
33	Jefferson		
34	Juniata		
35	Lackawanna		
36	Lancaster		
37	Lawrence		
38	Lebanon		
39	Lehigh		
40	Luzerne	2,655	
41	Lycoming		
42	McKean		
43	Mercer		
44	Mifflin		
45	Monroe	335	
46	Montgomery	206	
47	Montour		
48	Northampton		
49	Northumberland		
50	Perry		
51	Philadelphia		
52	Pike	2,292	
53	Potter		
54	Schuylkill	152	
55	Snyder		
56	Somerset		
57	Sullivan		
58	Susquehanna		
59	Tioga		
60	Union		
61	Venango		
62	Warren		
63	Washington		
64	Wayne	289	
65	Westmoreland		
66	Wyoming	414	
67	York		
Totals		19,784	
Total Population of Territory Served (Estimated)			

(Company Name)

200. COMPARATIVE BALANCE SHEET ASSETS AND OTHER DEBITS

Balances at Beginning of Year must be consistent with balances at end of previous year

Line No.	Account Number and Title (a)	Schedule No. (b)	Balance Beginning of Year (c)	Balance End of Year (d)	Increase/Decrease (e)
1	UTILITY PLANT		xxx	xxx	xxx
2	101.0 Utility Plant in Service	201	101,860,179	110,518,405	8,658,226
3	102.0 Utility Plant Leased To Others	202			-
4	103.0 Property Held for Future Use	203	3,213,292	3,213,292	-
5	104.0 Utility Plant Purchased or Sold		168,930	456,837	287,907
6	105.0 Construction Work in Progress	204	2,559,967	3,313,408	753,441
7	106.0 Completed Construction Not Classified				-
8	Total Utility Plant		107,802,368	117,501,942	9,699,574
9	ACCUMULATED DEPRECIATION		xxx	xxx	xxx
10	108.1 Utility Plant in Service	205	27,886,000	30,883,302	2,997,302
11	108.2 Utility Plant Leased to Others	205			-
12	108.3 Property Held for Future Use	205			-
13	Total Accumulated Depreciation		27,886,000	30,883,302	2,997,302
14	ACCUMULATED AMORTIZATION		xxx	xxx	xxx
15	110.1 Utility Plant In Service	201			-
16	110.2 Utility Plant Leased to Others	202			-
17	Total Accumulated Amortization		-	-	-
18	UTILITY PLANT ADJUSTMENTS		xxx	xxx	xxx
19	114.0 Utility Plant Acquisition Adjustments	206	(8,152,896)	(11,181,584)	(3,028,688)
20	115.0 Accumulated Amortization of Utility Plant Acquisition Adjustments		1,714,452	2,130,132	415,680
21	116.0 Other Utility Plant Adjustments				-
22	Total Utility Plant Adjustments		(6,438,444)	(9,051,452)	(2,613,008)
23	117.0 Pending Reclass of Utility Plant	205			-
24	TOTAL NET UTILITY PLANT		73,477,924	77,567,188	4,089,264
25	OTHER PROPERTY AND INVESTMENTS		xxx	-	xxx
26	OTHER PROPERTY		xxx	-	xxx
27	121.0 Non-Utility Property			-	-
28	122.0 Accumulated Depreciation & Amortization of Non-Utility Property			-	-
29	Total Other Property		-	-	-
30	INVESTMENTS		xxx	-	xxx
31	123.0 Investments in Affiliated Companies	210		-	-
32	124.0 Utility Investments	210		-	-
33	125.0 Other Investments	210		-	-
34	126.0 Sinking Funds	210		-	-
35	127.0 Other Special Funds	210		-	-
36	Total Investments		-	-	-
37	TOTAL OTHER PROPERTY AND INVESTMENTS		-	-	-

610. Territory Served

Report below the number of customers at the end of the year in respondent's distribution system in which service is furnished, setting forth by counties the number of customers and average number of customers during the year.

County Code	Name of Pennsylvania County (a)	Number Of Customers At End Of Year (b)	Average Number Of Customers During Year (c)
01	Adams	168	159
02	Allegheny		
03	Armstrong		
04	Beaver		
05	Bedford		
06	Berks		
07	Blair		
08	Bradford		
09	Bucks	214	214
10	Butler		
11	Cambria		
12	Cameron		
13	Carbon	990	989
14	Centre		
15	Chester	3,375	3,304
16	Clarion	80	80
17	Clearfield	2,191	2,183
18	Clinton		
19	Columbia		
20	Crawford		
21	Cumberland		
22	Dauphin		
23	Delaware	6,770	6,770
24	Elk		
25	Erie		
26	Fayette		
27	Forest		
28	Franklin		
29	Fulton		
30	Greene		
31	Huntingdon		
32	Indiana		
33	Jefferson		
34	Juniata		
35	Lackawanna	302	300
36	Lancaster		
37	Lawrence		
38	Lebanon		
39	Lehigh		
40	Luzerne	1,906	1,909
41	Lycoming		
42	McKean		
43	Mercer		
44	Mifflin		
45	Monroe	340	340
46	Montgomery	207	207
47	Montour		
48	Northampton		
49	Northumberland		
50	Perry		
51	Philadelphia		
52	Pike	1,958	1,950
53	Potter		
54	Schuylkill	1,155	1,147
55	Snyder		
56	Somerset		
57	Sullivan		
58	Susquehanna		
59	Tioga		
60	Union		
61	Venango	365	365
62	Warren		
63	Washington		
64	Wayne		
65	Westmoreland		
66	Wyoming	419	419
67	York		
Totals		20,440	20,336
Total Population of Territory Served (Estimated)			

(Company Name)

200. COMPARATIVE BALANCE SHEET ASSETS AND OTHER DEBITS

Balances at Beginning of Year must be consistent with balances at end of previous year

Line No.	Account Number and Title (a)	Schedule No. (b)	Balance Beginning of Year (c)	Balance End of Year (d)	Increase/Decrease (e)
1	UTILITY PLANT		xxx	xxx	xxx
2	101.0 Utility Plant in Service	201	110,518,405	129,353,270	18,834,865
3	102.0 Utility Plant Leased To Others	202			-
4	103.0 Property Held for Future Use	203	3,213,292	3,213,292	-
5	104.0 Utility Plant Purchased or Sold		456,837	5,692,124	5,235,287
6	105.0 Construction Work in Progress	204	3,313,408	8,141,168	4,827,759
7	106.0 Completed Construction Not Classified				-
8	Total Utility Plant		117,501,942	146,399,854	28,897,911
9	ACCUMULATED DEPRECIATION		xxx	xxx	xxx
10	108.1 Utility Plant in Service	205	30,883,302	34,505,236	3,621,934
11	108.2 Utility Plant Leased to Others	205			-
12	108.3 Property Held for Future Use	205			-
13	Total Accumulated Depreciation		30,883,302	34,505,236	3,621,934
14	ACCUMULATED AMORTIZATION		xxx	xxx	xxx
15	110.1 Utility Plant In Service	201			-
16	110.2 Utility Plant Leased to Others	202			-
17	Total Accumulated Amortization		-	-	-
18	UTILITY PLANT ADJUSTMENTS		xxx	xxx	xxx
19	114.0 Utility Plant Acquisition Adjustments	206	(11,181,584)	(12,788,754)	(1,607,170)
20	115.0 Accumulated Amortization of Utility Plant Acquisition Adjustments		2,130,132	2,720,760	590,628
21	116.0 Other Utility Plant Adjustments		-		-
22	Total Utility Plant Adjustments		(9,051,452)	(10,067,994)	(1,016,542)
23	117.0 Pending Reclass of Utility Plant	205	-		-
24	TOTAL NET UTILITY PLANT		77,567,188	101,826,624	24,259,435
25	OTHER PROPERTY AND INVESTMENTS		-	xxx	xxx
26	OTHER PROPERTY		-	xxx	xxx
27	121.0 Non-Utility Property		-		-
28	122.0 Accumulated Depreciation & Amortization of Non-Utility Property		-		-
29	Total Other Property		-	-	-
30	INVESTMENTS		-	xxx	xxx
31	123.0 Investments in Affiliated Companies	210	-		-
32	124.0 Utility Investments	210	-		-
33	125.0 Other Investments	210	-		-
34	126.0 Sinking Funds	210	-		-
35	127.0 Other Special Funds	210	-		-
36	Total Investments		-	-	-
37	TOTAL OTHER PROPERTY AND INVESTMENTS		-	-	-

610. Territory Served

Report below the number of customers at the end of the year in respondent's distribution system in which service is furnished, setting forth by counties the number of customers and average number of customers during the year.

County Code	Name of Pennsylvania County (a)	Number Of Customers At End Of Year (b)	Average Number Of Customers During Year (c)
01	Adams	174	171
02	Allegheny		
03	Armstrong		
04	Beaver		
05	Bedford		
06	Berks		
07	Blair		
08	Bradford		
09	Bucks	214	214
10	Butler		
11	Cambria		
12	Cameron		
13	Carbon	1,007	999
14	Centre		
15	Chester	3,386	3,381
16	Clarion	80	80
17	Clearfield	2,205	2,198
18	Clinton		
19	Columbia		
20	Crawford		
21	Cumberland		
22	Dauphin		
23	Delaware	6,770	6,770
24	Elk		
25	Erie		
26	Fayette		
27	Forest		
28	Franklin		
29	Fulton		
30	Greene		
31	Huntingdon		
32	Indiana		
33	Jefferson		
34	Juniata		
35	Lackawanna	307	305
36	Lancaster		
37	Lawrence		
38	Lebanon		
39	Lehigh		
40	Luzerne	1,914	1,910
41	Lycoming		
42	McKean		
43	Mercer		
44	Mifflin		
45	Monroe	1,086	713
46	Montgomery	233	220
47	Montour		
48	Northampton		
49	Northumberland		
50	Perry		
51	Philadelphia		
52	Pike	1,978	1,958
53	Potter		
54	Schuylkill	1,173	1,164
55	Snyder		
56	Somerset		
57	Sullivan		
58	Susquehanna		
59	Tioga		
60	Union		
61	Venango	353	359
62	Warren		
63	Washington		
64	Wayne		
65	Westmoreland		
66	Wyoming	426	423
67	York		
Totals		21,306	20,865
Total Population of Territory Served (Estimated)		54,000	

FOOTNOTES:

1. Bulk sewer treatment services are stated in equivalent dwelling units.

(Company Name)

200. COMPARATIVE BALANCE SHEET ASSETS AND OTHER DEBITS

Balances at Beginning of Year must be consistent with balances at end of previous year

Line No.	Account Number and Title (a)	Schedule No. (b)	Balance Beginning of Year (c)	Balance End of Year (d)	Increase/Decrease (e)
1	UTILITY PLANT		xxx	xxx	xxx
2	101.0 Utility Plant in Service	201	129,353,270	252,000,313	122,647,043
3	102.0 Utility Plant Leased To Others	202			
4	103.0 Property Held for Future Use	203	3,213,292	2,049,607	(1,163,685)
5	104.0 Utility Plant Purchased or Sold		5,692,124		(5,692,124)
6	105.0 Construction Work in Progress	204	8,141,168	26,920,788	18,779,620
7	106.0 Completed Construction Not Classified				
8	Total Utility Plant		146,399,854	280,970,708	134,570,854
9	ACCUMULATED DEPRECIATION		xxx	xxx	xxx
10	108.1 Utility Plant in Service	205	34,505,236	73,369,689	38,864,453
11	108.2 Utility Plant Leased to Others	205			
12	108.3 Property Held for Future Use	205			
13	Total Accumulated Depreciation		34,505,236	73,369,689	38,864,453
14	ACCUMULATED AMORTIZATION		xxx	xxx	xxx
15	110.1 Utility Plant In Service	201			
16	110.2 Utility Plant Leased to Others	202			
17	Total Accumulated Amortization				
18	UTILITY PLANT ADJUSTMENTS		xxx	xxx	xxx
19	114.0 Utility Plant Acquisition Adjustments	206	(12,788,754)	(12,788,754)	
20	115.0 Accumulated Amortization of Utility Plant Acquisition Adjustments		2,720,760	3,352,556	631,796
21	116.0 Other Utility Plant Adjustments				
22	Total Utility Plant Adjustments		(10,067,994)	(9,436,198)	631,796
23	117.0 Pending Reclass of Utility Plant	205			
24	TOTAL NET UTILITY PLANT		101,826,624	198,164,821	96,338,197
25	OTHER PROPERTY AND INVESTMENTS		xxx	xxx	xxx
26	OTHER PROPERTY		xxx	xxx	xxx
27	121.0 Non-Utility Property				
28	122.0 Accumulated Depreciation & Amortization of Non-Utility Property				
29	Total Other Property		-		
30	INVESTMENTS		xxx	xxx	xxx
31	123.0 Investments in Affiliated Companies	210			
32	124.0 Utility Investments	210			
33	125.0 Other Investments	210			
34	126.0 Sinking Funds	210			
35	127.0 Other Special Funds	210			
36	Total Investments		-		
37	TOTAL OTHER PROPERTY AND INVESTMENTS		-		

610. Territory Served

Report below the number of customers at the end of the year in respondent's distribution system in which service is furnished, setting forth by counties the number of customers and average number of customers during the year.

County Code	Name of Pennsylvania County (a)	Number Of Customers At End Of Year (b)	Average Number Of Customers During Year (c)
01	Adams	183	179
02	Allegheny		
03	Armstrong		
04	Beaver		
05	Bedford		
06	Berks		
07	Blair		
08	Bradford		
09	Bucks	214	214
10	Butler		
11	Cambria		
12	Cameron		
13	Carbon	1,004	1,006
14	Centre		
15	Chester	4,311	3,849
16	Clarion	68	74
17	Clearfield	2,210	2,208
18	Clinton		
19	Columbia		
20	Crawford		
21	Cumberland		
22	Dauphin		
23	Delaware	7,110	6,940
24	Elk		
25	Erie		
26	Fayette		
27	Forest		
28	Franklin		
29	Fulton		
30	Greene		
31	Huntingdon		
32	Indiana		
33	Jefferson		
34	Juniata		
35	Lackawanna	310	309
36	Lancaster		
37	Lawrence		
38	Lebanon		
39	Lehigh		
40	Luzerne	1,917	1,916
41	Lycoming		
42	McKean		
43	Mercer		
44	Mifflin		
45	Monroe	1,095	1,091
46	Montgomery	5,732	2,983
47	Montour		
48	Northampton		
49	Northumberland		
50	Perry		
51	Philadelphia		
52	Pike	1,986	1,982
53	Potter		
54	Schuylkill	1,191	1,182
55	Snyder		
56	Somerset		
57	Sullivan		
58	Susquehanna		
59	Tioga		
60	Union		
61	Venango	351	352
62	Warren		
63	Washington		
64	Wayne		
65	Westmoreland		
66	Wyoming	427	427
67	York		
Totals		28,109	24,712
Total Population of Territory Served (Estimated)		54,000	

(Company Name)

200. COMPARATIVE BALANCE SHEET ASSETS AND OTHER DEBITS

Balances at Beginning of Year must be consistent with balances at end of previous year

Line No.	Account Number and Title (a)	Schedule No. (b)	Balance Beginning of Year (c)	Balance End of Year (d)	Increase/Decrease (e)
1	UTILITY PLANT		xxx	xxx	xxx
2	101.0 Utility Plant in Service	201	252,000,313	282,424,941	30,424,628
3	102.0 Utility Plant Leased To Others	202			
4	103.0 Property Held for Future Use	203	2,049,607	2,049,607	
5	104.0 Utility Plant Purchased or Sold			44,839,614	44,839,614
6	105.0 Construction Work in Progress	204	26,920,788	37,381,475	10,460,687
7	106.0 Completed Construction Not Classified				
8	Total Utility Plant		280,970,708	366,695,637	85,724,929
9	ACCUMULATED DEPRECIATION		xxx	xxx	xxx
10	108.1 Utility Plant in Service	205	73,369,689	78,330,227	4,960,538
11	108.2 Utility Plant Leased to Others	205			
12	108.3 Property Held for Future Use	205			
13	Total Accumulated Depreciation		73,369,689	78,330,227	4,960,538
14	ACCUMULATED AMORTIZATION		xxx	xxx	xxx
15	110.1 Utility Plant In Service	201			
16	110.2 Utility Plant Leased to Others	202			
17	Total Accumulated Amortization				
18	UTILITY PLANT ADJUSTMENTS		xxx	xxx	xxx
19	114.0 Utility Plant Acquisition Adjustments	206	(12,788,754)	(12,892,613)	(103,859)
20	115.0 Accumulated Amortization of Utility Plant Acquisition Adjustments		3,352,556	7,419,641	4,067,085
21	116.0 Other Utility Plant Adjustments				
22	Total Utility Plant Adjustments		(9,436,198)	(5,472,972)	3,963,226
23	117.0 Pending Reclass of Utility Plant	205			
24	TOTAL NET UTILITY PLANT		198,164,821	282,892,438	84,727,617
25	OTHER PROPERTY AND INVESTMENTS		xxx	xxx	xxx
26	OTHER PROPERTY		xxx	xxx	xxx
27	121.0 Non-Utility Property			25,887,802	25,887,802
28	122.0 Accumulated Depreciation & Amortization of Non-Utility Property			(3,826,070)	(3,826,070)
29	Total Other Property			22,061,732	22,061,732
30	INVESTMENTS		xxx	xxx	xxx
31	123.0 Investments in Affiliated Companies	210			
32	124.0 Utility Investments	210			
33	125.0 Other Investments	210			
34	126.0 Sinking Funds	210			
35	127.0 Other Special Funds	210			
36	Total Investments				
37	TOTAL OTHER PROPERTY AND INVESTMENTS			22,061,732	22,061,732

610. Territory Served

Report below the number of customers at the end of the year in respondent's distribution system in which service is furnished, setting forth by counties the number of customers and average number of customers during the year.

County Code	Name of Pennsylvania County (a)	Number Of Customers At End Of Year (b)	Average Number Of Customers During Year (c)
01	Adams	201	192
02	Allegheny		
03	Armstrong		
04	Beaver		
05	Bedford		
06	Berks	270	
07	Blair		
08	Bradford		
09	Bucks	213	214
10	Butler		
11	Cambria		
12	Cameron		
13	Carbon	970	1,000
14	Centre		
15	Chester	4,357	4,337
16	Clarion	53	67
17	Clearfield	2,171	2,215
18	Clinton		
19	Columbia		
20	Crawford		
21	Cumberland		
22	Dauphin		
23	Delaware	7,097	7,111
24	Elk		
25	Erie		
26	Fayette		
27	Forest		
28	Franklin		
29	Fulton		
30	Greene		
31	Huntingdon		
32	Indiana		
33	Jefferson		
34	Juniata		
35	Lackawanna		344
36	Lancaster		
37	Lawrence		
38	Lebanon		
39	Lehigh		
40	Luzerne	2,914	1,917
41	Lycoming		
42	McKean		
43	Mercer		
44	Mifflin		
45	Monroe	1,077	1,096
46	Montgomery	15,693	10,728
47	Montour		
48	Northampton		
49	Northumberland		
50	Perry		
51	Philadelphia		
52	Pike	1,968	1,995
53	Potter		
54	Schuylkill	151	1,202
55	Snyder		
56	Somerset		
57	Sullivan		
58	Susquehanna		
59	Tioga		
60	Union		
61	Venango	349	350
62	Warren		
63	Washington		
64	Wayne	296	
65	Westmoreland		
66	Wyoming	422	394
67	York		
Totals		38,202	33,162
Total Population of Territory Served (Estimated)		64,000	

Respondent: William C. Packer
Date: 9/04/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SUNOCO PARTNERS MARKETING & TERMINALS L.P.

SET I INTERROGATORIES TO AQUA

SPMT-AQUA-I-14 What amount of annual additions to UPIS are anticipated within AQUA Pennsylvania Wastewater's existing footprint over the coming five years?

RESPONSE

Approximately \$25 million per year over the next five years.

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SUNOCO PARTNERS MARKETING & TERMINALS L.P.

SET III INTERROGATORIES TO AQUA

SPMT-AQUA-III-5 Please refer to Mr. Packer's Rebuttal Testimony at Page 34, Lines 19-21 and Aqua's responses to SPMT-AQUA I-13 and SPMT-AQUA I-14. Please explain and quantify the impact of investing \$25,000,000 per year over the next five years in a system with a customer base of 38,202 on the existing DELCORA customers through an allocation in general as a larger customer base.

RESPONSE

Assuming a cumulative investment totaling \$125 million with a 10% allocation of the cost of service would equate to approximately \$1.4 million in revenue requirement being added to DELCORA on their existing revenues in Appendix A or about 1.90% of revenue if using 2020 authorized.

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SUNOCO PARTNERS MARKETING & TERMINALS L.P.

SET III INTERROGATORIES

SPMT-DELCORA-III-1 DELCORA's response to OCA-VI-3(c) indicates that the "Trust will hold the transaction proceeds (and any of DELCORA's cash on hand at closing), and will make customer assistance payments using that money to benefit ratepayers." {Emphasis added.} Does the DELCORA cash on hand include the amounts included in the three PLGIT accounts listed on Page 21 in Note 2 of DELCORA's audited financial statements for 2019?

RESPONSE:

Yes. As of 8/31/2020, the most current date for which the information is available, the following accounts and their respective balances are:

Operating Cash Accounts: \$6,393,401.17

Funds needed for daily operations.

Debt Service Fund: \$2,415,674.27

Funds needed to pay debt service per Trust Indenture.

Debt Service Reserve Fund: \$11,620,979.66

Reserve funds for debt service.

Renewal and Replacement Fund: \$24,027,171.61

Funds set aside for construction, improvements to the DELCORA system, or funds required to implement projects needed to achieve or maintain regulatory compliance.

Rate Stabilization Fund: \$6,404,458.91

Funds set aside to mitigate significant future rate increases.

Revenue Fund: \$43,496,759.44

Funds set aside to mitigate rate increases associated with the long-term control plans as well as other capital improvements.

Sewer Reserve Fund: \$3,114,653.85

Funds set aside to pay for capital improvements, per the Trust Indenture.

Sewer Repair and Replacement Fund: \$4,092,843.89

Funds set aside to mitigate rate increases from capital improvement in the local collection system.

Respondent: John Pileggi
Date: October 13, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SUNOCO PARTNERS MARKETING & TERMINALS L.P.

SET III INTERROGATORIES

SPMT-DELCORA-III-2 Are any of the funds included in DELCORA's cash on hand at closing (ref OCA-VI-3(c)) moneys collected from customers to fund DELCORA's implementation of the Long Term Control Plan? If so, what is the current total amount of the funds collected to fund the Long Term Control Plan?

RESPONSE:

Yes. Approximately \$30 million is located in the Revenue Fund. The estimated proposed amount of the Chester Long Term Control Plan, pending EPA approval, is over \$100 million.

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SUNOCO PARTNERS MARKETING & TERMINALS L.P.

SET III INTERROGATORIES

SPMT-DELCORA-III-8 Does DELCORA believe that payments received from customers for EPA Long Term Control Plan billings are encumbered in a way where those payments can only be used by DELCORA to implement the Long Term Control Plan and to satisfy the terms of the Consent Decree? If DELCORA believes that these funds can be used for any other purpose, please explain.

RESPONSE:

DELCORA will use the cash on hand to be a source of funds for the Trust. The Trust will be used to offset costs for among other items, the Chester Long Term Control Plan. The estimated proposed amount of the Chester Long Term Control Plan, pending EPA approval, is over \$100 million.

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SUNOCO PARTNERS MARKETING & TERMINALS L.P.

SET I INTERROGATORIES

SPMT-DELCORA-I-10 Provide a schedule identifying all entities that have been issued Industrial Discharge Permits by DELCORA.

RESPONSE:

Aberdeen Sunoco
Alloy Surfaces Company Plant 1
Barry Callebaut
Braskem America, Inc.
Bullen Chemical Co.
Burlington County Board
C & R Laundry
Chelton House Products
Chester County Solid Waste Authority
Choice Party Linen, Inc.
Cintas – Aston
Congoleum Corporation
Container Research Corp.
Covanta Delaware Valley, L.P.
Cumberland County Improvement Authority
Delaware County Linen
Delaware County Solid Waste Authority
Eaton Aerospace LLC
Eldredge, Inc.
Esschem, Inc.
Exelon Power
Exxon Chester Pike & Oak Lane
FC Pa Stadium, LLC
First Time US Generics
Gloucester County Improvement Authority
Hydrol Chemical
ICS-SDS, LLC
Kimberly-Clark of PA, LLC.

Liberty Electric Power, LLC.
M. Cohen & Sons
Marcus Hook Energy L.P.
Monroe Energy LLC
Multiflex Plating Company
Norquay, LLC
Oatly, Inc
Olympic Tool & Machine Corp
P.Q. Corporation
PADEP - 4th Street Auto Repair
Pennsylvania Machine Works
Polyurethane Specialties Co.
Precious Metals Plating Co.
Pyromet
Pyromet Recycling LLC
Qualawash Holdings LLC
Quotient Sciences
Refresco Beverages US, Inc.
Salem County Improvement Authority
SECCRA
Springfield Township Landfill
Sunoco Logistics Partners L.P - Darby Creek Tank Farm
Sunoco Partners Marketing & Terminals
United Hospital Supply
Waste Management of Delaware Valley - South
Waste Management of PA
Wawa Beverage Co.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Application of Aqua Pennsylvania :
Wastewater, Inc. pursuant to Sections 1102, :
1329 and 507 of the Public Utility Code for : Docket No. A-2019-3015173
approval of the acquisition by Aqua of the :
wastewater system assets of the Delaware :
County Regional Water Quality Control :
Authority :

SPMT Statement No. 3

**SURREBUTTAL TESTIMONY OF KEVIN W. SMITH
ON BEHALF OF
SUNOCO PARTNERS MARKETING & TERMINALS, L.P.**

PUBLIC VERSION

Dated: November 2, 2020

1 **Q. PLEASE STATE YOUR NAME, EMPLOYMENT POSITION, AND ON WHOSE**
2 **BEHALF YOU ARE TESTIFYING.**

3 A. I am Kevin W. Smith. I am an Environmental Compliance Specialist with Sunoco
4 Partners Marketing & Terminals L.P./ Energy Transfer (“SPMT”) and I am testifying on
5 SPMT’s behalf.

6 **Q. DID YOU SUBMIT DIRECT TESTIMONY IN THIS PROCEEDING?**

7 A. Yes. I submitted direct testimony, SPMT Statement No. 3, **[BEGIN HIGHLY**
8 **CONFIDENTIAL]** [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 [REDACTED] **[END**

14 **HIGHLY CONFIDENTIAL]**

15 **Q. DID AQUA OR DELCORA RESPOND TO YOUR TESTIMONY?**

16 A. Yes. Aqua submitted the rebuttal testimony of Jason B. Miller, Aqua Statement No. 10-
17 R. DELCORA submitted the rebuttal testimony of Michael J. DiSantis, Aqua Statement
18 7-R.

19 **Q. PLEASE SUMMARIZE YOUR DIRECT TESTIMONY.**

20 A. **[BEGIN HIGHLY CONFIDENTIAL]** [REDACTED]

21 [REDACTED]

[REDACTED]

[REDACTED]

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III	A	3	

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Line	Category	Value
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5	Category B	90%
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7	Category B	100%
8	Category B	98%
9	Category B	95%
10	Category B	98%
11	Category B	95%
12	Category B	100%
13	Category B	98%
14	Category B	95%
15	Category B	90%
16	Category B	95%
17	Category B	100%
18	Category B	30%
19	Category C	85%
20	Category C	98%
21	Category C	98%
22	Category C	85%
23	Category C	90%

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**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

In Re: Application of Aqua Pennsylvania	:	
Wastewater, Inc. pursuant to Sections 507, 1102,	:	
and 1329 of the Public Utility Code for, inter alia,	:	Docket No. A-2019-3015173
approval of the acquisition of the wastewater	:	
system assets of the Delaware County Regional	:	
Water Quality Control Authority	:	
	:	

Direct Testimony of
THOMAS BROOKS

Finance & Logistics Manager – Kimberly-Clark Chester Mill

On Behalf of Kimberly-Clark Pennsylvania, LLC and
Kimberly-Clark Corporation

September 29, 2020

1 **Q. Please identify yourself for the record.**

2 A. My name is Thomas Brooks. I am the Finance and Logistics Manager for Kimberly-
3 Clark's manufacturing plant in Chester. My business address is One Avenue of the
4 States, Chester, Pennsylvania, 19013.

5
6 **Q. Mr. Brooks, please briefly summarize your professional and educational**
7 **background.**

8 A. I have a BA in Business Administration and a MBA from the Keller Graduate School of
9 Management. I have worked in operations-oriented finance and supply chain logistics
10 positions for 30 years and have been with Kimberly-Clark in various related capacities
11 since 1995. A copy of my resume is attached as Exhibit Kimberly-Clark TB-1.

12
13 **Q. On whose behalf are you testifying in this proceeding?**

14 A. Kimberly-Clark Pennsylvania, LLC and Kimberly-Clark Corporation ("Kimberly-
15 Clark").

16
17 **Q. Is anyone else from Kimberly-Clark testifying in this proceeding?**

18 A. Yes, Mr. Eric Wentz, the Lead Environmental Engineer for Kimberly-Clark's
19 manufacturing plant in Chester.

20
21 **Q. Have you previously provided testimony to the Commission?**

22 A. No.

23

1 **Q. What is the purpose of your testimony in this proceeding?**

2 A. As DELCORA's largest industrial customer, Kimberly-Clark has a direct and substantial
3 interest in the outcome of this proceeding and will be substantially impacted by the
4 proposed acquisition. Aqua has not established that the transaction is necessary or
5 beneficial or that it will serve public interest. DELCORA also appears to be a solvent
6 entity. In addition, Kimberly-Clark is concerned about several specific aspects of the
7 proposed transaction including: (1) that, in the long run, Aqua will not maintain the
8 existing rates and rate structure; (2) that Aqua has not guaranteed the size of the
9 Customer Trust Fund and that any payments or offsets from the Trust Fund will be
10 inadequate and limited in duration; and (3) as a publicly traded company, Aqua will be
11 under pressure to increase profits for its investors and, in comparison to DELCORA,
12 Aqua will have increased capital costs and increased rates of return.

13
14 **Q. Please tell us about Kimberly-Clark's manufacturing plant in Chester.**

15 A. In 1910, Scott Paper Company purchased what was then an abandoned soap factory.
16 Kimberly-Clark acquired the plant in 1995. The plant is 1.1 million square feet and
17 located on a 90 acre site. There are 575 full-time employees who operate the plant 24
18 hours a day, 7 days a week. The plant primarily produces Scott® Brand bath tissue.
19 Kimberly-Clark has invested over \$350 million into infrastructure for the plant over the
20 last ten years.

21
22 **Q. Is the plant located in DELCORA's service area?**

1 A. Yes. As part of its manufacturing operations at this plant, Kimberly-Clark produces
2 wastewater and is a wholesale industrial customer of DELCORA in DELCORA's
3 Western Service Region, along with several other companies.
4

5 **Q. Describe Kimberly-Clark's relationship with DELCORA.**

6 A. DELCORA executed a Service Agreement with Scott Paper Company dated December 1,
7 1973 ("Service Agreement") under which Scott Paper and several other industrial
8 customers funded the construction and operations of DELCORA's Western Wastewater
9 Treatment Plant ("Western Plant") and a related conveyance system. That conveyance
10 system was constructed and now is used by DELCORA in order to serve several
11 industrial customers, including the Scott Paper plant now owned by Kimberly-Clark.
12 Under the Service Agreement, Scott Paper was obligated to pay 26% of the annual debt
13 service charges related to the bonds issued to purchase and construct the Western Plant
14 and 55% of the annual debt service charges for the bonds issued for the purchase and
15 construction of the conveyance system. On December 12, 1995, Kimberly-Clark
16 assumed all of the rights and obligations of Scott Paper under the Service Agreement as
17 part of Kimberly-Clark's acquisition of the plant. Kimberly-Clark has paid rates and
18 charges to DELCORA in accordance with the Service Agreement since it assumed the
19 Agreement. Kimberly-Clark has also continued to fund the capital and operating
20 requirements of the Western Plant and the related conveyance system in accordance with
21 the terms of the Service Agreement. A copy of the Service Agreement is attached to the
22 Application as Exhibit F105.
23

1 **Q. Is the Service Agreement still in effect?**

2 A. In recent weeks, DELCORA has claimed that the Service Agreement expired or was
3 terminated in 2003 and that thereafter Kimberly-Clark agreed that the “pretreatment
4 program’s Rules and Regulations” would determine the terms of the relationship.
5 However, I am unclear exactly which rules or regulations DELCORA is referencing.
6 More importantly, both DELCORA and Kimberly-Clark have acted as if the Service
7 Agreement is still in effect. Kimberly-Clark has been unable to identify any fully formed
8 successor agreement, and it is unclear how the “Rules and Regulations” DELCORA
9 references could create a new agreement or contract. Kimberly-Clark is not asking the
10 Commission to resolve this contractual issue, but the Commission should recognize the
11 importance of the Service Agreement terms that have defined Kimberly-Clark’s
12 relationship with DELCORA.

13
14 **Q. Please explain what you mean when you say DELCORA and Kimberly-Clark have**
15 **acted as if the Service Agreement is still in effect.**

16 A. The quarterly invoices Kimberly-Clark receives from DELCORA states very clearly that
17 the charges incurred are “per agreement dated December 18, 1973.” A copy of such an
18 invoice is attached as Exhibit Kimberly-Clark TB-2. Representatives from DELCORA
19 and Aqua also met with me and others from Kimberly-Clark to explain the proposed
20 transaction. They presented a PowerPoint presentation that stated: “In order to make sure
21 that Aqua can operate DELCORA’s system under a regulatory framework, there are
22 some language changes that are needed in your Service Agreement.” The PowerPoint
23 then goes on to suggest specific changes to the 1973 Service Agreement. In addition, the

1 1973 Service Agreement is attached to the Application (Exhibit F105) and to the Asset
2 Purchase Agreement (Exhibit B1) as one of the contracts DELCORA must assign to
3 Aqua if the transaction is approved. In the Asset Purchase Agreement dated September
4 2019, DELCORA and Aqua clearly state that this Service Agreement will be assigned
5 and assumed.
6

7 **Q. How does Kimberly-Clark compare to other industrial customers of DELCORA?**

8 A. According to DELCORA, Kimberly-Clark is the largest volume industrial customer in
9 the Western Service Region. Kimberly-Clark's flow is 30% higher than the next largest
10 western industrial customer. During the calendar year 2019, DELCORA budget
11 documents indicate that the volume of wastewater discharged by Kimberly-Clark was
12 approximately 1,468,438 million gallons and that Kimberly-Clark paid DELCORA
13 \$4,077,441 for its services. Kimberly-Clark's discharge volumes and revenue are
14 approximately 18.7% and 16.2%, respectively, of DELCORA's Western Plant total
15 volumes and revenue. My colleague Mr. Wentz will also provide testimony on the low-
16 toxicity of Kimberly-Clark's wastewater and will explain that the wastewater contains
17 paper particles and small wood particles believed to be beneficial to the treatment process
18 used at DELCORA's Western Plant.
19

20 **Q. Are there terms in the Service Agreement that recognize Kimberly-Clark's**
21 **substantial contributions to DELCORA and Kimberly-Clark's status as**
22 **DELCORA's largest industrial customer?**

1 A. Yes. DELCORA agreed to provide Kimberly-Clark with sufficient capacity in the
2 Western Plant:

3 Section 1.3 DELCORA, further, hereby agrees to provide
4 sufficient capacity in said Western Regional Plant for the treatment
5 of said wastewater during the term hereof.

6 DELCORA also agreed that Kimberly-Clark will not be responsible for costs unrelated to
7 its own wastewater:

8 Section 3.2 The User Service Charges established by
9 DELCORA, however, will be uniform for all users in the same
10 category and region as Industry. Such Service Charges will not
11 include any costs of: (1) the collection, conveyance and treatment
12 of wastewater in the Eastern Delaware County Service Area; (2)
13 the cost of any of DELCORA's collection conveyance, or
14 treatment facilities in the Western Delaware County Service Area
15 not used for Industry's wastewater hereunder; (3) any debt service
16 costs for expansion of the Western Regional Plant beyond a
17 capacity of 60 MGD, except to the extent that such expansion is
18 required to provide additional capacity or increased degree of
19 treatment for Industry.

20 DELCORA further agreed to utilize all available grants and subsidies:

21 Section 7.1 DELCORA will make all applications for available
22 grants and subsidies with respect to the construction and operation
23 of the facilities owned and operated by It, and used by Industry,
24 and the proceeds thereof will be credited equitable to all users of
25 the system in computing the rates to be charged by DELCORA,
26 subject to applicable State and Federal regulations.

27 That Kimberly-Clark would not be responsible for applying for permits:

28 Section 11.1 This Agreement shall be deemed to be the permit
29 that is required for users, under the DELCORA Standards, Rules
30 and Regulations of 1973 and Industry shall be exempt from the
31 applicability of said permit sections thereof.

32 And that Kimberly-Clark's wastewater would not require a surcharge:

33 Section 20.5 DELCORA agrees that the existing wastewater of
34 Industry, based on representations made by Industry and subject to
35 applicable federal laws and regulations, is acceptable to
36 DELCORA without the necessity for a surcharge.

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Q. Does Kimberly-Clark have concerns about the proposed transaction?

A. Yes. In general, Aqua has not demonstrated that the increased costs of private-sector ownership resulting from the proposed acquisition will be offset by other benefits to rate payers or to the public. There is no evidence that DELCORA is insolvent or that DELCORA will be unable to meet its obligations to its existing customers. Additionally, Aqua has not structured the transaction in a way that recognizes or ensures Kimberly-Clark’s unique status as a high-volume, low-cost industrial customer that has contributed or paid millions of dollars in capital to DELCORA.

Q. What leads you to believe DELCORA is a solvent entity?

A. I have reviewed DELCORA’s 2019 Audit Report, which is publicly available on DELCORA’s website, and there is nothing to indicate DELCORA is or will become insolvent. A copy of this Audit Report is attached as Exhibit Kimberly-Clark TB-3.

Q. Can you explain Kimberly-Clark’s specific concerns about the proposed transaction?

A. Yes. First, Kimberly-Clark is concerned that, in the long run, Aqua will not maintain the existing rates and rate structure. Second, Kimberly-Clark is concerned that any offsets or payments from the Customer Trust Fund will be inadequate and limited in duration, particularly considering that Aqua has not given any binding assurances regarding the size of the Trust Fund. And third, as a private sector firm, Aqua will have significant profitability demands, as well as increased capital costs and increased rates of return.

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Q. Please expand on Kimberly-Clark’s concerns regarding rates and rate structure.

A. The proposed transaction does not ensure Aqua will adhere to the contract pricing principles that were agreed to by DELCORA and are beneficial to Kimberly-Clark and to DELCORA. While this may not be a base rate proceeding, and while Aqua has signaled that it will not initiate a rate case until 2022, the Commission should impose a condition on any approval of this transaction ensuring that high-volume, low-cost industrial customers should only be required to pay for the assets and infrastructure that they actually use. Additionally, Kimberly-Clark should continue to receive rates that reflect its high volume, the low toxicity of its wastewater, and its years of paying debt service charges for the benefit of DELCORA. Kimberly-Clark may not own any of the DELCORA assets, but it has paid for its share of the Western Plant and the conveyance system used in providing service to Kimberly-Clark.

Q. What are Kimberly-Clark’s concerns regarding the Customer Trust Fund?

A. The burden is on Aqua and DELCORA to establish that the proposed transaction will benefit ratepayers and will serve the public interest. Yet the transaction is structured in a way in which it will substantially increase rates for all consumers in the long run. Under the governing statute, the purchase price will be used to substantially increase the rate base. While the Trust Fund may potentially offset or defer any rate increase for a limited period of time, many customers will require service long into the future. In addition, Aqua has not made any binding commitments or guarantees on the size of the Trust Fund, and there may be residual property interests held by various Counties that could further

1 impact the Trust Fund's size. In addition, as structured by Aqua, there is currently no
2 direct oversight of the Trust Fund by the Commission. If there are issues in the future
3 involving the Trust Fund, it is unclear whether, or to what extent, the Commission would
4 have jurisdiction to adjudicate and resolve them.

5
6 **Q. Please expand on Kimberly-Clark's concerns regarding Aqua's status as a private**
7 **sector firm.**

8 A. As a public authority, DELCORA is not beholden to equity investors and is able to raise
9 capital on advantageous terms. DELCORA is also eligible for various grants and loans
10 that are made available to public entities. Under the Service Agreement, DELCORA is
11 obligated to utilize all available grants and subsidies. By contrast, Aqua is a private
12 sector firm obligated and/or pressured to increase profits on behalf of its investors.
13 According to Aqua's 2019 Annual Report, which is publicly available, Aqua has a
14 history of 10% returns. Unlike DELCORA, which has no shareholders, Aqua would be
15 required to raise equity capital in the market. Aqua may not be eligible for all of the
16 same federal and state grants and loans, and Aqua's rate of return would necessarily
17 include a return on equity. As a result, Aqua's overall rate of return and its revenue
18 requirements would likely be substantially higher than DELCORA's. Aqua will also
19 gross-up its revenues to account for taxation, which will also lead to increased revenue
20 requirements. This would all inevitably have an adverse impact on every DELCORA
21 ratepayer, including Kimberly-Clark.

22
23 **Q. Is Kimberly-Clark a "captive" customer of DELCORA?**

1 A. Not at all. Kimberly-Clark's discharge volumes and wastewater treatment costs are
2 significant enough that if it cannot secure certainty with regard to its future rates and
3 service levels, it could elect to construct its own wastewater treatment plant. Kimberly-
4 Clark already operates its own wastewater treatment facilities at several other
5 manufacturing facilities. If the transaction is approved and if Aqua establishes rates that
6 are too high for Kimberly-Clark, the utility may lose its most significant customer. Aqua
7 should make a commitment now that it will take this into account in developing or
8 proposing tariff rates now or in the future.

9
10 **Q. What is Kimberly-Clark asking from the Commission in this proceeding?**

11 A. Kimberly-Clark is asking the Commission to deny the Application on the grounds that
12 the transaction has no proven benefits to the public or DELCORA's current customers.
13 Should the Commission grant the Application, Kimberly-Clark is asking the Commission
14 to mitigate the harm that will result by imposing conditions on Aqua. As a first
15 condition, Aqua should be required to ensure the Customer Trust Fund will be established
16 at the full projected dollar value and will be operated under Commission oversight.
17 Second, to the extent that its future rates provide for recovery of capital costs, Aqua
18 should acknowledge that as a general principle, customers such as Kimberly-Clark should
19 only be required to pay for the portion of the utility's assets and infrastructure that are
20 used to serve them. Third, Aqua should be required to treat the interest payments made
21 by industrial customers, including Kimberly-Clark, as if they were contributions in aid of
22 construction, or the Commission should develop another mechanism that gives Kimberly-
23 Clark credit or recognition for the financial contributions made to DELCORA from 1973

1 to the present. Or, perhaps in light of all the circumstances, Aqua should establish
2 contract rates or contract riders as part of its future tariffs, which would include
3 Kimberly-Clark. Contract rates seem especially appropriate where there are customers
4 that have made substantial financial contributions in the past and have the ability to cease
5 using the public utility in the future, if needed.

6
7 **Q. Does this conclude your direct testimony?**

8 A. At this time, yes. I reserve the right to supplement my testimony if additional
9 information becomes available.

Exhibit Kimberly-Clark TB-1

Controller / Finance Manager / Supply Chain Logistics

EXECUTIVE SUMMARY:

Operations-oriented Financial Controller and Logistics Manager combining teamwork and innovation with demonstrated Business Unit Profitability and Supply Chain effectiveness within the Consumer Products Industry.

- | | |
|----------------|---|
| 2011 - Present | <p>Kimberly-Clark Corporation Chester, PA
<i>Controller / Community Relations:</i> Added Warehouse Logistics and Materials Handling Departments accountability.</p> <ul style="list-style-type: none">• Received 2012 CFO World Class Finance Finalist Award for Project CASH, a \$5 million revenue/cost avoidance project converting a 27-year ash waste stream into viable revenue generating product sale.• Developed / implemented a 5-year Footprint strategic plan taking out \$50 million from Cost of Manufacture to support competitiveness viability and grow margin for supported product lines |
| 2008 - Present | <p>Kimberly-Clark Corporation Chester, PA
<i>Controller / Community Relations:</i> Added Storeroom and Purchasing Departments accountability</p> <ul style="list-style-type: none">• Initiated plans to reduce inventory by 20% for asset consolidations and safety stock leveling• Competitively bid out single source agreements for general and major maintenance crafts• Increased United Way Campaign funding over 400%• Community Impact activities through employee volunteerism and environmentally sustaining projects (i.e. Days of Caring, Stream Clean Up, Tree Planting) |
| 2005 - Present | <p>Kimberly-Clark Corporation Chester, PA
<i>Financial Manager III:</i> Finance, IT, and MRP. Provide coaching, training, and development of Operations Analysis teams which provides planning and analysis of mill supply chain and mill manufacturing processes to support department and mill objectives. Proactively support mill and staff management by providing sound business advice and guidance toward achieving company, business and mill objectives for the Family Care Consumer Products Business Unit.</p> <ul style="list-style-type: none">• Streamlined Finance and IT departmental alignment to meet business needs allowing for annual savings of \$500 thousand• Post SAP Go-Live, built Excel tool to download SAP database financials for non-technical operations line management to manage budgets / control costs. |
| 04/03 to 09/05 | <p>Kimberly-Clark Corporation LaGrange, GA
<i>Mill Information Team Leader:</i> Provide coaching, training, and development of Operations Analysis teams which provides planning and analysis of mill supply chain and mill manufacturing processes to support department and mill objectives. Proactively support mill and staff management by providing sound business advice and guidance toward achieving company, business and mill objectives for the Nonwovens Business Unit.</p> <ul style="list-style-type: none">• Second manufacturing site in K-C to achieve a One-Day Close - led the way for the Corporation in providing data earlier, moving the mill towards an SAP environment and providing value added information to the mill. These improvements allowed analysts more time to do mill related activities and supporting the additional information requested of them for forecasting and budgeting information for their sector and the corporation. |
| 10/01 to 03/03 | <p>Kimberly-Clark Corporation Roswell, GA
<i>Business Analyst III:</i> Financial Consultant to General Manager of Safeskin Gloves Division. \$200 million Profit & Loss responsibility of a \$1 billion Health Care Business Unit.</p> <ul style="list-style-type: none">• Finance liaison with manufacturing operations in Thailand• Drove analysis to support market shift from Powered Gloves to Synthetic products• Consolidated Scientific & Medical Glove Divisions into one Business Unit |

- 6/99 to 9/01 **Kimberly-Clark Corporation** Roswell, GA
Business Analyst II: Financial Consultant to VP of Partnership Products Division. \$100 million Profit & Loss responsibility for 50 employee specialty division (Sales/Marketing, R&D, Product Supply, and Customer Service).
 - Integrated World Support Group transfer sales pricing for all Kimberly-Clark nonwovens
 - Successfully launched J&J "Hurt-Free" Tape into the consumer market.
- 10/98 to 05/99 **Kimberly-Clark Corporation** Roswell, GA
Project Analyst: Financial role: Define, analyze, design, and implement a cost system for the Nonwoven Fabrics business team to track the efficacy of outside converting processes. Logistics role: Streamline communications and processes between outside converters and Kimberly-Clark's customer service, manufacturing, marketing, and planning departments.
- 6/97 to 9/98 **Kimberly-Clark Corporation** Lexington, NC
MIT – Cost Coordinator: Administer mill accounting and information systems for \$75 million nonwovens manufacturing facility. Coordinate training and technical development of analysts.
 - Planned and facilitated an Operations Analysts Conference for 60 people that educated analysts about the technologies, products, and strategies of K-C's nonwovens division.
 - Investigated and corrected discrepancies between cost and production systems. Resulted in restored data integrity, eliminated fictitious variances, and improved trend analysis.
- 8/96 to 5/97 *Operations Analyst II:* Consulted high performance operating teams and supported mill objectives by providing reliable cost and production analysis.
 - Performed financial impact analysis of reducing sterile wrap production, which allowed corporate planning to develop a balanced supply and demand strategy.
 - Analyzed and presented to mill management a summary evaluation on the utilization of mill resources. Reduced overtime abuses by 10% in maintenance and warehouse departments.
- 7/95 to 7/96 **Kimberly-Clark Corporation** Everett, WA
Purchasing Agent: Procured and managed \$35 million of acquisition and delivery of all plant packaging for 150 consumer and industrial paper products.
 - Improved systems and processes regarding the supply of packaging materials from supplier to shop floor. Reduced costs for all parties and streamlined communications between engineering, materials handling, and suppliers.
 - Implemented vendor consignment programs that reduced vital supplies working capital by 50% while maintaining quality, service, and price.
 - Utilized Just-In-Time to balance supply/demand forecasts against packaging inventories and customer orders. Managed dynamic production changes with minimal operating disruption and cost during transition to new product line extension introductions.
- 9/93 to 6/95 **Scott Paper Company** Everett, WA
Financial Planning and Control Analyst: Reported to Controller who managed balance sheet and profit/loss statement reporting for a \$300 million pulp and paper manufacturing facility.
 - Tracked efficacy of and suggested improvements to plant cost reduction programs. Launched cost saving process that reduced freight expense \$50 thousand per year.
 - Educated operating managers to use monthly financial information to control department spending and to track progress towards goals. Combined statistics and costs to show how effective the distribution warehouse shipped and handled product.
 - Implemented Relevant Brand Cost computerized consolidation process to streamline geographically dispersed plant financial closings. Reduced month-end close time by 20%.

EDUCATION

Master of Business Administration - Keller Graduate School of Management, 2004
Bachelor of Arts in Business Administration - Franklin and Marshall College, 1990

Exhibit Kimberly-Clark TB-2



INVOICE

DELCORA100 E. 5th Street

Chester, PA

Phone: (610) 876-5523 Ext 139

CUSTOMER NO: 22KIMBERLY- CLARK CORPORATION
FRONT AND AVENUE OF THE
STATES

CHESTER, PA 19013

INVOICE DATE: 04/06/2020**INVOICE NO:** 2020-00000031**DUE DATE:** 05/29/2020**TOTAL DUE:** \$1,088,156.25

Please detach and return with payment

QUARTERLY BILLING 2020 PO#16601853SECOND QUARTER 2020 ESTIMATED SEWER CHARGE FOR DEBT SERVICE, ADMINISTRATION, OPERATIONS
PER AGREEMENT DATED DECEMBER 18, 1973 AND DELCORA'S 2020 BUDGET ADOPTED NOVEMBER 19, 2019

Item	Description	Quantity	Unit Price	Total Price
------	-------------	----------	------------	-------------

Wholesale		1	\$1,088,156.2500	\$1,088,156.25
Industrial				

TOTAL DUE: \$1,088,156.25

Exhibit Kimberly-Clark TB-3

**DELAWARE COUNTY REGIONAL
WATER QUALITY CONTROL AUTHORITY**

AUDITED FINANCIAL STATEMENTS

DECEMBER 31, 2019



CYNTHIA REIZER LEITZELL, CPA
SYRILA C. ECONOMIDIS, CPA

LEITZELL & ECONOMIDIS, PC
CERTIFIED PUBLIC ACCOUNTANTS

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY**

TABLE OF CONTENTS

	<u>Page</u>
MANAGEMENT'S DISCUSSION AND ANALYSIS.....	1-9
INDEPENDENT AUDITOR'S REPORT.....	10-12
STATEMENTS OF NET POSITION.....	13
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION	14
STATEMENTS OF CASH FLOWS.....	15
NOTES TO FINANCIAL STATEMENTS.....	16-34
 REQUIRED SUPPLEMENTARY INFORMATION	
SCHEDULES OF CHANGES OF NET PENSION LIABILITY AND RELATED RATIOS.....	35-37
 SUPPLEMENTAL INFORMATION	
SCHEDULES OF OPERATING REVENUES BUDGET COMPARISON.....	38
SCHEDULES OF OPERATING EXPENSES.....	39
SCHEDULE OF DEBT SERVICE SEWER REVENUE BONDS, 2007 SERIES.....	40
SCHEDULE OF DEBT SERVICE SEWER REVENUE BONDS, 2015 SERIES.....	41
SCHEDULE OF DEBT SERVICE SEWER REVENUE BONDS, 2016 SERIES.....	42



CYNTHIA FREIZER LEITZELL, CPA
STELLA C. ECONOMIDIS, CPA

LEITZELL & ECONOMIDIS, PC
CERTIFIED PUBLIC ACCOUNTANTS

Page

SCHEDULE OF DEBT SERVICE SEWER REVENUE BONDS, 2017 SERIES.....43

SCHEDULE OF CASH RECEIPTS AND DISBURSEMENTS FUNDS
ESTABLISHED UNDER AN INDENTURE DATED JULY 15, 2001 AND TOTAL
CASH AND INVESTMENTS.....44

INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS
BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN
ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS.....45-46

DELAWARE COUNTY REGIONAL WATER QUALITY CONTROL AUTHORITY

Management's Discussion and Analysis (Unaudited)

December 31, 2019

DELCORA Mission Statement

“Provide Environmentally Responsible and Cost Effective Waste Water Management Services to the Citizens, Businesses and Industries of Southeastern Pennsylvania”

Executive Summary

DELCORA's performance for the year ended December 31, 2019 includes the following key highlights:

- DELCORA is facing significant infrastructure improvements and increased expenses as a result of more stringent and costly environmental regulations. These significant additional costs would have led to large rate increases for all customers. For this reason, DELCORA sought a local partner with experience in large scale capital investment projects, an excellent reputation and close proximity to us. These factors led us to the proposed asset sale to Aqua Pennsylvania Wastewater, Inc. (Aqua)
- On September 17, 2019, DELCORA entered into an Asset Purchase Agreement with Aqua Pennsylvania Wastewater, Inc.
- On March 3, 2020, the Pennsylvania Public Utility Commission (PUC) conditionally accepted for filing the application of Aqua for approval to acquire the DELCORA wastewater system assets.
- On April 1, 2013, a fifteen-year agreement between the City of Philadelphia and DELCORA became effective. Due to the significant anticipated expenses from the increased environmental regulations facing Philadelphia and DELCORA's contractual proportionate share of those costs, it is DELCORA's intention to not renew the agreement when it reaches its term in 2028. Instead, DELCORA has initiated plans to redirect DELCORA's wastewater away from Philadelphia and send it to DELCORA's Western Regional Treatment Plant (WRTP). The design is scheduled to be completed in 2023 with construction completed in 2028. Please refer to Note 9 – Wastewater Treatment Agreement in the Notes to the Financial Statements for further details on the agreement.
- DELCORA entered into a Consent Decree (CD) with the United States Government in August 2015. The CD involves a Combined Sewer Overflow Long-Term Control Plan Update (CSO LTCPU) which evaluates the DELCORA's sewer systems according to United States Environmental Protection Agency (USEPA) requirements and guidance. The updated plan addresses all aspects of the Consent Decree issued to DELCORA by USEPA. Several capital projects are being implemented at significant costs to comply with the CD requirement. Also involved is the implementation of “Early Action Combined Sewer Overflow (CSO) Control Measures”. These measures achieve a reduction in CSO volume.
- Prior to this LTCPU, DELCORA has expended approximately \$150 million in capital improvements to address CSOs as planned in the original 1999 Long Term Control Plan. This update adds over \$120 million in life cycle costs to the prior and ongoing investment within an accelerated 10-year schedule.
- The Combined Sewer Overflow Long-Term Control Plan (CSO LTCP) Update Report and the Nine Minimum Controls Plan were submitted on February 17, 2019. Currently, the LTCP Team is awaiting comments from the USEPA / Pennsylvania Department of Environmental Protection (PADEP) on the submittal of the LTCP Updated Report and the Updated Nine Minimum Controls.
- In 2019, DELCORA completed the replacement of the Bar Screens (4 pump stations) Project - Bar screens at the pump stations perform coarse debris removal. The bar screens at four major pump stations had seen dramatic increases in the required maintenance requirements. This

project replaced the bar screens at the following pump stations: Central Delaware County Pump Station; Muckinipates Pump Station; Darby Creek Pump Station; and Chester Pump Station.

- DELCORA also initiated the design of several major projects in 2019. The largest is the design of a major program to redirect DELCORA's wastewater away from Philadelphia and send it to DELCORA's WRTP. The design is scheduled to be completed in 2023 with construction completed in 2028. Two other design projects are listed below. These relate to the Long Term Control Plan that has been submitted to EPA for approval.

Major Capital projects completed in 2019 included:

• Solids Handling Upgrade Construction	\$ 11,000,000
• HVAC Energy Upgrades – Phase 1	\$ 4,985,046
• Bar Screen Replacements	\$ 3,070,000
• Rehab 7 Siphons	\$ 2,675,000
• I-95 Combined Sewer Line Repair Work	\$ 1,198,000
• Marcus Hook Pump Station & Chester Ridley Creek Pump Station Electrical Upgrades	\$ 789,127

Major Projects in Progress in 2020

- | | |
|---|---------------|
| • 2018 WRTP Upgrades | \$ 22,220,000 |
| • HVAC Energy Upgrades – Phase 2 | \$ 1,149,670 |
| • WRTP Substation No. 2 Replacement | \$ 1,442,777 |
| • Springhill Farm WWTF Pump Station And Sanitary Force Main Project | \$ 678,847 |
| • Eastern Service Area Program | In-Design |
| • Crum Creek Pump Station Bypass Force Maim | In-Design |
| • CSO #5 Partial Separation | In-Design |
- DELCORA sent an average of 26.04 million gallons per day (MGD) in 2019 to the Philadelphia Water Department's (PWD) Treatment Plant vs. 26.41 MGD in 2018. Flow in 2019 at DELCORA's Western Regional Treatment Plant (WRTP) was 40.23 MGD vs. 39.18 MGD in 2018. Total flow in the East and West did not vary significantly in 2019 from 2018 despite a decrease in rainfall from 61.52 inches in 2018 to 47.33 inches in 2019, as a significant amount of 2018's rainfall occurred in late in 2018, resulting in high flow in the first half on 2019. Flow in the East and West both decreased significantly in the second half of 2019.
 - In 2019, revenue from the trucked waste receiving business reached \$6,414,861 an increase of \$1,664,861 (35.0%) over the 2019 budget and an increase of \$692,862 (12.1%) over the prior year. Part of the increase is associated with an overall average price increase of 3% in August of 2019. Revenue has consistently increased annually from a level of approximately \$300,000 in 2004 to the present level.

DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY

Management's Discussion and Analysis (Unaudited)
December 31, 2019

Summary of Organization and Business

The Delaware County Regional Water Quality Control Authority (DELCORA) is a body, politic and corporate, created October 20, 1971, by a resolution of the Council of the County of Delaware, Pennsylvania, the County, under an Act of General Assembly of the State, approved May 2, 1945, P.L. 382, as amended and supplemented, known as the Municipality Authorities Act of 1945, as amended (the "Act").

The governing body of DELCORA is a Board of Directors consisting of nine members appointed by the Delaware County Council. The Board is authorized to exercise any and all powers conferred by the aforementioned Act necessary for the acquisition, construction, improvement, extension, maintenance and operation of the system facilities. A Board Member's term is for 5 years. The terms of the Board members are staggered.

DELCORA does not have taxing power. Ongoing operations are funded from customer revenues. The acquisition and construction of capital assets are funded by capital borrowing, contributions from developers, Federal and State grants and loans, and customer revenues.

The system is divided into two regions: the Eastern Service Area and the Western Service Area. Each is served by a regional wastewater treatment plant. DELCORA is responsible for building and operating interceptors, force mains and pump stations in both regions, building the regional treatment plant in the Western Service Area and acquiring capacity at the Philadelphia Water Department's Southwest Water Pollution Control Plant (SW WPCP) for wastewater treatment for the Eastern Service Area. DELCORA currently owns and operates sewer collection systems serving eight municipalities: the City of Chester, parts of the Township of Chester, and the Boroughs of Parkside, Upland, Trainer, Marcus Hook, Rose Valley and Edgmont. In addition, DELCORA owns and operates 2 treatment plants in housing developments in Pocopson Township, Chester County.

DELCORA History & Background

- Late 1960's—Delaware County recognized the need for a regional wastewater management plan
- All 49 Municipalities designated the Delaware County Planning Commission to develop the plan
 - First phase (1971)—Identified problems, future needs, alternate solutions
 - Second Phase (1972)—Regional plan divided the county into Eastern and Western services areas
 - Eastern Flows (about 50MGD) conveyed to PWD's Southwest Water Pollution Control Plant
 - Western Flows consisting of mixed Municipal/Industrial Waste (Sun Oil, Scott Paper, FMC) conveyed to a new 44MGD, \$50MM plant in Chester
 - Federal construction grants (~\$100MM) utilized in Delaware County and the City of Philadelphia
- DELCORA was created by the County to implement the plan

DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
Management's Discussion and Analysis (Unaudited)
December 31, 2019

Overview of Annual Financial Report

Management's Discussion and Analysis (MD&A) serves as an introduction to the basic financial statements and supplementary information. The MD&A represents management's analysis of DELCORA's financial condition and performance. Summary financial statement data, key financial and operational indicators from DELCORA's strategic plan, the current year budget, bond resolutions, and other management tools were used for this analysis.

The financial statements report information about DELCORA using full accrual accounting methods as utilized by similar business activities in the private sector.

The financial statements include a statement of net position; a statement of revenues, expenses, and changes in net position; a statement of cash flows; and notes to the financial statements. The statement of net assets presents the financial position of DELCORA on a full accrual historical cost basis. While the statement of net position provides information about the nature and amount of resources and obligations at year-end, the statement of revenues, expenses, and changes in net position presents the results of the business activities over the course of the fiscal year and the amounts by which the net assets changed during the year. All changes in net assets are reported concurrently with the occurrence of the underlying event giving rise to the change, regardless of the timing of the related cash flows. This statement also provides certain information about DELCORA's recovery of its costs.

The statement of cash flows reports changes in cash and cash equivalents resulting from operations, financing, and investing activities. This statement presents cash receipts and cash disbursement information, without consideration of the earnings event, the timing of any arising obligations, or depreciation of capital assets.

The notes to the financial statements provide required disclosures and other information that is essential to a full understanding of the financial data provided in the statements. The notes also present information about DELCORA's accounting policies, significant account balances and activities, material risks, obligations, commitments, contingencies and subsequent events, if any. Supplementary information comparing the budget to actual expenses, as well as statements of operating expenses, is also provided.

The financial statements were prepared by DELCORA's staff from the detailed books and records of DELCORA. The financial statements were audited and adjusted, if the adjustments were material, during the independent external audit process.

DELCORA uses the rate model developed by Municipal & Financial Services Group. Rate setting policies employ different methods of cost recovery not fully provided for by generally accepted accounting principles. The primary objective of a rate model is to improve upon the equitable allocation of costs among customer classes and to ensure that capital costs are allocated on the basis of long-term capacity needs, following the axiom that growth pays for growth.

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY**
Management's Discussion and Analysis (Unaudited)
December 31, 2019

Financial Analysis

The following comparative general information and condensed financial statements serve as the key financial data and indicators for management, monitoring and planning. Comments regarding budget-to-actual variances and actual year-to-year variances are included in each section by the name of the statement or account.

	2018	2019	Difference	%
<i>Revenues per thousand gallons billed:</i>				
Residential	\$2.63	\$2.82	.19	7.2
Commercial	\$2.64	\$2.81	.17	6.4
<i>Ratio of Operating Revenue to:</i>				
-Operating Expenses	1.32	1.31	(.01)	(0.8)
-Operating Expenses, net of depreciation	1.54	1.54	.00	0.0
-Total assets (asset turnover)	0.16	0.17	.01	6.2
<i>Ratio of Operating Income to:</i>				
-Operating Revenue	0.24	0.24	.00	0.0
<i>Debt-related ratios:</i>				
Total debt to total assets	0.45	.42	(.03)	(6.7)

Financial Results of System-wide Operations

- Total Liabilities	\$ 188,522,743
Long Term	\$ 172,252,455
Other	\$ 16,270,288
- Total Net Assets	\$ 197,904,415
Invested in capital assets (net of related debt)	\$ 100,754,217
Restricted for Debt Service	\$ 11,116,069
Unrestricted	\$ 86,034,129
- Revenues (By source)	
Commercial Industries	\$ 15,627,770
Residential	50,436,552
Total Operating Revenue	<u>\$ 66,064,322</u>

DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
Management's Discussion and Analysis (Unaudited)
December 31, 2019

2019 Actual Compared to 2019 Budget Results:

	<u>Actual</u>	<u>Budget</u>	<u>Difference</u>
Total Revenues	\$ 68,670,531	\$ 66,528,097	\$ 2,142,434 Favorable
Operating Expenses (Net of Depreciation and Debt Service)	\$ 42,869,486	\$ 44,189,788	\$ 1,320,302 Favorable

Total revenue is \$68,670,531, 3.2% higher than the budget of \$66,528,097, due to a favorable variance in sludge revenue of \$1,665,000 and a favorable variance of \$1,203,000 in interest income. These two favorable variances were partially offset by small variances in other operating revenue categories to get to the overall favorable variance of \$2,142,000.

Significant variances to budget in operating expenses are as follows:

PWD Treatment Costs – actual treatment costs were less than budget by \$1,296,000. Although flow approximated the budget, BOD and TSS readings were lower than the budget. In addition, DELCORA's share of the PWD Long Term Control Plan for 2019 was lower than anticipated.

Chemicals – Total Chemicals was over budget by approximately \$425,000 or 42.9%, due to several factors. These include a substantial increase in the use of RAS chlorination due to process issues, a 30% increase in the price of polymer that was not in the budget, and the use of an un-budgeted chemical that was used to address H2S concentrations in the belt filter press room.

Solicitor and Consulting – These expenses were a combined \$570,000 or 78% over budget due to expenses associated with the Aqua merger, Consent Decree and the PWD contract.

DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
Management's Discussion and Analysis (Unaudited)
December 31, 2019

2019 Actual Compared to 2018 Actual Results:

Operating Revenues and Expenses: DELCORA has various classes of wastewater customers depending on assets used in conveying flow to both the Philadelphia and Chester plants. Retail residential sewer rates increased from \$4.93 to \$5.32 per 1,000 gallons (a 7.9% increase) from calendar year 2018 to 2019. Retail Residential customers are Chester City, Chester Township, and the Boroughs of Parkside, Upland, Marcus Hook, Trainer, Rose Valley and Edmont Township. Total operating revenues increased \$3,906,000 from 2018. This was primarily the result of increased Residential billing of \$500,000, an increase in Western Municipal Authorities of \$950,000, an increase in Eastern Authorities of \$1,540,000 and an increase of \$700,000 in outside hauling.

The following table shows the composition of wastewater operating expenses by major classification of expense for the last two fiscal years.

	2018	% of Total	2019	% of Total	Variance	% Change
PWD Plant Treatment	\$9,625,120	20.5%	\$9,890,358	19.6%	\$265,238	2.8%
Salary and Wages	12,396,648	26.4%	13,039,649	25.9%	643,001	5.2%
Depreciation and Amortization	6,588,896	14.0%	7,526,695	14.9%	937,799	14.2%
Utilities	2,529,871	5.4%	2,719,105	5.4%	189,234	7.5%
Pension	1,944,894	4.1%	2,128,575	4.2%	183,681	9.4%
Employee Benefits	4,648,744	9.9%	4,664,693	9.3%	15,949	0.3%
Solids Disposal	1,329,837	2.8%	1,240,682	2.5%	(89,155)	-6.7%
Repairs and Maintenance	2,778,617	5.9%	2,829,079	5.6%	50,462	1.8%
Engineering and Tech Services	198,361	0.4%	375,692	0.7%	177,331	89.4%
Legal Fees	172,119	0.4%	682,624	1.4%	510,505	296.6%
Minor Equipment and Supplies	2,915,007	6.2%	2,882,190	5.7%	(32,817)	-1.1%
Other Operating Expenses	1,836,288	3.9%	2,417,039	4.8%	580,751	31.6%
Total Operating Expenses	<u>\$46,964,402</u>	100.0%	<u>\$50,396,381</u>	100.0%	<u>\$3,431,979</u>	7.3%

PWD Treatment Costs -- 2019 treatment costs were higher than 2018 by 2.8% (\$265,238). Flow in 2019 to PWD was close to 2018. The increase was due to a price increase instituted by PWD.

Salaries and Wages -- Increased by 5.2% due to normal salary and wage increases of approximately 3.25% along with several positions added in 2019.

Utilities – Increased by almost \$190,000 or 7.5% due primarily to higher natural gas usage. To reduce the chance of RTO short stack openings during the year, we purposely reduced RTO efficiency which resulted in higher natural gas usage.

Depreciation – Increased by \$938,000 or 14.2% from 2018 to 2019 due to a number of significant projects that have been completed and placed in service in both 2018 and 2019.

Cash Flow Activity

The following table shows DELCORA's ability to generate net operating cash. Net cash provided by operating activities is shown both in total dollars and as a percentage of operating revenues.

Net cash flow from operations increased by \$2,851,790 to \$18,764,868 in 2019 from 2018.

	2018	2019	Difference	% Change
Total operating revenues	\$62,157,984	\$66,064,322	\$3,906,338	6.3%
Net cash provided by operations	\$15,913,078	\$18,764,868	\$2,851,790	17.9%
Net operating cash as a % of operating revenue	25.6%	28.4%		

Rate Covenant

In the Bond Resolution, DELCORA covenants and agrees that it will, at all times, prescribe and maintain, and thereafter collect rates and charges for the services and facilities furnished by DELCORA, together with other income, that will yield annual income from operations before depreciation in the calendar year equal to at least one hundred ten percent (110%) of the sum of the annual debt service payments. The rate covenant in the Bond Resolution obligates DELCORA to review rates not less than once a year and to revise such rates and charges as necessary to meet the coverage test.

2019 Operations

WRTP—Water Quality Performance

- Average Suspended Solids - 15 mg/L for the year
- Average cBOD5 - 9 mg/L for the year
- Average cBOD20 % Removal – 96.4% for the year

WRTP—Solids Handling Performance

- Average Dry Tons/Day - 64.3 tons for the year
- Average Cake Solids - 22.3 % for the year
- Average Fuel Oil Usage – 4.87 MCF/Dry Ton for the year

Waste Water Conveyed and Treated

- Western Delaware County To WRTP, including 10.82 MGD from CDCA — ~ 40.23 MGD
- Eastern Delaware County To Philadelphia Southwest Treatment Plant— ~26.04 MGD

Environmental Compliance Issues and Capital Projects

In 2019, DELCORA continued the project called 2018 WRTP Upgrades. This is an expansive overhaul of many of the mechanical and electrical systems at WRTP. Most of the systems included in this project have been in-service since the construction of the WRTP in the mid-1970's. An example is the substations that supply electrical power to the treatment and pumping facilities. A life of 40 years is exceptional service-life for these components. Their decreased reliability indicates that replacement is needed to maintain uninterrupted permit compliance. Another example is the clarifier equipment. It was fabricated from steel. Some minor components were replaced approximately 20 years ago but the main/largest components date back to the original plant construction from 40 years ago. Over the years, minor repairs and recoating has extended the life, but they have now reached a point where repairs are

not effective. The 2018 W RTP Upgrades Project includes replacement of these examples and many other components.

DELCORA's Monitoring and Modeling required by the DELCORA/USEPA/Pennsylvania Department of Environmental Protection Consent Decree has shown that high wet weather flows in the separate serviced areas result in Sanitary Sewer Overflows (SSOs) and contribute to increased CSO discharges. Projects planned under the LT CPU address the impact of CSO discharges as required by the Clean Water Act. However, while SSOs are reduced under the plan, the DELCORA/USEPA consent decree requires the elimination of SSOs. To address the Consent Decree, DELCORA will continue to monitor and model the hydraulically connected system to evaluate SSOs and identify additional areas where remediation is needed. While some of these areas in need of remediation are likely to be in a DELCORA owned system, it is known that there are significant areas in non-DELCORA owned satellite systems that will require investment to address SSOs.

Although monitoring and modeling studies show DELCORA is not causing Water Quality Standards to be exceeded, the plan includes further investment to reduce Combined Sewer Overflow (CSO) discharges and improve water quality. The investments include improvements to the collection system, the treatment plant and the implementation of green infrastructure that will provide multiple benefits to DELCORA customers. These improvements increase the level of system wide annual average wet weather flow capture to at least 90% of the total wet weather flow. This level of capture exceeds the Federal Clean Water Act requirements under USEPA's "Presumptive" approach.

TO CONTACT MANAGEMENT AND REQUESTS FOR INFORMATION

This financial report is designed to provide our clients, taxpayers, customers, investors and creditors with a general overview of the Organization's finances and to demonstrate DELCORA's accountability of its funds. If you have questions regarding this report or would like additional information, contact the Chief Financial Officer at 100 East 5th Street, Chester, Pennsylvania 19013.



CYNTHIA PEIZER LEITZELL, CPA
STELLA C. ECONOMIDIS, CPA

LEITZELL & ECONOMIDIS, PC
CERTIFIED PUBLIC ACCOUNTANTS

INDEPENDENT AUDITOR'S REPORT

Board of Directors
Delaware County Regional Water Quality Control Authority
Chester, Pennsylvania

Report on the Financial Statements

We have audited the accompanying financial statements of the Delaware County Regional Water Quality Control Authority ("DELCORA"), as of and for the years ended December 31, 2019 and 2018, and the related notes to the financial statements, which collectively comprise DELCORA's financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



CYNTHIA FEYZER LEITZELL, CPA
STELLA C. ECONOMIDIS, CPA

LEITZELL & ECONOMIDIS, PC
CERTIFIED PUBLIC ACCOUNTANTS

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Delaware County Regional Water Quality Control Authority as of December 31, 2019 and 2018 and the changes in financial position, and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and net pension liability historical information on pages 1-9 and 35 and 37 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audits were conducted for the purpose of forming an opinion on the Delaware County Regional Water Quality Control Authority's basic financial statements. The schedules of operating revenues-budget comparison, operating expenses, debt service and cash receipts and disbursements-trust funds established under an indenture dated July 15, 2001 and total investments are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The schedules of operating revenues-budget comparison, operating expenses, debt service and cash receipts and disbursements-trust funds established under an indenture dated July 15, 2001 are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedules of operating revenues-budget comparison, operating expenses, debt service and cash receipts and disbursements-trust funds established under an indenture dated July 15, 2001 is fairly stated in all material respects in relation to the basic financial statements as a whole.



CYNTHIA FEYZER LEITZELL, CPA
STELLA C. ECONOMIDIS, CPA

LEITZELL & ECONOMIDIS, PC
CERTIFIED PUBLIC ACCOUNTANTS

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated April 15, 2020, on our consideration of the Delaware County Regional Water Quality Control Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Delaware County Regional Water Quality Control Authority's internal control over financial reporting and compliance.

Leitzell & Economidis, PC

Leitzell & Economidis, PC
Media, Pennsylvania

April 15, 2020

**DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY
STATEMENTS OF NET POSITION
DECEMBER 31,**

	2019	2018
ASSETS		
Current:		
Cash and cash equivalents	\$ 49,554,394	\$ 58,897,690
Investments	50,496,995	54,120,668
Receivables:		
Western Region		
Residential, net of allowance for doubtful accounts of \$110,333 and \$113,776 in 2019 and 2018, respectively	815,092	810,662
Municipal	2,219,787	1,884,022
Major industries	370,023	511,785
Permit industries	114,730	95,505
Notes receivable, current portion	77,814	75,255
Other receivables	1,852,846	1,966,955
Prepaid expenses	450,012	530,461
Total current assets	105,951,693	118,893,003
Non Current:		
Capital assets, net of accumulated depreciation	260,506,518	240,841,951
Notes receivable, net of current portion	1,673,971	1,751,785
Restricted cash and cash equivalents	4,757,706	1,741,419
Restricted investments	6,744,000	9,438,760
Total non current assets	273,682,195	253,773,915
DEFERRED OUTFLOWS OF RESOURCES		
Deferred expense on refunding	3,793,516	4,065,290
Pension plan related deferred outflows	4,598,710	4,172,616
Total assets and deferred outflows of resources	<u>\$ 388,026,114</u>	<u>\$ 380,904,824</u>
LIABILITIES		
Current liabilities:		
Accounts payable and accrued expenses	\$ 5,500,399	\$ 5,910,736
Payable to the City of Philadelphia	1,462,680	1,784,671
Current portion of long-term debt	6,383,067	6,142,895
Accrued bond interest payable	1,116,400	1,154,760
Advances on services		
Central Delaware County Authority	-	-
Muckinipates Authority	259,375	343,216
Darby Creek Joint Authority	652,075	559,963
Municipal	260,684	293,326
Major industries	514,777	482,172
Permit industries	120,831	109,323
Total current liabilities	16,270,288	16,781,062
Noncurrent		
Long term debt, net of current portion	158,332,081	164,715,148
Deferred revenue - Philadelphia rate stabilization	9,021,335	8,825,277
Net pension liability	3,068,684	3,407,987
Deferred compensation plan	350,649	214,870
Deferred revenue - long term control plan	1,479,706	1,440,301
Total non current liabilities	172,252,455	178,603,583
Total liabilities	<u>188,522,743</u>	<u>195,384,645</u>
DEFERRED INFLOWS OF RESOURCES		
Pension plan related deferred inflows	1,598,956	484,843
Total liabilities and deferred inflows of resources	<u>190,121,699</u>	<u>195,869,488</u>
NET POSITION		
Invested in capital assets, net of related debt	100,754,217	94,186,478
Restricted for debt service	11,116,069	11,114,826
Unrestricted	86,034,129	79,734,032
Total net position	<u>197,904,415</u>	<u>185,035,336</u>
TOTAL LIABILITIES AND NET POSITION	<u>\$ 388,026,114</u>	<u>\$ 380,904,824</u>

**DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
FOR THE YEARS ENDED DECEMBER 31,**

	<u>2019</u>	<u>2018</u>
Operating revenues		
Western Region:		
Major Industries	\$ 7,056,587	\$ 6,817,336
Residential	8,532,868	8,044,641
Municipal	9,974,845	9,033,912
Contract operation fees	638,548	652,965
Permit Industries	1,517,774	1,498,561
Total Western Region	<u>27,720,622</u>	<u>26,047,415</u>
Eastern Region:		
Darby Creek Joint Authority	18,173,876	17,299,667
Central Delaware County Authority	9,638,024	9,152,096
Muckinipates Authority	4,116,939	3,936,807
Total Eastern Region	<u>31,928,839</u>	<u>30,388,570</u>
Sludge disposal and processing	6,414,861	5,721,999
Total operating revenues	<u>66,064,322</u>	<u>62,157,984</u>
Operating expenses, including depreciation of \$7,526,695 in 2019 and \$6,588,896 in 2018	<u>50,396,381</u>	<u>46,964,402</u>
Operating income	<u>15,667,941</u>	<u>15,193,582</u>
Nonoperating revenues (expense)		
Interest income	2,453,200	2,405,360
Interest expense	(6,808,997)	(6,888,255)
Bond premium amortization	1,322,852	1,341,976
Deferred cost on refunding amortization	(271,774)	(271,774)
Gain on asset disposition	-	7,847
Other income	153,009	151,074
Total non operating revenues (expense)	<u>(3,151,710)</u>	<u>(3,253,772)</u>
Net income before capital contributions	12,516,231	11,939,810
Capital contributions:	352,848	244,281
Net income	<u>12,869,079</u>	<u>12,184,091</u>
Net position - beginning	<u>185,035,336</u>	<u>172,851,245</u>
Net position - ending	<u><u>\$ 197,904,415</u></u>	<u><u>\$ 185,035,336</u></u>

The accompanying notes to the financial statements are an integral part of these statements.

**DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY
STATEMENTS OF CASH FLOWS**

FOR THE YEARS ENDED DECEMBER 31,

	<u>2019</u>	<u>2018</u>
Cash flows from operating activities:		
Receipts from customers	\$ 65,707,551	\$ 61,823,371
Payments to suppliers	(26,869,325)	(26,911,160)
Payments to employees	(20,073,358)	(18,999,133)
Net cash provided by operating activities	<u>18,764,868</u>	<u>15,913,078</u>
Cash flows from capital and related financing activities:		
Acquisition and construction of capital assets	(27,263,712)	(37,949,513)
Collection of notes receivable	75,255	90,800
Gain on asset disposition	-	7,847
Other income	153,009	151,074
Interest paid	(6,847,097)	(6,926,355)
Repayment of long-term debt	(4,820,044)	(4,594,927)
Net cash used by capital and related financing activities	<u>(38,702,589)</u>	<u>(49,221,074)</u>
Cash flows from investing activities:		
Investments redeemed (purchased)	7,525,023	35,568,749
Investment interest received	2,863,222	2,043,466
Net cash provided by investing activities	<u>10,388,245</u>	<u>37,612,215</u>
Net increase (decrease) in cash and cash equivalents	(9,549,476)	4,304,219
Cash and cash equivalents - beginning	59,103,870	54,799,651
Cash and cash equivalents - ending	<u>\$ 49,554,394</u>	<u>\$ 59,103,870</u>
Reconciliation of operating income to net cash provided by operating activities:		
Net income	\$ 12,869,079	\$ 12,184,091
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	7,526,695	6,588,896
Amortization	(1,051,078)	(1,070,202)
Provision for doubtful accounts	102,494	61,782
Decrease (increase) in:		
Receivables:		
Residential	(4,430)	(24,349)
Municipal	(335,765)	(599,308)
Major industries	141,762	205,260
Permit industries	(19,225)	48,965
Note receivables	75,255	90,800
Other receivables	(295,903)	(571,356)
Prepaid expenses	80,449	(448,452)
Deferred compensation plan		
Deferred outflows/inflows - pension plan	688,019	(484,582)
Increase (decrease) in:		
Accounts payable and accrued expenses	(410,337)	27,200
Net pension liabilities	(339,303)	(170,644)
Payable to the City of Philadelphia	(321,991)	358,139
Deferred revenue - long term control plan	39,405	145,820
Advances on services	19,742	(428,982)
Net cash provided by operating activities	<u>\$ 18,764,868</u>	<u>\$ 15,913,078</u>

The accompanying notes to the financial statements are an integral part of these statements.

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 1 - Summary of Significant Accounting Policies

Nature of Operations - Delaware County Regional Water Quality Control Authority ("DELCORA") was created by the County Council of Delaware County, Pennsylvania, on October 20, 1971, pursuant to the Municipality Authorities Act of 1945. DELCORA has the power to construct, finance, operate and maintain sewer systems throughout Delaware County and adjacent areas included in its drainage basin.

Reporting Entity - The reporting entity has been defined in accordance with the criteria established in Statement 14 issued by the Governmental Accounting Standards Board (GASB) and as amended by GASB Statement 61. The specific criteria used in determining whether DELCORA should be included in another organization's financial reporting entity are financial accountability, fiscal dependency and legal separation.

As defined above, DELCORA should not be included in another organization's financial statements.

Basis of Presentation - DELCORA's financial statements are prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). The Governmental Accounting Standards Board (GASB) is responsible for establishing GAAP for state and local governments through its pronouncements (Statements and Interpretations).

DELCORA's accounts are organized as a governmental enterprise fund, and are used to account for operations (a) that are financed and operated in a manner similar to private business enterprises where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis are financed or recovered primarily through user charges; or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other purposes.

DELCORA distinguishes operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with DELCORA's principal ongoing operations. Operating revenues are charges to customers for services provided. Operating expenses include the cost of services, administrative expenses and depreciation of capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

Basis of Accounting - The financial statements are prepared on the accrual basis of accounting. Revenues are recognized when earned and expenses are recognized when incurred.

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 1 - Summary of Significant Accounting Policies (continued)

Use of Estimates The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reporting amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents - DELCORA considers all highly liquid investments purchased with original maturities of three months or less to be cash equivalents.

Statements of Cash Flows - For the purposes of the statements of cash flows, cash and cash equivalents are defined to be cash on hand, demand deposits, and highly liquid investments with a maturity of three months or less from the date of purchase (as noted above). For financial statement presentation purposes, cash and cash equivalents are shown accordingly. Investments include certificates of deposit with a maturity of over three months from the date of purchase.

Capital Assets - Capital assets have been financed primarily through proceeds from various bond issues, grants from the Environmental Protection Agency and funds generated from ongoing operations. Capital assets are recorded at cost. If actual cost could not be determined from available records, estimated historical cost was used.

Depreciation is computed using the straight-line method over the estimated useful lives of the related assets as follows:

Western Region Treatment	5 - 40	Years
Plant service lines	10 - 60	Years
Force mains pumping	10 - 40	Years
Stations	5 - 10	Years
Machinery and equipment	40	Years

Investments - Investments represent funds established under various trust indentures and secured sewer revenue bonds outstanding. Restricted investments are reserved for liquidation of specific obligations. Investments are stated at fair value.

Advances on Services - Advances on services represents user charges collected in excess of the user's respective share of operating expenses.

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 1 - Summary of Significant Accounting Policies (continued)

Vacation, Sick Leave and Other Compensated Absences - DELCORA employees are entitled to certain compensated absences based on their length of employment. Compensated absences are accrued when earned.

Allowance for Doubtful Accounts - Provisions for doubtful accounts are provided for on the reserve method based on historical experience and management's evaluation of outstanding residential receivables.

Deferred Outflows/Inflows of Resources - DELCORA reports decreases in net assets that relate to future periods as deferred outflows of resources in the statements of net position. DELCORA reports deferred outflows of resources for contributions made to the defined benefit pension plan between the measurement date of the net pension liability and DELCORA's year end. The statement of financial position also reports a section for deferred inflows of resources that represent an acquisition of net position that applies to a future period and so not be recognized as an inflow of resources (revenue) until that time. DELCORA reports deferred inflows of resources related to pension.

New Pronouncements

In 2018, DELCORA early adopted GASB Statement 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. The pronouncement establishes guidance designed to enhance the relevance and comparability of information about capital assets and the cost of borrowing for the reporting period. It also simplifies accounting for interest cost incurred before the end of a construction period. Such interest cost had previously been capitalized as part of the historical cost of a capital asset. Under this pronouncement, which is being applied prospectively, this interest cost should be recognized as an expense in the period in which the cost is incurred.

In 2019, DELCORA adopted GASB Statement 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*. This pronouncement establishes guidance designed to enhance debt-related disclosures in notes to financial statements including those addressing direct borrowings and direct placements. DELCORA does not have direct borrowings or direct placements or unused lines of credit and is in compliance with requisite disclosures pursuant to the pronouncements.

NOTE 2 - Deposits and Investments

Under Section 7.1 of the Pennsylvania Municipality Authorities Act and the Trust Indenture, DELCORA is permitted to invest funds consistent with sound business practices in the following types of investments:

- Obligations of the United States government or its agencies or instrumentalities;
- Obligations of the Commonwealth of Pennsylvania or any of its political subdivisions;
- Deposits in savings accounts or time deposits must be insured by the Federal Deposit Insurance Corporation (FDIC). For amounts above the insured limit, collateral must

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 2 - Deposits and Investments (continued)

- be pledged by the depository.
- Other investments as described in the Trust Indenture Agreement between DELCORA and TD Bank, N.A. dated July 15, 2001.

Deposits - As of December 31, 2019 and 2018, the carrying amount of the entity's deposits was \$9,496,028 and \$6,770,927, respectively.

All funds in the Pennsylvania Local Government Investment Trust ("PLGIT") are invested in accordance with the Pennsylvania Municipality Authorities Act. Each entity owns a prorata share of each investment or deposit which is held in the name of the fund. Other fixed-term investments purchased by the entity through the fund's administrator are purchased in the name of the entity. The balance of the funds as of December 31, 2019 and 2018 was \$48,695 and \$57,039, respectively, included in the deposits noted above.

Custodial Credit Risk - Deposits - Custodial credit risk is the risk that in the event of a bank failure, the entity's deposits may not be returned to it. The entity's investment policy limits the exposure to custodial credit risk by requiring all deposits in excess of federal depository insurance limits to be secured with collateralization pledged by the applicable financial institution. Of the deposits, \$548,695 was covered by federal depository insurance, inclusive. The remaining balance was uninsured and covered by collateral in accordance with the Intergovernmental Cooperation Act of 1972. The entity's certificates of deposit are in excess of three months maturity and are held in a Certificate of Deposit Account Registry program and are covered in their entirety by federal depository insurance.

Investments - The entity's investments are categorized as either (1) insured and registered, or securities held by the entity or its agent in the entity's name, (2) uninsured and unregistered, with securities held by the counterparty's trust department or agent in the entity's name, or (3) uninsured and unregistered with securities held by the counterparty, or by its trust department or agent but not in the entity's name.

All funds held in accordance with the Trust Indenture for the Sewer Revenue Bonds (see page 44) are invested in accordance with the Trust Indenture Agreement between DELCORA and TD Bank, N.A. dated July 15, 2001. The balance as of December 31, 2019 and 2018 was \$103,186,134 (including cash of \$6,164; certificates of deposit of \$16,865,583, PLGIT Term investments of \$72,075,000 PLGIT Arm of \$11,599,388 and repurchase agreements of \$2,639,999) and \$118,210,406 (including cash of \$997,665; certificates of deposit of \$24,792,948, PLGIT Term investments of \$72,681,248, PLGIT Arm of \$18,119,333 and repurchase agreements of \$1,619,212) respectively. Certificates of deposit are held in a PLGIT CD program and are covered in their entirety by federal depository insurance. These funds are included as part of the overall cash and cash equivalent and investments as shown in the chart on page 21.

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 2 - Deposits and Investments (continued)

Investments maturing in less than one year from original purchase are recorded at unamortized cost. Investments maturing beyond one year from original purchase are recorded at fair value.

Custodial Credit Risk - Investments - For an investment, custodial credit risk is the risk that in the event of the failure of the counterparty, the entity will not be able to recover the value of its investments or collateral security that are in the possession of an outside party. The entity has no investments subject to custodial credit risk.

Fair Value Measurement

The Authority's investments are measured and reported at fair value and are classified according to the following hierarchy:

Level 1—Investments reflect prices quoted in active markets

Level 2—Investments reflect prices that are based on a similar observable asset either directly or indirectly, which may include inputs in markets that are not considered to be active.

Level 3—Investments which reflect prices based on unobservable resources

The categorization of investments within the hierarchy is based upon the pricing transparency of the instrument and should not be perceived as the particular investment's risk.

The Authority considers all investments to be Level 1.

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 2 - Deposits and Investments (continued)

	2019	2018
Unrestricted cash and investments:		
Cash and cash equivalents		
Cash	\$ 9,496,028	\$ 6,770,927
PLGIT ARM	11,597,070	18,111,912
PLGIT CD	9,880,330	6,848,069
PLGIT TERM	18,575,000	27,158,092
TD Ameritrade	5,966	8,690
Cash and cash equivalents	<u>\$ 49,554,394</u>	<u>\$ 58,897,690</u>
Investments		
Certificates of deposit originally maturing beyond three months	\$ 4,752,312	\$ 15,262,119
PLGIT Term	42,760,000	37,033,156
Repurchase agreements	2,639,999	1,619,213
TD Ameritrade	344,684	206,180
Total investments	<u>\$ 50,496,995</u>	<u>\$ 54,120,668</u>
	2019	2018
Restricted cash and investments:		
Cash and cash equivalents		
PLGIT ARM	\$ 2,317	\$ 7,419
PLGIT Term	4,240,000	1,734,000
Certificates of deposit originally maturing less than three months	515,389	-
Cash and cash equivalents	<u>\$ 4,757,706</u>	<u>\$ 1,741,419</u>
Investments		
Certificates of deposit originally maturing beyond three months	\$ 244,000	\$ 1,713,760
PLGIT Term	6,500,000	7,725,000
Total investments	<u>\$ 6,744,000</u>	<u>\$ 9,438,760</u>

NOTE 3 - Capital Assets

As noted above, DELCORA in 2018 adopted GASB Statement 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. Capital assets at December 31, 2019 and 2018 included previously capitalized interest of \$2,595,820 included in the historical costs of the assets. These costs are depreciated over the lives of the projects. Interest incurred is expensed accordingly. During this period, interest expense totaled \$6,808,997.

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 3 - Capital Assets (continued)

Capital assets activity for the year ended December 31, 2019, is as follows:

	Balance 01/01/19	Additions	Deletions	Balance 12/31/19
Capital assets not being depreciated:				
Land and right of way	\$ 5,829,304	\$ -	\$ -	\$ 5,829,304
Construction in progress	57,541,531	25,430,498	(37,009,910)	45,962,119
Total capital assets not being depreciated	63,370,835	25,430,498	(37,009,910)	51,791,423
Capital assets being depreciated:				
Western Region Treatment Plant	138,331,549	30,021,878	-	168,353,427
Service lines and force mains	106,915,341	8,109,174	(72,450)	114,952,065
Pumping stations	40,303,863	118,412	-	40,422,275
Building and improvements	6,511,556	-	-	6,511,556
Machinery and equipment	5,296,974	593,660	(119,192)	5,771,442
Total capital assets being depreciated	297,359,283	38,843,124	(191,642)	336,010,765
Total capital assets	360,730,118	64,273,622	(37,201,552)	387,802,188
Accumulated depreciation				
Western Region Treatment Plant	69,237,711	3,366,399	-	72,604,110
Service lines and force mains	27,327,923	2,335,762	-	29,663,685
Pumping stations	18,588,881	1,024,557	-	19,613,438
Building and improvements	3,147,395	170,726	-	3,318,121
Machinery and equipment	1,586,257	629,251	(119,192)	2,096,316
Total accumulated depreciation	119,888,167	7,526,695	(119,192)	127,295,670
Capital assets, net of depreciation	\$ 240,841,951	\$ 56,746,927	\$ (37,082,360)	\$ 260,506,518

NOTE 4 - Notes Receivable

DELCORA had a note receivable from Folcroft Borough for renovations to a pump station. The note is being repaid over 20 years with installments of \$2,619 per month including interest at 5.25%. The balance of the note receivable was repaid in 2018 in the amount of \$18,018 (the amount remaining at December 31, 2017).

DELCORA has an additional note receivable from Edgmont Township established in 2016 in the amount of \$1,775,838 for payment of debt on its behalf to the Central Delaware County Authority. In 2017, additional debt was incurred bringing the balance of the note receivable to \$1,970,208.

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 4 - Notes Receivable (continued)

The note is being repaid over 20 years at the rate of 3.40% per annum, with anticipated payments of principal and interest of \$137,375 annually. Principal in the amount of \$75,255 was paid leaving a balance of \$1,751,785.

NOTE 5 - User Agreements

In accordance with a County-Wide Sewerage Facilities Plan (the "Plan") developed in 1972 and by orders of the Commonwealth of Pennsylvania Department of Environmental Protection, various municipal authorities and industries in Delaware County were ordered to negotiate with DELCORA for future treatment of sewage in its regional facilities.

The Plan divided the County into two sections: Eastern Service Region and Western Service Region. Eastern Service Region wastewater is treated in the upgraded and expanded Philadelphia Southwest Water Pollution Control Plant ("City Plant"). Western Service Region wastewater is treated at a regional plant constructed on the site of the former City of Chester Plant. The Central Delaware County Authority has the ability to flow to either plant.

In order to execute the Plan, DELCORA entered into service agreements with municipalities and major industries in DELCORA's service area. The agreements are for various terms up to 50 years.

NOTE 6 - Long-Term Debt

DELCORA's long-term debt consists of sewer revenue bonds, a note payable consisting of a Pennsylvania Infrastructure Investment Authority "Pennvest" note payable and deferred issuance premiums.

The long-term indebtedness is as follows:

	Original Indebtedness	Interest rate	Maturity Date	1/1/2019	New indebtedness	Principal/ Amortization	12/31/2019	Due in one year
Revenue Bond 2007	\$ 36,235,000	5.25%	05/01/25	\$ 19,910,000	\$ -	\$ 4,335,000	\$ 15,575,000	\$ 4,570,000
Revenue Bond 2015	36,205,000	5.0-5.50%	5/1/2045	36,205,000	-	-	36,205,000	-
Revenue Bond 2016	52,855,000	5.00%	5/1/2046	52,855,000	-	-	52,855,000	-
Pennvest Note	10,038,785	1.06%	9/1/2031	6,586,878	-	485,044	6,101,834	490,216
Revenue Bond 2017	32,275,000	5.00%	5/1/2033	32,275,000	-	-	32,275,000	-
	<u>\$ 167,608,785</u>			<u>147,831,878</u>	<u>-</u>	<u>4,820,044</u>	<u>143,011,834</u>	<u>5,060,216</u>
Deferred issuance								
Premiums				23,026,165	-	1,322,852	21,703,313	1,322,851
				<u>\$ 170,858,043</u>	<u>\$ -</u>	<u>\$ 6,142,896</u>	<u>\$ 164,715,147</u>	<u>\$ 6,383,067</u>

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 6 - Long-Term Debt (continued)

Sewer Revenue Bond interest is payable on May 1st and November 1st.

Aggregate maturities and required sinking fund payments of long-term debt subsequent to December 31, 2019 are as follows:

Year ending December 31,	Principal	Interest	Principal and Interest	Issuance premiums	Total
2020	\$ 5,060,216	\$ 6,608,430	\$ 11,668,646	\$ 1,322,851	\$ 12,991,497
2021	5,315,442	6,358,716	11,674,158	1,322,851	12,997,009
2022	4,910,725	6,152,939	11,063,664	1,322,851	12,386,515
2023	5,131,063	5,930,001	11,061,064	1,322,851	12,383,915
2024	5,381,459	5,684,868	11,066,327	1,322,851	12,389,178
2025-2029	30,995,261	24,325,181	55,320,442	5,633,096	60,953,538
2030-2034	32,737,668	16,504,844	49,242,512	4,430,540	53,673,052
2035-2039	19,885,000	10,599,325	30,484,325	2,164,725	32,649,050
2040-2044	24,600,000	5,395,225	29,995,225	2,164,726	32,159,951
2045-2046	8,995,000	545,800	9,540,800	695,971	10,236,771
	<u>\$ 143,011,834</u>	<u>\$ 88,105,329</u>	<u>\$ 231,117,163</u>	<u>\$ 21,703,313</u>	<u>\$ 252,820,476</u>

The Sewer Revenue Bonds were issued pursuant to the Trust Indenture Agreement between DELCORA and TD Bank, NA, ("Trustee") dated July 15, 2001. TD Bank replaced Chase Manhattan Trust Company, NA., now known as JP Morgan Chase, who was the trustee under the previous indenture. Under the July 15, 2001 Indenture, DELCORA has pledged certain assets and agreed to covenants and conditions, the most significant of which are:

- Fix rates and rentals sufficient to cover the costs of operating the system;
- Pledge revenues to secure the outstanding bonds;
- Net Revenues at least equal to 100% of annual debt service requirements of all outstanding bonds exclusive of funds deposited into the revenue fund from the renewal and replacement fund;
- Net Revenues at least equal to 1.1 times the annual debt service requirements of all outstanding bonds;
- Establish certain funds to account for DELCORA activity; and,
- Maintain and operate the system in a sound and economical manner.

Management believes it has complied, in all material respects, with all covenants and requirements of the Indenture.

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 6 - Long-Term Debt (continued)

BOND REFUNDING

During 2007, DELCORA issued the Sewer Revenue Bonds, 2007 Series. The 2007 Series bonds were issued to provide funds to advance refund certain maturities of DELCORA's Series 2001 and Series 2004 bonds. Proceeds from the issuance of the 2007 Series bonds were deposited in an irrevocable trust with an escrow agent to provide for the debt service required for advance refunding of the bonds.

During 2017, DELCORA issued the Sewer Revenue Bonds, 2017 series. The proceeds of the 2017 Bonds, along with other available funds, were utilized to advance refund all of the outstanding 2013 Bonds as well as to pay for the costs and expenses of issuing the 2017 Bonds. The proceeds were deposited in an irrevocable trust with an escrow agent to provide for the debt service required for the advance refunding of the bonds.

NOTE 7 - Commitments and Contingencies

Commitments - DELCORA had construction commitments outstanding of \$14,100,877 and \$32,382,192 at December 31, 2019 and December 31, 2018, respectively.

DELCORA also has the following leases:

- A 60-month lease agreement for copiers in the amount of \$1,750 per month expiring May 31, 2022.
- Several cell tower leases at various locations for periods ending from December 31, 2019 through May 31, 2022.

Future operating lease payments as of December 31, 2019 are as follows:

2020	\$	44,145
2021		42,914
2022		30,664
	\$	<u>117,722</u>

Contingencies - DELCORA is involved in various claims and lawsuits, both for and against DELCORA, arising in the normal course of business. Management believes that any financial responsibility that may be incurred in settlement of such claims and lawsuits would not be material to DELCORA's financial position.

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 8 - Employee Retirement Plans

DEFINED BENEFIT PLAN

Plan Policies - For purposes of measuring net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, pension expense, and information about the Plan fiduciary net position have been determined on the same basis as they are reported by the Plan. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value. The change in liability resulting from a change of Plan provisions is recognized immediately in pension expense. The change in liability resulting from a change of assumptions is recognized in pension expense over a closed period equal to the average of the expected remaining service lives of all Plan participants (active and inactive). The change in liability resulting from differences between expected and actual experience is recognized in pension expense over a closed period equal to the average of the expected remaining services lives of all Plan participants (active and inactive). The change in net pension liability resulting from differences between projected and actual earnings on Plan assets is recognized in pension expense over a closed period of five years.

Certain assumption changes were made as of December 31, 2018 as a result of an experience study conducted in 2019 for calendar years 2014 through 2018.

Plan Description - Delaware County Regional Water Quality Control Authority Retirement Plan (the "Plan") is a single-employer defined benefit pension plan administered by DELCORA. The Plan provides early retirement, normal retirement, and disability benefits to plan members. Plan benefits were established under the terms of the plan document. The Plan allows amendments by DELCORA. The operation of the Plan is governed by the provisions of certain public employee laws under the Commonwealth of Pennsylvania Code which are administered by the Public Employee Retirement Commission of the Commonwealth of Pennsylvania.

Pension Benefits - Pension benefits are as follows:

Normal Retirement: A member is eligible upon attainment of age 65.

For salaried employees, the accrued benefit equals the sum of:

- (a) 1.50% of average applicable compensation multiplied by years of service completed on or after January 2, 2006;
- (b) 1.45% of average applicable compensation multiplied by years of service completed on or after January 2, 2004 and before January 2, 2006;
- (c) 1.35% of average applicable compensation multiplied by years of service completed on or after January 2, 2000 and before January 2, 2004; and
- (d) 1.50% of average applicable compensation multiplied by years of service completed prior to January 2, 2000;

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 8 - Employee Retirement Plans (continued)

For non-salaried employees, the accrued benefit equals the sum of:

- (a) 1.65% of average applicable compensation multiplied by years of service completed on or after January 2, 2006;
- (b) 1.60% of average applicable compensation multiplied by years of service completed on or after January 2, 2004 and before January 2, 2006; and
- (c) 1.50% of average applicable compensation multiplied by years of service completed prior to January 2, 2004;

Early Retirement: A member is eligible for a retirement benefit upon attainment of age 55 and the completion of ten years of service equal to the portion of the normal retirement benefit that has been accrued as of the participant's early retirement date, reduced by 5/16% for each month that the benefit commencement date precedes the normal retirement date.

Funding Policy - Pursuant to the plan document, DELCORA is required to contribute to the Plan from time to time amounts necessary to satisfy the applicable requirements of every relevant statute and expected to be sufficient on the basis of actuarial estimates to provide the benefits specified in the Plan. There is no required contribution rate of the employer in dollars or as a percentage of covered payroll. Active plan members are not required to contribute to the Plan. The Plan was amended in 2011 for technical compliance updates.

The annual contribution calculation was determined as part of the January 1, 2017 actuarial valuation. Funding requirements for the plan years 2018 and 2019 was established as part of the January 1, 2017 actuarial valuation. Entry Age Normal Actuarial Cost Method is used as the actuarial valuation method. The actuarial assumptions pursuant to the January 1, 2019 valuation included (a) interest rate of 7.0% compounded annually, (b) lump sum payments are valued based on the 15 year average of IRS section 417e segment rates of 3.0% for the first five years, 4.9% for the next fifteen years, and 5.70% for all years thereafter, (c) mortality rates are based on Pub-2010 General Amount Weighted Mortality Tables projected from 2010 with Mortality Improvement Scale MP-2019; for Lump Sum payments, the IRS section 417e applicable mortality table is used, (d) turnover (withdrawal) are based on Turnover Table T3, (e) salary increases of 4.00% per annum (f) the Level Dollar Open Method over an open period of 30 years is used to amortize the unfunded actuarial liability with a remaining amortization period of 10 years. The Plan amendment and restatement adopted in 2011 was considered in the valuation.

Act 205 requires full funding of the entry age normal cost plus Plan expenses, in addition to amortization of the unfunded liability to ultimately achieve a 100% funded status. The Plan's fiduciary net position is projected to be sufficient to make projected benefit payments for all future years. Hence, there is no "depletion date" and therefore the discount rate is equal to the assumed long-term rate of return of 7.0%.

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 8 - Employee Retirement Plans (continued)

Assets are valued at fair market value.

Pension Liabilities, Pension Expense, Pension Contributions, Plan Assets, Employees
Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

Plan membership as of December 31, 2019 was as follows:

Inactive employees or beneficiaries receiving benefits	16
Inactive employees entitled to but not yet receiving benefits	25
Active employees	133
Total employees covered	<u>174</u>

Custodial credit risk is the risk that in the event of a bank failure, the Plan's deposits may not be returned. At December 31, 2019, the carrying amount and the balance of the Plan's deposits in cash and cash alternatives totaled \$281,305 and was held with Ameritrade, of which \$250,000 was covered by FDIC insurance.

In accordance with Government Accounting Standards Board (GASB) No. 67, investments are reported at fair value. Unrealized gains and/or losses due to fluctuations in market value are recorded in the financial statements. Securities traded on national exchanges are valued at the last reported sales price. Realized gains or losses are recorded at the time of sale. Net appreciation or depreciation in the fair value of plan investments include both realized and unrealized gains and losses and related fees as well as investment. Plan investments at year end are as follows:

Ishares TIPS Bond ETF	\$ 927,431
Vanguard Total Bond Market Index Fund	2,400,996
Vanguard International Bond Index Fund	938,888
Vanguard AllWRLD Ex US	4,464,152
Vanguard Intermediate Term Corp Bond	463,226
Vanguard Mid Cap Index Fund	1,060,884
Vanguard Growth ETF	3,043,150
Vanguard Value ETF	2,996,370
Vanguard Small Cap Index Fund	1,028,624
	<u>17,323,721</u>
Cash and cash equivalents/mutual funds	623,174
	<u>\$ 17,946,895</u>

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 8 - Employee Retirement Plans (continued)

Pension fund investments, pursuant to Government Accounting Standards Board Statement Nos. 3 and 40, are categorized to give an indication of the level of risk assumed by the Plan at December 31, 2019. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the Plan and are held by either counterparty or the counterparty's trust department or agent but not in the Plan's name. Custodial credit risk is the risk that, in the event of the failure of the counterparty, the Plan will not be able to recover the value of its investments or collateral securities in the possession of an outside party.

The securities are registered in the name of the Plan; thus, they are not subject to credit risk. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment or deposit. Generally, the longer the maturity of an investment, the greater sensitivity of its fair value to changes in market interest rates. The Board has no formal policy that limits investment maturities as a means of managing its exposure to interest rate risk. The Board has, however, adopted a long-term investment policy to weigh the chances and duration of investment losses against the long-term potential for appreciation of assets. Investments in mutual funds and certain investment pools are excluded from this requirement.

The Plan's investment policy regarding the allocation of invested assets is established and may be amended by the Plan's Board by a majority vote of its members. The policy of the Board is to pursue an investment strategy that reduces risk through prudent diversification among its asset classes given the Plan's liability structure. Following is the Board's adopted asset allocation policy as of December 31, 2019:

<u>Asset Class</u>	<u>Target Allocation</u>
Equities	70.00%
Fixed Income	27.00%
Cash	3.00%

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 8 - Employee Retirement Plans (continued)

The long-term expected rate of return on pension plan investments was determined using a method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.. The long-term rate of return on assets is expected to be approximately 6.65 percent per year before inflation factor of 2.25%. The net blended rate representing the real rate of return, inclusive of inflation and net of plan expenses was 4.10%. Long term expected real rate of return was as follows:

Asset Class	Long-Term Expected Real Rate of Return
Equities	5.78%
Fixed Income	1.35%
Cash	-0.31%
Total Gross Blended Return	4.40%
Less: Plan Expenses	0.30%
Total Net Blended Return	4.10%

For the year ended December 31, 2019, the annual rate of return on the pension plan investments, net of pension investment expense was 21.41%. The rate of return is calculated net of investment expense, adjusted for the changing amounts actually invested.

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 8 - Employee Retirement Plans (continued)

DELCORA recognized defined benefit pension expense in the amount of \$1,988,715 and \$1,944,894 for the years ended December 31, 2019 and 2018, respectively. At December 31, 2019, DELCORA reported deferred outflows of resources and deferred inflows of resources related to the pension as follows:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 1,294,165	\$ 45,403
Changes in assumptions	3,304,545	374,621.00
Net differences between projected and actual earnings on pension plan investments	<u>-</u>	<u>1,178,932</u>
	<u>\$ 4,598,710</u>	<u>\$ 1,598,956</u>

Future recognition of deferred outflows and inflows in pension expense	<u>Fiscal Year</u>	<u>Amount Recognized</u>
	2020	\$ 521,538
	2021	\$ 555,106
	2022	\$ 844,840
	2023	\$ (57,603)
	2024	\$ 318,006
	Thereafter	\$ 817,867

Sensitivity of Net Pension Liability to Changes in Discount Rate:

	1% Decrease 6.00%	Current Rate 7.00%	1% Increase 8.00%
Net pension liability	<u>\$4,531,804</u>	<u>\$3,068,684</u>	<u>\$1,753,126</u>

Defined Contribution Plan

DELCORA established the Delaware County Regional Water Quality Control Authority Defined Contribution Plan (401a Plan) in 2000 covering all salaried employees. Employer contributions were \$139,860 and \$127,224 for the years ended December 31, 2019 and 2018, respectively. DELCORA matches employee contributions up to 1.5% with an additional year end match of 1.5% of employee's payroll.

Additionally, all employees are eligible to contribute into a 457 Plan.

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 8 - Employee Retirement Plans (continued)

DELCORA also provides a deferred compensation Section 409(a) Plan for certain employees. Compensation for the participants in the Plan is earned in one year, but is paid in a future year. This is considered a nonqualified deferred compensation plan. The funds remain within DELCORA and represents a liability on DELCORA's balance sheet shown on these financial statements as \$350,649 and \$214,870 for 2019 and 2018, respectively.

NOTE 9 - Wastewater Treatment Agreement

In 1974, DELCORA entered into a thirty-year agreement with the Philadelphia Water Department (the City") to pay the City for treatment of wastewater sent to the Southwest Philadelphia plant based on its proportionate share of the City's operating costs. The agreement with the City was extended until 2011.

In July 2011, DELCORA signed an agreement with the City for treatment of the flows. The term was for the longer of either two years or one year after DELCORA received information about the City's Long-Term Control Plan (LTCP). The agreement was considered a bridge toward a long-term agreement.

There remained a need for the determination by the City of DELCORA's proportionate share of the \$4 billion in estimated costs over twenty-five years for the implementation of the City's LTCP. The flow capacity thresholds in the contract had remained the same as the 1974 agreement. The management fee had been increased from 10% to 12%. The contract also included a different method for accounting for DELCORA's share of the City's capital costs, i.e., the depreciation and return on investment method.

On April 1, 2013, a fifteen-year agreement between the City and DELCORA became effective. Many of the terms of the July 2011 agreement remain in effect. DELCORA has received an estimate of its proportionate share of LTCP costs for which in 2015 municipal revenue was deferred and is shown on these statements as deferred revenue - long term control plan. Additional deferred revenue relative to Philadelphia is represented by the deferred revenue - rate stabilization for which a portion of revenues are deferred to protect from unanticipated or precipitous charges from Philadelphia.

NOTE 10 – Delaware County Long-Term Control Plan Update

The Combined Sewer Overflow Long-Term Control Plan (CSO LTCP) Update Report and the Nine Minimum Controls Plan was submitted on February 17, 2019 to meet a Consent Decree and regulatory requirements requiring the implementation of "early action combined sewer overflow" (CSO) measures designed to achieve a reduction in CSO volume. Currently the LTCP Team is awaiting comments from the USEPA / PADEP on the submittal of the LTCP Updated Report and the Updated Nine Minimum Controls.

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 10 – Delaware County Long-Term Control Plan (continued)

This Update (LTCPU) has evaluated the Delaware County Regional Water Quality Control Authority's (DELCORA's) sewer systems according to United States Environmental Protection Agency (USEPA) requirements and guidance. The final plan addresses all aspects of the Consent Decree issued to DELCORA by USEPA. Although monitoring and modeling studies show DELCORA is not causing Water Quality Standards to be exceeded, the plan includes further investment to reduce Combined Sewer Overflow (CSO) discharges and improve water quality. The investments include improvements to the collection system, the treatment plant and the implementation of green infrastructure that will provide multiple benefits to DELCORA customers. These improvements increase the level of system wide annual average wet weather flow capture to over 90% of the total wet weather flow. This level of capture exceeds Federal Clean Water Act requirements under USEPA's "Presumption" approach.

Prior to this LTCPU, DELCORA has expended approximately \$150 million in capital improvements to address CSOs as planned in the original 1999 Long Term Control Plan. This update adds over \$120 million in life cycle costs to the prior and ongoing investment within an accelerated 10-year schedule. This additional investment is affordable if other program costs do not increase significantly.

DELCORA Monitoring and Modeling required by the DELCORA/USEPA/Pennsylvania Department of Environmental Protection Consent Decree has shown that high wet weather flows in the separate serviced areas result in Sanitary Sewer Overflows (SSOs) and contribute to increased CSO discharges. Projects planned under the LTCPU address the impact of CSO discharges as required by the Clean Water Act. However, while SSOs are reduced under the plan, the DELCORA/USEPA consent decree requires the elimination of SSOs. To address the Consent Decree, DELCORA will continue to monitor and model the hydraulically connected system to evaluate SSOs and identify additional areas where remediation is needed. While some of these areas in need of remediation are likely to be in a DELCORA owned system, it is known that there are significant areas in non-DELCORA owned satellite systems that will require investment to address SSOs and remain cost effective.

NOTE 11 - Asset Purchase Agreement

On September 17, 2019, DELCORA entered into an asset purchase agreement with Aqua Pennsylvania Wastewater, Inc ("Aqua"). through which Aqua will acquire all assets and assume all liabilities as specified in the agreements. The purchase price shall be \$276,500,000. The sale proceeds are to be used to pay outstanding debt with the balance to be reinvested by DELCORA in a rate stabilization plan. Such plan intends that the proceeds of the sale will be utilized to offset future customer bill increases. The sale requires and is pending approval by the Pennsylvania Public Utility Commission.

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018**

NOTE 12 – Subsequent Events

DELCORA has evaluated subsequent events through April 15, 2020, which represents the date on which the financial statements were available to be issued.

REQUIRED SUPPLEMENTARY INFORMATION

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY
REQUIRED SUPPLEMENTARY INFORMATION**

SCHEDULE OF CHANGES OF NET PENSION LIABILITY AND RELATED RATIOS

	2014	2015	2016	2017	2018	2019
<i>Total Pension Liability</i>						
Service cost	\$ 433,832	\$ 451,185	\$ 647,770	\$ 743,624	\$ 833,107	\$ 928,895
Interest	962,400	982,877	1,321,748	1,345,004	1,236,708	1,350,242
Changes in benefit terms	-	-	-	-	(4,914)	181
Differences between expected and actual experience	183,182	465,714	-	384,396	(59,417)	962,659
Changes in assumptions	-	4,170,435	-	1,012,254	(490,245)	1,158,057
Benefit payments	(664,651)	(1,260,137)	(1,994,115)	(2,079,637)	(3,272,141)	(1,806,164)
Net change in total pension liability	914,763	4,810,074	(24,597)	1,405,641	(1,756,902)	2,593,870
Total pension liability - beginning	13,072,730	13,987,493	18,797,567	18,772,970	20,178,611	18,421,709
Total pension liability - ending	<u>\$ 13,987,493</u>	<u>\$ 18,797,567</u>	<u>\$ 18,772,970</u>	<u>\$ 20,178,611</u>	<u>\$ 18,421,709</u>	<u>\$ 21,015,579</u>
<i>Plan Fiduciary Net Position</i>						
Contributions - Authority	\$ 1,150,000	\$ 4,450,000	\$ 2,168,616	\$ 1,711,040	\$ 2,600,000	\$ 1,640,000
Contributions - Employee	-	-	-	-	-	-
Net investment income	678,120	33,319	1,146,717	2,466,801	(867,963)	3,147,159
Benefit payments	(664,651)	(1,260,137)	(1,994,115)	(2,079,637)	(3,272,141)	(1,806,164)
Other	-	-	-	-	-	-
Administrative expense	(27,963)	(31,155)	(40,406)	(46,438)	(46,154)	(47,822)
Net change in fiduciary net position	1,135,506	3,192,027	1,280,812	2,051,766	(1,586,258)	2,933,173
Plan fiduciary net position - beginning	8,939,869	10,075,375	13,267,402	14,548,214	16,599,980	15,013,722
Plan fiduciary net position - ending	<u>\$ 10,075,375</u>	<u>\$ 13,267,402</u>	<u>\$ 14,548,214</u>	<u>\$ 16,599,980</u>	<u>\$ 15,013,722</u>	<u>\$ 17,946,895</u>
Net pension liability - ending	<u>\$ 3,912,118</u>	<u>\$ 5,530,165</u>	<u>\$ 4,224,756</u>	<u>\$ 3,578,631</u>	<u>\$ 3,407,987</u>	<u>\$ 3,068,684</u>

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY**

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES OF NET PENSION LIABILITY AND RELATED RATIOS (continued)

	2014	2015	2016	2017	2018	2019
Plan fiduciary net position as a percentage of total pension liability	72.03%	70.58%	77.50%	82.27%	81.50%	85.40%
Covered employee payroll	\$ 7,435,831	\$ 7,470,137	\$ 8,516,891	\$ 8,900,803	\$ 9,160,776	\$ 9,686,532
Authority's net pension liability as a percentage of covered payroll	52.61%	74.03%	49.60%	40.21%	37.20%	31.68%

SCHEDULE OF INVESTMENT RETURNS

	2014	2015	2016	2017	2018	2019
Annual money-weighted rate of return net of investment expense	7.25%	0.79%	8.54%	16.59%	-5.69%	21.41%

SCHEDULE OF CONTRIBUTIONS

	2013	2014	2015	2016	2017	2018	2019
Actuarial determined contribution	\$ 542,957	\$ 699,671	\$ 830,001	\$ 1,693,616	\$ 1,711,041	\$ 1,593,018	\$ 1,640,000
Actual employer contribution	1,100,000	1,150,000	4,450,000	2,168,616	1,711,040	2,600,000	1,640,000
Contributions deficiency (excess)	\$ (557,043)	\$ (450,329)	\$ (3,619,999)	\$ (475,000)	\$ 1	\$ (1,006,982)	\$ -

**DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY**

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN NET PENSION LIABILITY

	Total Pension Liability	Plan Fiduciary Net Position	Net Pension
Balances at December 31, 2018	\$ 18,421,709	\$ 15,013,722	\$ 3,407,987
Changes for the year:			
Service cost	928,895	-	928,895
Interest	1,350,242	-	1,350,242
Change in benefit terms	181	-	181
Changes of assumptions	1,158,057	-	1,158,057
Differences between expected and actual	962,659	-	962,659
Contributions - employer	-	1,640,000	(1,640,000)
Net investment income	-	3,147,159	(3,147,159)
Benefit payments	(1,806,164)	(1,806,164)	-
Administrative expense	-	(47,822)	47,822
Net changes	2,593,870	2,933,173	(339,303)
Balances at December 31, 2019	\$ 21,015,579	\$ 17,946,895	\$ 3,068,684

SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

**DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY**

**SCHEDULE OF OPERATING REVENUES
BUDGET COMPARISON**

	ACTUAL 2019	BUDGET 2019	FAVORABLE (UNFAVORABLE) VARIANCE
WESTERN REGION			
Residential	\$ 8,532,868	\$ 8,691,163	\$ (158,295)
Major industry:			
Kinberly-Clark	3,793,405	4,024,125	(230,720)
Monroe Energy	435,249	188,754	246,495
Sun Refining and Marketing Co.	2,827,933	3,111,990	(284,057)
Total major industry	7,056,587	7,324,869	(268,282)
Municipal:			
Brookhaven	702,565	723,991	(21,426)
Eddystone	386,209	388,360	(2,151)
Lower Chichester	506,908	485,450	21,458
Middletown Authority	1,976,711	1,939,464	37,247
Nether Providence	1,003,261	1,024,687	(21,426)
South West Delaware County Authority	3,316,047	2,909,196	406,851
Southern Delaware County Authority	2,083,144	2,135,980	(52,836)
Total Municipal	9,974,845	9,607,128	367,717
Permit industries:			
Ace Linen	162,426	102,720	59,706
Boeing	113,621	121,363	(7,742)
Braskem	200,500	223,440	(22,940)
Congoileum	23,141	28,248	(5,107)
Delaware County Linen	26,896	53,607	(26,711)
Florida Power & Light	421,291	342,216	79,075
Harrah's Casino	53,105	55,860	(2,755)
Liberty Electric	238,772	357,210	(118,438)
Exelon	5,702	10,548	(4,846)
The P.Q. Corporation	106,396	128,400	(22,004)
Other	165,924	18,962	146,962
Total permit industries	1,517,774	1,442,574	75,200
Contract operation fees	638,548	410,000	228,548
Total Western Region	27,720,622	27,475,734	244,888
EASTERN REGION			
Authority:			
Central Delaware County Authority	9,638,024	9,619,575	18,449
Darby Creek Joint Authority	18,173,876	18,781,075	(607,199)
Muckinipates Authority	4,116,939	4,351,713	(234,774)
Total Eastern Region	31,928,839	32,752,363	(823,524)
Sludge disposal and processing	6,414,861	4,750,000	1,664,861
Total operating revenues	\$ 66,064,322	\$ 64,978,097	\$ 1,086,225

SUPPLEMENTAL INFORMATION

**DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY
SCHEDULES OF OPERATING EXPENSES**

FOR THE YEARS ENDED DECEMBER 31,

	2019	2018
Advertising	\$ 11,204	\$ 25,799
Consulting	620,166	270,054
Depreciation	7,526,695	6,588,896
Dues and conferences	90,904	73,574
Employee benefits	4,664,693	4,648,744
Engineering and tech services	375,692	198,361
Insurance	872,874	797,348
Minor equipment and supplies	2,882,190	2,915,007
Office	124,791	130,418
Other contracted services	594,606	477,313
Pension	2,128,575	1,944,894
Philadelphia Plant Treatment costs	9,890,358	9,625,120
Provision for doubtful accounts	102,494	61,782
Repairs and maintenance	2,829,079	2,778,617
Salaries and wages	13,039,649	12,396,648
Solicitor	682,624	172,119
Solids disposal	1,240,682	1,329,837
Utilities	2,719,105	2,529,871
Total operating expenses	<u>\$ 50,396,381</u>	<u>\$ 46,964,402</u>

SUPPLEMENTAL INFORMATION

**DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY**

**SCHEDULE OF DEBT SERVICE
SEWER REVENUE BONDS, 2007 SERIES**

<u>Year Ending December 31,</u>	<u>Coupon</u>	<u>Principal Maturity</u>	<u>Interest</u>	<u>Total Debt Service</u>
2020	5.25%	\$ 4,570,000	\$ 697,725	\$ 5,267,725
2021	5.25%	4,820,000	451,237	5,271,237
2022	5.25%	1,425,000	287,306	1,712,306
2023	5.25%	1,505,000	210,394	1,715,394
2024	5.25%	1,585,000	129,281	1,714,281
2025	5.25%	1,670,000	43,838	1,713,838
Total		<u>\$ 15,575,000</u>	<u>\$ 1,819,781</u>	<u>\$ 17,394,781</u>

SUPPLEMENTAL INFORMATION

**DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY**

**SCHEDULE OF DEBT SERVICE
SEWER REVENUE BONDS, 2015 SERIES**

Year Ending December 31,	Coupon	Principal Maturity	Interest	Total Debt Service
2020	2.500%	\$ -	\$ 1,637,394	\$ 1,637,394
2021	2.500%	-	1,637,394	1,637,394
2022	2.500%	835,000	1,626,956	2,461,956
2023	5.000%	870,000	1,594,769	2,464,769
2024	5.000%	915,000	1,550,144	2,465,144
2025	5.000%	975,000	1,502,894	2,477,894
2026	5.000%	1,010,000	1,453,269	2,463,269
2027	5.000%	1,060,000	1,401,519	2,461,519
2028	5.000%	1,115,000	1,347,144	2,462,144
2029	5.000%	1,170,000	1,290,019	2,460,019
2030	3.375%	1,220,000	1,240,181	2,460,181
2031	3.375%	1,265,000	1,198,247	2,463,247
2032	5.000%	1,320,000	1,143,900	2,463,900
2033	5.000%	1,385,000	1,076,275	2,461,275
2034	5.000%	1,455,000	1,005,275	2,460,275
2035	5.000%	1,530,000	930,650	2,460,650
2036	5.000%	1,610,000	852,150	2,462,150
2037	5.000%	1,695,000	769,525	2,464,525
2038	5.000%	1,780,000	682,650	2,462,650
2039	5.000%	1,870,000	591,400	2,461,400
2040	5.000%	1,965,000	495,525	2,460,525
2041	4.000%	2,055,000	405,300	2,460,300
2042	4.000%	2,140,000	321,400	2,461,400
2043	4.000%	2,230,000	234,000	2,464,000
2044	4.000%	2,320,000	143,000	2,463,000
2045	4.000%	2,415,000	48,300	2,463,300
Total		<u>\$ 36,205,000</u>	<u>\$ 26,179,280</u>	<u>\$ 62,384,280</u>

SUPPLEMENTAL INFORMATION

**DELAWARE COUNTY REGIONAL WATER QUALITY
CONTROL AUTHORITY**

**SCHEDULE OF DEBT SERVICE
SEWER REVENUE BONDS, 2016 SERIES**

<u>Year Ending December 31,</u>	<u>Coupon</u>	<u>Principal Maturity</u>	<u>Interest</u>	<u>Total Debt Service</u>
2020		\$ -	\$ 2,597,200	\$ 2,597,200
2021		-	2,597,200	2,597,200
2022	5.00%	1,185,000	2,597,200	3,782,200
2023	5.00%	1,245,000	2,537,950	3,782,950
2024	5.00%	1,305,000	2,475,700	3,780,700
2025	5.00%	1,370,000	2,410,450	3,780,450
2026	5.00%	1,440,000	2,341,950	3,781,950
2027	5.00%	1,515,000	2,269,950	3,784,950
2028	5.00%	1,585,000	2,194,200	3,779,200
2029	5.00%	1,670,000	2,114,950	3,784,950
2030	5.00%	1,755,000	2,031,450	3,786,450
2031	5.00%	1,835,000	1,943,700	3,778,700
2032	5.00%	1,930,000	1,851,950	3,781,950
2033	5.00%	2,025,000	1,755,450	3,780,450
2034	5.00%	2,125,000	1,654,200	3,779,200
2035	4.00%	2,230,000	1,547,950	3,777,950
2036	4.00%	2,325,000	1,458,750	3,783,750
2037	5.00%	2,170,000	1,365,750	3,535,750
2038	5.00%	2,280,000	1,257,250	3,537,250
2039	5.00%	2,395,000	1,143,250	3,538,250
2040	5.00%	2,515,000	1,023,500	3,538,500
2041	5.00%	2,640,000	897,750	3,537,750
2042	5.00%	2,770,000	765,750	3,535,750
2043	5.00%	2,910,000	627,250	3,537,250
2044	5.00%	3,055,000	481,750	3,536,750
2045	5.00%	3,210,000	329,000	3,539,000
2046	5.00%	3,370,000	168,500	3,538,500
Total		<u>\$ 52,855,000</u>	<u>\$ 44,439,950</u>	<u>\$ 97,294,950</u>

SUPPLEMENTAL INFORMATION

DELAWARE COUNTY REGIONAL WATER QUALITY CONTROL AUTHORITY

SCHEDULE OF DEBT SERVICE SEWER REVENUE BONDS, 2017 SERIES

Year Ending December 31	Coupon	Principal Maturity	Interest	Total Debt Service
2020	5.00%	\$ -	\$ 1,613,750	\$ 1,613,750
2021	5.00%	-	1,613,750	1,613,750
2022	5.00%	965,000	1,589,625	2,554,625
2023	5.00%	1,005,000	1,540,375	2,545,375
2024	5.00%	1,065,000	1,488,625	2,553,625
2025	5.00%	1,115,000	1,434,125	2,549,125
2026	5.00%	2,935,000	1,332,875	4,267,875
2027	5.00%	3,080,000	1,182,500	4,262,500
2028	5.00%	3,240,000	1,024,500	4,264,500
2029	5.00%	3,405,000	858,375	4,263,375
2030	5.00%	3,580,000	683,750	4,263,750
2031	5.00%	3,765,000	500,125	4,265,125
2032	5.00%	3,960,000	307,000	4,267,000
2033	5.00%	4,160,000	104,000	4,264,000
Total		<u>\$ 32,275,000</u>	<u>\$ 15,273,375</u>	<u>\$ 47,548,375</u>

SUPPLEMENTAL INFORMATION

DELAWARE COUNTY REGIONAL WATER
QUALITY CONTROL AUTHORITY

SCHEDULE OF CASH RECEIPTS AND DISBURSEMENTS
FUNDS ESTABLISHED UNDER AN INDENTURE DATED JULY 15, 2001
AND TOTAL CASH AND INVESTMENTS
FOR THE YEAR ENDED DECEMBER 31, 2019

	Renewal and Replacement Fund	Rate Stabilization Fund	LTCF East Escrow	Revenue Fund	Sewer Reserve Fund	Debt Service Fund	Sewer Repair and Replacement Fund	Debt Service Reserve Fund	2015 Construction Fund	2016 Construction Fund	Total
Balances - January 1, 2019	\$ 36,772,993	\$ 8,825,277	\$ 1,440,301	\$ 26,495,806	\$ 3,000,558	\$ 2,610,760	\$ 3,681,961	\$ 11,180,180	\$ 3,862,617	\$ 20,339,953	\$ 118,210,406
Receipts:											
Customer revenue	-	-	-	65,071,667	-	-	-	-	-	-	65,071,667
Edgmont escrow reimbursement	-	-	-	-	-	-	-	-	-	-	-
SWCA & M/TSA payoff decommissioning	-	-	-	-	-	-	-	-	-	-	-
Transfers from Operating account	-	-	-	-	-	-	-	-	-	-	-
Transfers from other trust funds	1,500,000	-	-	-	-	11,079,922	240,000	-	-	-	12,819,922
Loan proceeds	-	-	-	-	-	-	-	-	-	-	-
Investment income	938,565	196,058	39,405	820,426	79,904	84,142	111,609	321,527	16,165	399,524	2,988,325
Total receipts	2,438,565	196,058	39,405	85,892,093	79,904	11,144,064	351,609	321,527	16,165	399,524	80,879,914
Disbursements:											
Requisitions	7,097,857	-	-	44,663,593	-	-	-	-	3,878,782	15,776,631	71,416,863
Transfers to other trust funds	-	-	-	12,819,922	-	-	-	-	-	-	12,819,922
Bond refunding	-	-	-	-	-	-	-	-	-	-	-
Bond refunding expense	-	-	-	-	-	-	-	-	-	-	-
Debt service payments:	-	-	-	-	-	-	-	-	-	-	-
Principal	-	-	-	485,044	-	4,335,000	-	-	-	-	4,820,044
Interest	-	-	-	87,532	-	6,779,625	-	-	-	-	6,847,357
Total disbursements	7,097,857	-	-	58,036,061	-	11,114,625	-	-	3,878,782	15,776,631	95,904,186
Balances - December 31, 2019	\$ 32,114,701	\$ 9,021,335	\$ 1,479,706	\$ 34,351,908	\$ 3,080,462	\$ 2,639,999	\$ 4,033,570	\$ 11,501,707	\$ -	\$ 4,962,846	\$ 103,185,134



CYNTHIA FELZER LEITZELL, CPA
STELLA C. ECONOMIDIS, CPA

LEITZELL & ECONOMIDIS, PC
CERTIFIED PUBLIC ACCOUNTANTS

**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING
AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL
STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

Board of Directors
Delaware County Regional Water Quality Control Authority
Chester, Pennsylvania

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Delaware County Regional Water Quality Control Authority ("DELCORA"), as of and for the year ended December 31, 2019, and the related notes to the financial statements, which collectively comprise the Delaware County Regional Water Quality Control Authority's basic financial statements, and have issued our report thereon dated April 15, 2020.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Delaware County Regional Water Quality Control Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Delaware County Regional Water Quality Control Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Delaware County Regional Water Quality Control Authority's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Delaware County Regional Water Quality Control Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

A handwritten signature in black ink, appearing to read "Leitzell & Economidis, PC". The signature is written in a cursive, flowing style.

Leitzell & Economidis, PC
Media, Pennsylvania

April 15, 2020

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

<hr/>	:	
In Re: Application of Aqua Pennsylvania	:	
Wastewater, Inc. pursuant to Sections 507, 1102,	:	
and 1329 of the Public Utility Code for, inter alia,	:	Docket No. A-2019-3015173
approval of the acquisition of the wastewater	:	
system assets of the Delaware County Regional	:	
Water Quality Control Authority	:	
<hr/>	:	

Direct Testimony of
ERIC WENTZ

Lead Environmental Engineer – Kimberly-Clark Chester Mill

On Behalf of Kimberly-Clark Pennsylvania, LLC and
Kimberly-Clark Corporation

September 29, 2020

1 **Q. Please identify yourself for the record.**

2 A. My name is Eric Wentz. I am the Lead Environmental Engineer for Kimberly-Clark's
3 manufacturing plant in Chester. My business address is One Avenue of the States,
4 Chester, Pennsylvania, 19013.

5
6 **Q. Mr. Wentz, please briefly summarize your professional and educational**
7 **background.**

8 A. I have a Bachelor of Science in Environmental Education from Neumann University and
9 have been the Lead Environmental Engineer at Kimberly-Clark's Chester plant since
10 2015. Prior to working for Kimberly-Clark, I was a Water Resource Technician for the
11 Delaware River Basin Commission in West Trenton, New Jersey for six years. A copy of
12 my resume is attached as Exhibit Kimberly-Clark EW-1.

13
14 **Q. On whose behalf are you testifying in this proceeding?**

15 A. Kimberly-Clark Pennsylvania, LLC and Kimberly-Clark Corporation ("Kimberly-
16 Clark").

17
18 **Q. Is anyone else from Kimberly-Clark testifying in this proceeding?**

19 A. Yes, Mr. Thomas Brooks, the Finance and Logistics Manager for Kimberly-Clark's
20 manufacturing plant in Chester.

21
22 **Q. Have you previously provided testimony to the Commission?**

23 A. No.

Q. What is the purpose of your testimony in this proceeding?

A. As Mr. Brooks testified, Kimberly-Clark has a direct and substantial interest in the outcome of this proceeding and will be substantially impacted by the proposed acquisition. Aqua has not established that the transaction is necessary or beneficial or that it will serve public interest. In addition, Mr. Brooks has explained that Kimberly-Clark is concerned about several specific aspects of the proposed transaction. I will provide further details on some of the concerns raised by Mr. Brooks and I will identify additional concerns, including: (1) that Aqua will not maintain the existing rates and rate structure in a way that recognizes Kimberly-Clark's unique customer status; and (2) as a private sector firm, Aqua may no longer be eligible to administer DELCORA's pretreatment programs in the same way that it has been administered in the past. The Clean Water Act requirements imposed on privately owned treatment plants may differ from and be more stringent than the requirements imposed on Publicly Owned Treatment Works ("POTWs"). This may result in increased costs for all users of the Western Wastewater Treatment Plant ("Western Plant"), including Kimberly-Clark. Additionally, if the transaction is approved, the Western Plant will no longer be classified as a POTW by the State or by the U.S. Environmental Protection Agency ("EPA"). For the first time, industrial customers of DELCORA may be required to obtain their own discharge permits directly from the Department of Environmental Protection ("DEP"). This could be a burdensome and time-consuming process for the affected industrial users.

Q. Please tell us what Kimberly-Clark manufactures at its plant in Chester.

1 A. The plant primarily produces Scott® Brand bath tissue.

2

3 **Q. Is the plant located in DELCORA's service area?**

4 A. Yes. As part of its manufacturing operations at this plant, Kimberly-Clark produces
5 wastewater and is a wholesale industrial customer of DELCORA in DELCORA's
6 Western Service Region.

7

8 **Q. Please explain how the wastewater is generated.**

9 A. Kimberly-Clark withdraws water from the Delaware River and treats the water at its filter
10 plant. The treatment process involves using chemicals to flocculate the mud particles and
11 disinfect the water. The mud particles are pumped into a silo, where it is concentrated
12 and discharged separately to DELCORA's conveyance system from outfall 101B. The
13 disinfected water then goes through sand filter beds to further remove contaminants. The
14 water is then sent over to the main plant for the paper making process. The water is
15 combined with virgin paper pulp to make a slurry. That slurry is then sent to the tissue
16 machines where the slurry is transformed into paper through the removal of moisture
17 from the pulp and the drying of the pulp. This process uses large amounts of water in
18 order to clean the various sections of the paper machinery. The removal of water from
19 the pulp slurry also generates wastewater along with the machine cleaning. The water is
20 captured on the machine in a Save-All where pulp fiber and water are recovered, and a
21 portion is recycled back into the process. Water is also used on the tissue machines for
22 dust control systems, pumps, and cooling water. The water that becomes wastewater
23 through the process has paper fiber in it, along with any chemical additives that we use as

1 part of the process, including disinfectants, process coatings, dry strength additives, and
2 wire cleaners. That water is sent to our internal wet wells where it is stored to be pumped
3 out to DELCORA from outfall 101A.
4

5 **Q. Is any of this wastewater recycled?**

6 A. Yes. Kimberly-Clark uses several methods during the process in order to recycle water
7 before it becomes waste. The Save-Alls recover fiber and water to reuse on the machines
8 individually. Kimberly-Clark also has recovery tanks that recover fiber free water mainly
9 used as cooling water. That water is injected back into the process. These methods
10 account for millions of gallons of recycled water each day.
11

12 **Q. What happens to the wastewater that is not able to be recycled?**

13 A. Some of the water is retained in the product, and some turns into steam as a part of the
14 process. The remainder is transported to DELCORA's Western Plant for treatment.
15

16 **Q. How is the wastewater transported to DELCORA's Western Plant?**

17 A. Kimberly-Clark has pumps at the wetwells that send the water to a pipe where it joins
18 other wastewater headed toward DELCORA. Kimberly-Clark does not have a direct feed
19 to DELCORA from its facilities.
20

21 **Q. How far is DELCORA's Western Plant from Kimberly-Clark's plant?**

22 A. DELCORA is approximately two miles west of Kimberly-Clark's facilities along the
23 Delaware River.

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Q. How much wastewater does Kimberly-Clark transport to DELCORA’s Western Plant?

A. About 4 million gallons per day. The flow to DELCORA increases seasonally in the summertime due to the need for extra cooling water. In the cooler seasons, Kimberly-Clark sends around 3.5 million gallons per day to DELCORA. In the summer months that increases by about 1 million gallons per day to 4.5 million gallons per day on average. During the calendar year 2019, DELCORA budget documents indicate that the volume of wastewater discharged by Kimberly-Clark was approximately 1,468,438 million gallons, and Kimberly-Clark paid DELCORA \$4,077,441 for its services. This is mostly clean city water that greatly dilutes the fiber content of the wastewater.

Q. Does all the wastewater Kimberly-Clark transports to DELCORA receive treatment at the Western Plant?

A. Yes.

Q. How does Kimberly-Clark compare to other industrial customers of DELCORA?

A. According to DELCORA, Kimberly-Clark is the largest volume industrial customer in the Western Service Region. Kimberly-Clark’s flow is 30% higher than the next largest western industrial customer. Kimberly-Clark’s discharge volumes and revenue are approximately 18.7% and 16.2%, respectively, of DELCORA’s Western Plant total volumes and revenue.

1 **Q. Please describe the key constituents in the wastewater Kimberly-Clark transports to**
2 **DELCORA.**

3 A. The key constituents of the wastewater from outfall 101A are paper fibers, and the key
4 constituent from outfall 101B is soil. This represents the TSS in the water. Other
5 chemicals in our water are for water treatment or come from treated city water. The
6 paper fibers are essentially the same fibers found in any publicly available toilet paper
7 used by consumers. The levels of TSS and BOD are within permit limits and are less
8 than any discharge where human excrement is a part of that discharge. DELCORA has
9 eliminated or scaled back the amount of sampling Kimberly-Clark is required to conduct
10 over the last few years because there have been no concerns or issues with sampling for
11 constituents that are not present in our wastewater, including heavy metals, TSS, and
12 BOD. This is mostly clean city water that greatly dilutes the fiber content of Kimberly-
13 Clark's wastewater and is believed to be beneficial to the treatment process used at
14 DELCORA's Western Plant.

16 **Q. What leads you to believe Kimberly-Clark's wastewater is beneficial to DELCORA?**

17 A. In order for a wastewater treatment plant to run effectively it needs a good population of
18 microorganisms that perform the essential work of digesting the material that the
19 wastewater treatment plant receives. Since Kimberly-Clark's paper is virgin pulp and our
20 water is either disinfected river water or city water and does not contain human
21 excrement, leachate, oils, or harmful chemicals, the microorganisms can digest it easily
22 and they essentially have a good diet on which to thrive. Those microorganisms are
23 necessary to DELCORA's operations and are always there to consume the TSS in the

wastewater. Our wastewater is the perfect food to keep this population of microorganisms healthy and eliminates the need for DELCORA to purchase supplemental “food.” The TSS of paper solids is an easily digestible food and is easily managed by the microorganisms. Kimberly-Clark’s wastewater also does not contain any additional constituents that are not already found in households that flush toilet paper except, importantly, Kimberly-Clark’s is free from human excrement. The volume of Kimberly-Clark’s water also allows for greater dilution of other wastewater DELCORA receives that is highly concentrated. For example, DELCORA may receive landfill leachate or wastewater from industries that send low flow but high concentrations of solids and other materials.

Q. In its discovery responses, DELCORA claims that “Kimberly-Clark’s wastewater routinely exhibits spikes of very high TSS and routinely exhibits low pH spikes.” Are these claims accurate?

A. No. For at least the past five years (if not longer), Kimberly-Clark’s TSS has always been within permit limits. In addition, the TSS is paper solids, which as I already explained, is a perfect food for the bacteria DELCORA uses to digest or clean all of its wastewater from all sources. Routinely exhibiting low pH spikes is also not accurate. Kimberly-Clark has exceeded its permit limits for low pH less than ten times in the past five years. Given the volume of wastewater Kimberly-Clark sends to DELCORA (an average of 4 million gallons per day), I do not consider this to be “routine.” In addition, even when Kimberly-Clark’s wastewater does measure low pH events, these events are measured directly at Kimberly-Clark’s discharge pipe, several miles from where the

1 wastewater enters DELCORA's treatment plant. As such, to my knowledge, DELCORA
2 has never seen a material impact at its plant because the length of the event is usually less
3 than one minute and never more than one hour. Furthermore, pH levels below 5.0 are
4 considered to be a violation of Kimberly-Clark's permit. Orange juice has a lower pH
5 than what Kimberly-Clark is allowed to send to DELCORA. A rain event with high flow
6 is more disruptive to DELCORA's system than Kimberly-Clark's fleeting and sporadic
7 "low" pH levels.

8
9 **Q. DELCORA also claims that "one of Kimberly Clark's discharges contains river**
10 **mud which is very low in inert solids that can negatively impact the volatility of**
11 **sludge for incineration." Is this accurate?**

12 A. DELCORA's claim is misleading. I do agree that Kimberly-Clark's mud is low in inert
13 solids and that this can impact incineration, but DELCORA's claim is misleading
14 because mud represents a very small fraction of the total volume of wastewater
15 Kimberly-Clark sends to DELCORA. Kimberly-Clark averages 4 million gallons of
16 wastewater per day, and mud is only 50,000 gallons per day, at maximum. That means
17 that the mud is, at most, 1.25% of the total wastewater Kimberly-Clark sends to
18 DELCORA on a daily basis.

19
20 **Q. As far as you are aware, what governs Kimberly-Clark's relationship with**
21 **DELCORA?**

22 A. The Service Agreement DELCORA executed with Scott Paper Company on December 1,
23 1973 under which Scott Paper and several other industrial customers funded the

1 construction and operations of DELCORA's Western Plant and the related conveyance
2 system. On December 12, 1995, Kimberly-Clark assumed all of the rights and
3 obligations of Scott Paper under the Service Agreement as part of Kimberly-Clark's
4 acquisition of the plant. In recent weeks, DELCORA has asserted that this Service
5 Agreement was terminated in 2003 and replaced by the "pretreatment program's Rules
6 and Regulations." Yet the invoices from DELCORA still refer to the 1973 Service
7 Agreement.

8
9 **Q. Are there terms in the Service Agreement relevant to your testimony?**

10 A. Yes. DELCORA agreed to provide Kimberly-Clark with sufficient capacity in the
11 Western Plant:

12 Section 1.3 DELCORA, further, hereby agrees to provide
13 sufficient capacity in said Western Regional Plant for the treatment
14 of said wastewater during the term hereof.

15 DELCORA also agreed that Kimberly-Clark would not be responsible for applying for
16 permits:

17 Section 11.1 This Agreement shall be deemed to be the permit
18 that is required for users, under the DELCORA Standards, Rules
19 and Regulations of 1973 and Industry shall be exempt from the
20 applicability of said permit sections thereof.

21 And that Kimberly-Clark's wastewater would not require a surcharge:

22 Section 20.5 DELCORA agrees that the existing wastewater of
23 Industry, based on representations made by Industry and subject to
24 applicable federal laws and regulations, is acceptable to
25 DELCORA without the necessity for a surcharge.

26
27 **Q. With respect to wastewater transported to the Western Plant, is Kimberly-Clark**
28 **currently responsible for obtaining any permits from the DEP or EPA?**

1 A. No. Kimberly-Clark receives an Industrial Wastewater Discharge Permit through
2 DELCORA's Industrial Pretreatment Program. DELCORA is responsible for
3 administering the Pretreatment Program and obtaining all necessary federal or State
4 permits, including the National Pollutant Discharge Elimination System (NPDES)
5 permits.

6
7 **Q. Does Kimberly-Clark have concerns about the proposed transaction?**

8 A. Yes. The burden is on Aqua and DELCORA to establish that the proposed transaction
9 will benefit ratepayers and will serve the public interest. Aqua has not established that
10 the transaction is necessary or beneficial or that it will serve the public interest.

11
12 **Q. Can you explain Kimberly-Clark's specific concerns about the proposed**
13 **transaction?**

14 A. Yes. In addition to the concerns raised by Mr. Brooks, Kimberly-Clark is concerned that
15 Aqua will not maintain the existing rates and rate structure in a way that recognizes
16 Kimberly-Clark's unique status as a low-cost, high-volume customer. Kimberly-Clark is
17 also concerned that, as a private sector firm, Aqua may no longer be eligible to
18 administer the Industrial Pretreatment Program or obtain NPDES permits that cover the
19 industrial wastewater processed by the Western Plant.

20
21 **Q. Please expand on Kimberly-Clark's concerns regarding rates and rate structure.**

22 A. The proposed transaction is structured in a way where it will substantially increase rates
23 for all consumers in the long run. The transaction does not ensure Aqua will adhere to

1 the contract pricing principles that are beneficial to Kimberly-Clark. While this may not
2 be a base rate proceeding, and while Aqua has signaled that it will not initiate a rate case
3 until 2022, Kimberly-Clark should continue to receive rates that reflect its high volume of
4 wastewater, the low toxicity of its wastewater, and the beneficial nature of its wastewater
5 to DELCORA's overall treatment system.
6

7 **Q. Is Kimberly-Clark a "captive" customer of DELCORA?**

8 A. No. Kimberly-Clark's discharge volumes and wastewater treatment costs are significant
9 enough that if it cannot secure certainty with regard to its future rates and service levels,
10 it could elect to construct its own wastewater treatment plant. Kimberly-Clark already
11 operates its own wastewater treatment facilities at several other manufacturing facilities.
12 If the transaction is approved and if, over time, Aqua establishes rates that are too high
13 for Kimberly-Clark, the utility may lose its most significant customer.
14

15 **Q. What are Kimberly-Clark's concerns regarding the Industrial Pretreatment**
16 **Program?**

17 A. As a publicly owned treatment works, DELCORA is able to administer the Industrial
18 Pretreatment Program and obtain NPDES permits that cover the wastewater discharges of
19 industrial customers. Aqua has provided no evidence or authority to show that, as a
20 private entity, it will be eligible to do the same. In its discovery responses, Aqua claims
21 the Pretreatment Program and NPDES permits will be transferred from DELCORA to
22 Aqua through a simple "notice procedure." But Kimberly-Clark has been unable to find
23 any rule or regulation to support Aqua's claim. In addition, on or about April 16, 1987,

the EPA issued a guidance document entitled “Permit Implications of Privatization.” (See Memorandum from Martha G. Prothro, Director, Permits Division, to Water Management Division Directors, Regions I-X, *Permit Implications of Privatization* (April 16, 1987), Exhibit Kimberly-Clark EW-2.) This guidance document indicates that the Clean Water Act imposes differing requirements on POTWs and on privately owned wastewater treatment plants. This EPA guidance indicates that privately owned plants must comply with limits that are tied to applicable effluent limitation guidelines and, for certain constituents, the permitting agency (here DEP) may apply best professional judgment. In addition, the 1987 guidance document indicates that the permitting agency (here DEP) may require industrial users to obtain a separate permit. In the alternative, an industrial discharger may be designated as a limited “co-permittee.” Admittedly, these passages in EPA’s guidance are not completely self-explanatory, and Kimberly-Clark has not been able to confirm whether the EPA or DEP still follow this guidance. Yet this EPA guidance document, on its face, indicates that privatization of a POTW alters or transforms the permitting process for the owner of a wastewater treatment plant and for its industrial customers. As of this date, neither Aqua nor DELCORA has referred to this guidance or has adequately explained whether the privatization of the Western Plant will have harmful effects on the permitting process going forward.

Q. What is Kimberly-Clark asking from the Commission in this proceeding?

A. Kimberly-Clark is asking the Commission to deny the Application on the grounds that the transaction has no proven benefits to the public or DELCORA’s current customers. Should the Commission grant the Application, Kimberly-Clark is asking the Commission

1 to mitigate the harm that will result by imposing conditions on Aqua. In addition to the
2 conditions detailed by Mr. Brooks, Aqua should be required to impose rates that reflect
3 Kimberly-Clark's high level of usage and the low toxicity and beneficial nature of its
4 wastewater. If the treatment costs incurred in operating the Western Plant will increase
5 solely due to privatization, Aqua should bear those increased costs itself. Aqua should
6 also be required to confirm its ability to administer the Industrial Pretreatment Program
7 and obtain all necessary NPDES permits. If Aqua is unable to do so, the Commission
8 should require Aqua to assist any industrial customers such as Kimberly-Clark that may
9 be required to obtain their own NPDES permits or to meet any new treatment or pre-
10 treatment requirements.

11
12 **Q. Does this conclude your direct testimony?**

13 A. At this time, yes. I reserve the right to supplement my testimony if additional
14 information becomes available.

Exhibit Kimberly-Clark EW-1

Eric Wentz

One Avenue of the States, Chester, Pennsylvania 19013

EDUCATION:

2009-2011 Neumann University

Aston, PA

Bachelor of Science in Education – Environmental Education

- Pennsylvania Certification K-12 Environmental Education, 7-12 Biology, 7-12 General Science
- Dean's Honor List
- Presidential Scholarship

2007-2009 Bucks County Community College

Newtown, PA

Transfer Degree Program - Environmental Science

- President's Honor List

EXPERIENCE:

2015-Present Kimberly Clark Chester Mill – Lead Environmental Engineer

Chester, PA

- Responsible for internal and external reporting related to Title V compliance, freshwater usage, wastewater contributions, waste production and general site environmental compliance
- Lead 4SPS investigations and implementing corrective actions related to environmental events and excursions
- Coordinated efforts to reduce costs to the environmental cost center and mill spend costs
- Represents Kimberly Clark during community outreach events, site visits and employee recognition events
- Liaison for all site inspections by government agencies

2009-2015 Delaware River Basin Commission – Water Resource Technician

West Trenton, NJ

- Co-Authored report analyzing the Existing Water Quality of the Delaware River and its Major Tributaries over a period of time
- Lead technician on all sampling collection for the Scenic Rivers Monitoring Program for Special Protection Waters
- Data analysis for monitoring programs using computer spreadsheet and statistical analysis software packages
- Aided staff and administration in the development of monitoring and assessment protocols in water quality projects
- Assisted in multiple projects to collect, analyze and interpret data for compliance and modeling purposes

2011 Pennsbury School District – Student Teacher

Yardley, PA

- Designed and implemented lessons aligned with Pennsylvania State Standards
- Utilized differentiated instruction to meet the needs of a diverse community of learners

2000-2011 Acme Markets – Night Manager

Feasterville, PA

- Managed daily activities of multiple departments focusing on customer satisfaction and sales improvement techniques
- Supported employees with their professional development
- Promoted excellent customer service and gave customers an enjoyable shopping experience

SKILLS/HOBBIES:

- 40 Hour HAZWOPER Certified
- DOT HAZMAT Shipping Certified
- RCRA Hazardous Waste Management Certified
- PI/Process Books
- Water Quality Equipment and Calibration: HACH, YSI, HYDROLAB, EUREKA
- QAPP development

Exhibit Kimberly-Clark EW-2

(Office of Water letterhead)

April 16, 1987

MEMORANDUM

SUBJECT: Permit Implications of Privatization

FROM: Martha G. Prothro, Director
Permits Division (EN-336)

TO: Water Management Division Directors, Regions I - X

On June 27, 1985, we sent you a draft document of questions and answers dealing with the NPDES permit and pretreatment implications of transactions that create private interests in municipal wastewater treatment works (i.e. "privatization"). In the draft memorandum we set out our conclusions on the applicable requirements for privatized facilities and discharges into such facilities and requested your comments.

Based on the comments we received, it is clear that there is a good deal of misunderstanding in this area, particularly with respect to the relevant Clean Water Act and NPDES requirements and legal constraints. For example, several commenters did not agree that ownership of the treatment works should be the determining factor in the appropriate limitations and whether pretreatment applied. These commenters suggested that any treatment plant treating primarily domestic waste should be regulated as a POTW (i.e., subject to limits based on secondary treatment, with contributors subject to pretreatment) regardless of whether it is publicly or privately owned. The Clean Water Act, however, does not allow for such an approach. Under the Act, whether a facility is subject to secondary treatment (and its users to pretreatment) requirements or whether other technology-based limits (BAT, BCT) apply depends solely upon whether the plant is publicly or privately owned, and not on the nature of the wastes being treated.

Another area of misunderstanding involves contracts with private for operation of POTWs. A couple of commenters questioned whether the private contract operator should be an NPDES permittee, suggesting instead that the POTW be the sole permittee. However, the NPDES regulations are explicit on this point, stating that when the owner and operator of a discharger are different persons, the operator of a facility is required to obtain an NPDES permit. See 40 CFR 122.21(b). We do agree with several commenters that, although the operator must be a permittee, where the municipality continues to own treatment works or sewer system, it should be a co-permittee. This policy is reflected in our revisions to the document.

Several commenters also raised questions about our statements that federally owned treatment plants (e.g., those serving military bases) are not POTWs, suggesting instead that we regulate these facilities as POTWs. The legislative history of the CWA indicates that Congress did not intend this to be the case. (See Appendix A of the attachment.) Moreover, EPA's regulatory definition of "POTW" in the general pretreatment regulations includes only plants owned by States and municipalities. See 40 CFR 403.3(o). Thus, these facilities will continue to be regulated as privately owned treatment works.

Attached in the final guidance that incorporates comments received on the earlier draft. Also, since the earlier draft was distributed for comment, the Office of Municipal Pollution Control has prepared a separate memorandum dealing with the

construction grants implications of various privatization scenarios (attached). Accordingly, we have dropped the grants-related discussion from our document. If you have any questions, please call me (FTS 475-9545) or have your staff call George Young (FTS 475-9539).

QUESTIONS AND ANSWERS ON PERMIT
AND PRETREATMENT IMPLICATIONS OF
PRIVATIZATION

I.
Introduction

"Privatization" of municipal wastewater treatment systems can occur in a variety of ways. The construction of new treatment plants or the upgrading of existing ones may be privately financed. Existing POTWs, or portions thereof, may be sold or leased to private parties. Municipalities may enter into contracts whereby private parties are to operate an existing POTW. Privatization may also result where an existing privately owned facility that was formerly used solely as an industrial discharger's treatment facility is now used to treat a municipality's wastewater. (This is the situation in Golden, Colorado, where a treatment plant owned by the Coors Company, and formerly used to treat the company's brewery waste, is now being used to treat wastewater received from the town of Golden.)

A treatment plant that treats wastes from any source other than the operator of the treatment plant is either a "publicly owned treatment works" (POTW) or a "privately owned treatment works" under EPA regulations. The grouping in which a facility is placed depends solely on the ownership and not on the nature of its influent. POTW is a treatment system that is owned by a State or municipality (for purposes of the NPDES program this includes counties or State sewer districts). "Privately owned treatment works" is defined in 40 CFR 121.2 as "any device or system which is (a) used to treat wastes from any facility whose operator is not the operator of the treatment works and (b) not a 'POTW'." In other words, a treatment plant that is not a POTW is by definition a privately owned treatment works, even if it is not in fact "privately owned." For example, a federally owned treatment plant serving a military base is not a POTW since it is not owned by a State or municipality, even though the majority of its waste may be domestic sewage from residential base housing. See 40 CFR 403.3(o). Conversely, any treatment works that is publicly owned (by a State or municipality) is a POTW, even if it receives most or all of its flow from industrial users.

Whether a treatment plant is a POTW or a privately owned treatment works is important in determining the limits to be contained in the plant's NPDES permit and the requirements (i.e., pretreatment or otherwise) to which contributors to the treatment plant are subject. If a treatment plant is a POTW, its NPDES permit must contain, at a minimum, technology-based limits requiring secondary treatment. See 301(b)(1)(B) of the Clean Water Act (CWA). In addition, contributors to the plant are subject to applicable pretreatment requirements. Privately owned treatment works, on the other hand, are subject to technology-based limits that require BPT, BAT, BCT and/or NSPS. See CWA, 301(b)(2), 306. These limits are established based upon applicable effluent limitation guidelines, and, for wastestreams not covered by a guideline, the permit writer's "best professional judgment" (BPJ).^{*} Contributors to privately owned treatment works are not subject to pretreatment requirements, but instead must comply with any requirements imposed pursuant to 40 CFR 122.44(m). That provision authorizes the permitting authority to include in the privately owned treatment works'

NPDES permit "any conditions expressly applicable to any user, as a limited co-permittee, that may be necessary in the permit issued to the treatment works to ensure compliance with applicable requirements under this part." Alternatively, the permitting authority may issue separate permits to the treatment works and its users, or require a separate permit application from any user. As noted in the preamble to the consolidated permit regulations (45 FR 33342, May 19, 1980), the discretionary authority provided by 122.44(m) gives the permitting authority "sufficient flexibility to ensure compliance with applicable standards and limitations and to minimize any administrative burdens."

The questions and answers that follow address some of the basic issues that privatization presents in the pretreatment and NPDES contexts, and represent an attempt to resolve these issues within the constraints of the existing statutory and regulatory schemes. Not all of the possible privatization scenarios are, discussed, but the general principles set forth should be applicable to most situations that are likely to occur. The first two sets of questions and answers deal with the preliminary issues of how "POTW" is defined for pretreatment purposes and the pretreatment implications where a privately owned treatment works is treating wastewater received through a publicly owned collection system. The remaining questions and answers examine the NPDES and pretreatment implications of specific privatization transactions.

II. Questions and Answers

Question #1: What is a "POTW" for purposes of triggering pretreatment requirements?

program

Answer: Section 307(b) of the Clean water Act ("the ACT") directs EPA to promulgate pretreatment standards for pollutants introduced into "treatment works (as defined in section 212 of this Act) which are publicly owned." Section 212 of the Act defines "treatment works" to include "any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature_including_sewage collection systems" and "any other method or system for preventing, abating, reducing, storing, treating, separating, or disposing of municipal waste_or industrial waste_" This definition includes treatment facilities that treat exclusively municipal or industrial waste as well as those treating a combination of the two. Assuming a facility is a treatment works, the controlling factor in determining whether the facility is a POTW under 307(b) is public ownership. The nature of the pollutants being contributed to the treatment works is irrelevant.

The General Pretreatment Regulations (40 CFR Part 403) further clarify the statute by defining "POTW" as "a treatment works as defined by section 212 of the Act, which is owned by a State or municipality (as defined by section 502(4) of the Act)." 40 CFR 403.3(o). This definition also includes "sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant." "POTW Treatment Plant" is defined as "that portion of the POTW which is designed to provide treatment. . . of municipal sewage and industrial waste." As with the statutory definition, the regulatory definition of "POTW" turns on ownership of the facility and not characterization of its flow as municipal or industrial in nature.

Under the General Pretreatment Regulations, a facility must be owned by a State or municipality in order to be a POTW. contributors to facilities meeting this criterion are subject to any and all applicable statutory and regulatory pretreatment

requirements.

Federally owned treatment plants (such as those serving some military bases or Forest Service operations) are not POTWs (since they are not owned by a State or municipality), and are therefore regulated as privately owned treatment works. Thus, they are subject to permit limits based on BPT, BAT, BCT and/or NSPS (see Introduction, p. 2). Because these plants are classified as privately owned treatment works, contributors to them are subject to any requirements imposed under 40 CFR 122.44(m) (see Introduction, p. 2).

Contributors to sewerage systems that do not lead to a POTW treatment works similarly are treated as contributors to a privately owned treatment works. These discharges are not covered by pretreatment standards (although they would be if a treatment works were later constructed), but instead are subject to direct discharger standards applied under 40 CFR 122.44(m).

Question #2: What are the pretreatment implications where a treatment plant is privately owned but the collection system is publicly owned?

Answer: Where a treatment plant is privately owned but the collection system leading to it is publicly owned, the Collection system does not meet the regulatory definition of "POTW" since it does not convey wastewater to a publicly owned treatment plant. See 40 CFR 403.3(o). Therefore, contributors to the system are not subject to Federal pretreatment requirements.* As contributors to a "privately owned treatment works," however, they (and the public entity whose collection system discharges into the treatment plant) may be subject to requirements imposed under 40 CFR 122.44(m), which allows the Director to regulate such contributors, either as co-permittees with the owner/operator of the treatment plant or under separate permits (see Introduction, p. 2).

Question #3: What are the pretreatment implications where a POTW is sold to a private party?

Answer: Where the entire treatment plant is sold, pretreatment requirements no longer apply since there is no longer any introduction of pollutants into a POTW (i.e., the treatment plant is now privately owned). This is true whether or not the collection system remains in public ownership. In the case of a partial sale of a POTW, the pretreatment implications depend upon which portion is sold. For example, if all system components located between an industrial user's outfall and the POTW's headworks (i.e., the sewer lines connecting the industrial user's facility to the public treatment plant) are sold to the industrial user, pretreatment requirements continue to apply since the industrial user is still introducing pollutants into a POTW (i.e., the treatment plant is still publicly owned). The only change is the point at which these requirements apply. Instead of applying where the industrial user's effluent enters the sewer, they now apply where the effluent enters the treatment plant (i.e., the headworks), since this is the point of introduction to the POTW. *

Where part of the treatment plant is sold but the collection system remains in public ownership, whether industrial contributors to the collection system are subject to pretreatment requirements depends upon whether the treatment plant can still be characterized as "publicly owned." This in turn depends upon the nature and extent of private ownership. If the public and private entities are co-owners of the entire facility, it is still a POTW and pretreatment would apply. If, however, the different entities own distinct portions of the facility a case

specific analysis tracing the waste would be required. If an industrial user's waste flows through any treatment process that is publicly owned, then the plant is considered a POTW and the contributor is subject to pretreatment. For instance, where the industrial user's waste flows sequentially through treatment processes that are owned by the public and private entities pretreatment would apply. This result derives from the fact that the waste is treated, even though only partially, by a publicly owned treatment works. If, however, complete treatment trains are distinct, though possibly identical and adjacent, the result would be different. The waste treated at the publicly owned portion would, of course, be subject to pretreatment requirements. The waste treated solely by the privately owned facility would not, but would instead be subject to requirements under 40 CFR 122.44(m).

Question #4: What are the NPDES permit implications where a POTW is sold to a private party?

Answer: Under the NPDES regulations, it is the "operator" of a facility who must apply for and comply with a permit. See 40 CFR 122.21(B). Thus, where a POTW is sold to a private party who also operates the plant, that party must apply for, and comply with, an NPDES permit. The permit limitations for the facility are no longer based on secondary treatment, but on BPT, BAT, BCT and/or NSPS (see Introduction, p. 2). If only a portion of the plant is sold, and the plant can still be characterized as a POTW (see Answer to Question #3, above), the permit limits would then be based on secondary treatment. In these cases, as in any case where the facility is still considered a POTW, the public entity also should be a co-permittee with the operator of the facility.

Where the treatment plant is sold but the collection system remains in public ownership, pretreatment requirements no longer apply. All contributors to the system are now subject to any requirements imposed under 40 CFR 122.44(m), which applies to privately owned treatment works. Under that provision, the Director may issue one permit under which some or all contributors are co-permittees or may issue separate permits. The privately owned treatment works and, as such, may also be made a co-permittee.** This will help to ensure that the collection system will continue to be operated as an integral part of the treatment system, thereby maximizing efficiency and avoiding conflicting interests between public and private parties.

Question #5: What are the pretreatment and NPDES implication where a POTW is leased to a private party?

Answer: Since a lease does not transfer ownership, it does not affect a facility's status as a POTW and therefore should not affect the application of pretreatment requirements. Contributors to the POTW must comply with pretreatment standards under 307(b) of the CWA. As in the case of mixed public-private ownership (see Answer to Question #4, above), the public entity should be a co-permittee even though the lessee is now the operator of the treatment works. With respect to permit limits, secondary treatment (or more stringent requirements under 301(b)(1)(C)) of the CWA applies since the facility is still a POTW.

Question # 6: What are the pretreatment and NPDES permit implications of a municipality contracting with a private party to operate a POTW?

Answer: Since an operating contract does not transfer ownership, it does not change the facility's status as a POTW. Therefore,

the facility's NPDES permit limits will continue to be based on secondary treatment (at a minimum) and any industrial contributors will still be subject to applicable pretreatment requirements.

The NPDES regulations impose the duty to apply for a permit on the "operator" of a facility. 40 CFR 122.21(b). Historically, though, municipal NPDES permits have been issued to the municipality even where a private party operates the plant under a service contract. EPA's intent in adopting this requirement was to ensure that the permit would be issued to the person(s) with operational control over the facility. To be consistent with this intent, all private parties operating POTWs under contracts with municipalities should be NPDES permittees. As where there is mixed public-private ownership or the POTW is leased to a private party, since the facility is still a POTW the municipality also should be a co-permittee.

Question # 7: What are the pretreatment and NPDES implication, where a private-party finances improvements to an existing POTW?

Answer: Pretreatment requirements will continue to apply if the upgraded facility can still be characterized as a "POTW." This will depend upon the nature of the privately financed improvements (see Answer to Question #3, above). If the private party also operates the plant, it must apply for an NPDES permit. If the plant remains a POTW, the municipality must also be made a co-permittee (see Answer to Question # 7, above). In addition, secondary treatment (at a minimum), and pretreatment standards for industrial users, continue to apply.

Where the plant can no longer be characterized as "publicly owned," it will be regulated as a "privately owned treatment works" and thus will be subject to permit limits based on BPT, BAT and/or BCT (see Introduction, p. 2). This would occur where the private party owns the new treatment works or separate treatment train. Industrial contributors to the plant will be subject to any requirements imposed upon them under 40 CFR 122.44(m) (see Introduction, p. 2).

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

In Re: Application of Aqua Pennsylvania	:	
Wastewater, Inc. pursuant to Sections 507, 1102,	:	
and 1329 of the Public Utility Code for, inter alia,	:	Docket No. A-2019-3015173
approval of the acquisition of the wastewater	:	
system assets of the Delaware County Regional	:	
Water Quality Control Authority	:	

Surrebuttal Testimony of

THOMAS BROOKS

Finance & Logistics Manager – Kimberly-Clark Chester Mill

On Behalf of Kimberly-Clark Pennsylvania, LLC and
Kimberly-Clark Corporation

November 2, 2020

1 **Q. Please identify yourself for the record.**

2 A. My name is Thomas Brooks. I am the Finance and Logistics Manager for Kimberly-
3 Clark's manufacturing plant in Chester. My business address is One Avenue of the
4 States, Chester, Pennsylvania, 19013.

5
6 **Q. Are you the same Mr. Brooks who previously testified in this case?**

7 A. Yes. I submitted direct testimony on September 29, 2020.

8
9 **Q. What is the purpose of your surrebuttal testimony?**

10 A. My surrebuttal testimony addresses portions of the rebuttal testimony offered by William
11 C. Packer on behalf of Aqua, and John Pileggi on behalf of DELCORA.

12
13 **Q. Have you had an opportunity to review the rebuttal testimony submitted by Mr.**
14 **Packer and Mr. Pileggi?**

15 A. Yes.

16
17 **Q. Does Kimberly-Clark acknowledge in any of its direct testimony that the Service**
18 **Agreement between Kimberly-Clark and DELCORA expired?**

19 A. No. Mr. Wentz and I acknowledged only that DELCORA has asserted that the Service
20 Agreement expired or was terminated.

21
22 **Q. What is the status of the Service Agreement?**

23 A. Kimberly-Clark was not aware of DELCORA's claim that the Service Agreement was

1 terminated until this proceeding and apparently both Aqua and DELCORA were unaware
 2 of any such termination until this proceeding as well. The Service Agreement was
 3 attached to the Application (Exhibit F105) and to the Asset Purchase Agreement (Exhibit
 4 B1) as one of the contracts DELCORA must assign to Aqua if the transaction is
 5 approved. In the Asset Purchase Agreement dated September 2019, DELCORA and
 6 Aqua clearly state that Kimberly-Clark's Service Agreement will be assigned and
 7 assumed. In addition, Kimberly-Clark has found no evidence in its business records to
 8 support DELCORA's assertion that the Service Agreement expired. As far as Kimberly-
 9 Clark knows, the alleged 2003 termination letter cited by Mr. Packer and DELCORA
 10 could have been rescinded. Kimberly-Clark has been unable to identify any fully formed
 11 successor agreement and according to Mr. Pileggi, no such written successor agreement
 12 exists. More importantly, and as I explained in my direct testimony, both DELCORA
 13 and Kimberly-Clark have acted as if the Service Agreement is still in effect. In addition
 14 to the examples I already provided, Mr. Pileggi admitted that DELCORA continues to
 15 calculate Kimberly-Clark's rates based on the terms in the Service Agreement. Mr.
 16 Pileggi also admitted that "DELCORA's pretreatment program's Rules and Regulations
 17 do not determine billing rates for flow and loadings." Thus Mr. Packer's and
 18 DELCORA's claims that Kimberly-Clark agreed to allow the pretreatment program's
 19 Rules and Regulations to determine the terms of the relationship after the Service
 20 Agreement allegedly expired make no sense.

21
 22 **Q. How does Kimberly-Clark respond to Mr. Packer's statement that Kimberly-Clark**
 23 **"may be eligible for a rate set under a future rider in Aqua's tariff."**

A. If Mr. Packer is indicating that Aqua will establish a FLEX rate rider in its tariff allowing customers to enter into special rate agreements, Kimberly-Clark agrees that this is necessary and appropriate. FLEX rates should be made available to customers with realistic service alternatives, and the tariff should require only that competitive options exist for the customer, that the customer is willing to pay more than incremental or marginal cost, and that the customer and the utility have entered into a rate agreement or have ratified an existing agreement. Consistent with past Commission practice, the FLEX rate contracts should be filed as confidential documents with the Commission, but be made available to OCA and OSBA under appropriate safeguards. If the Commission approves the proposed transaction, it should impose a condition requiring that Aqua's initial tariff include such a provision. As both Mr. Wentz and I have previously indicated, Kimberly-Clark has realistic alternatives for the treatment of its wastewater and if we cannot secure certainty with regard to our future rates and service levels, we could elect to construct our own wastewater treatment plant. Kimberly-Clark operates over 30 wastewater treatment plants at its manufacturing facilities globally, including North America, and it is an internal competency readily transferable to our Chester facility. While I am not an attorney, I have been informed by counsel that a FLEX rate rider would be consistent with decisions in prior PUC cases. Kimberly-Clark's counsel will address this issue in its briefs.

Q. How do you respond to Mr. Packer's and Mr. Pileggi's assertions that the Trust is non-jurisdictional to the PUC and, therefore, the Commission should not have direct oversight responsibilities?

1 A. I understand that as currently structured, the Trust is non-jurisdictional as to the
2 Commission. My point, however, is that the Commission SHOULD have jurisdiction
3 over the Trust. If there are issues involving the Trust in the future, the Commission
4 should have the ability to adjudicate and resolve them.

5
6 **Q. Why did you comment on DELCORA's solvency in your direct testimony?**

7 A. Aqua and DELCORA put DELCORA's solvency at issue in this proceeding by claiming
8 DELCORA's impending insolvency would render DELCORA unable to meet its
9 obligations to existing customers. As such, Aqua purchasing DELCORA would serve the
10 public interest. But as I previously explained, there is nothing to indicate DELCORA is
11 or will become insolvent. In addition, and while I am not an attorney, my understanding
12 is that this proceeding is not governed exclusively by Section 1329.

13
14 **Q. Do you agree with Mr. Packer's assertion that economies of scale are one of the**
15 **supposed benefits of the transaction?**

16 A. No. Aqua has not identified any concrete economies of scale and plans to simply step
17 into DELCORA's shoes and maintain the *status quo*. Unless DELCORA was about to
18 become insolvent, I do not see how this could be considered a benefit of the transaction.

19
20 **Q. Does this conclude your surrebuttal testimony?**

21 A. At this time, yes. I reserve the right to supplement my testimony if additional
22 information becomes available.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

In Re: Application of Aqua Pennsylvania	:	
Wastewater, Inc. pursuant to Sections 507, 1102,	:	
and 1329 of the Public Utility Code for, inter alia,	:	Docket No. A-2019-3015173
approval of the acquisition of the wastewater	:	
system assets of the Delaware County Regional	:	
Water Quality Control Authority	:	

Surrebuttal Testimony of

ERIC WENTZ

Lead Environmental Engineer – Kimberly-Clark Chester Mill

On Behalf of Kimberly-Clark Pennsylvania, LLC and
Kimberly-Clark Corporation

November 2, 2020

1 **Q. Please identify yourself for the record.**

2 A. My name is Eric Wentz. I am the Lead Environmental Engineer for Kimberly-Clark's
3 manufacturing plant in Chester. My business address is One Avenue of the States,
4 Chester, Pennsylvania, 19013.

5
6 **Q. Are you the same Mr. Wentz who previously testified in this case?**

7 A. Yes. I submitted direct testimony on September 29, 2020.

8
9 **Q. What is the purpose of your surrebuttal testimony?**

10 A. My surrebuttal testimony addresses portions of the rebuttal testimony offered by Mark J.
11 Bubel, Sr. on behalf of Aqua, and Michael J. DiSantis on behalf of DELCORA.

12
13 **Q. Have you had an opportunity to review the rebuttal testimony submitted by Mr.**
14 **DiSantis?**

15 A. Yes.

16
17 **Q. Does Mr. DiSantis's testimony rebut your testimony that Kimberly-Clark's**
18 **wastewater is beneficial to DELCORA?**

19 A. No. Mr. DiSantis's supposed rebuttal appears to have been taken directly from
20 DELCORA's responses to Kimberly-Clark's discovery requests (KCC-I-25), which I
21 responded to in my direct testimony (*see* Kimberly-Clark Statement No. 2 at 7-8). But
22 Mr. DiSantis's rebuttal testimony does not address any of the facts in my testimony.

23

1 **Q. What are the key constituents in the wastewater Kimberly-Clark transports to**
2 **DELCORA.**

3 A. The key constituents of the wastewater from outfall 101A are paper fibers, and the key
4 constituent from outfall 101B is soil. This represents the TSS in the water. Other
5 chemicals in our water are for water treatment or come from treated city water. The
6 paper fibers are essentially the same fibers found in any publicly available toilet paper
7 used by consumers. The levels of TSS and BOD are within permit limits and are less
8 than any discharge where human excrement is a part of that discharge. DELCORA has
9 eliminated or scaled back the amount of sampling Kimberly-Clark is required to conduct
10 over the last few years because there have been no concerns or issues with sampling for
11 constituents that are not present in our wastewater, including heavy metals, TSS, and
12 BOD. This is mostly clean city water that greatly dilutes the fiber content of Kimberly-
13 Clark's wastewater and is believed to be beneficial to the treatment process used at
14 DELCORA's Western Plant.

16 **Q. What leads you to believe Kimberly-Clark's wastewater is beneficial to DELCORA?**

17 A. In order for a wastewater treatment plant to run effectively it needs a good population of
18 microorganisms that perform the essential work of digesting the material that the
19 wastewater treatment plant receives. Since Kimberly-Clark's paper is virgin pulp and our
20 water is either disinfected river water or city water and does not contain human
21 excrement, leachate, oils, or harmful chemicals, the microorganisms can digest it easily
22 and they essentially have a good diet on which to thrive. Those microorganisms are
23 necessary to DELCORA's operations and are always there to consume the TSS in the

wastewater. Kimberly-Clark's wastewater is the perfect food to keep this population of microorganisms healthy and eliminates the need for DELCORA to purchase supplemental "food." The TSS of paper solids is an easily digestible food and is easily managed by the microorganisms. Kimberly-Clark's wastewater also does not contain any additional constituents that are not already found in households that flush toilet paper except, importantly, Kimberly-Clark's is free from human excrement. The volume of Kimberly-Clark's water also allows for greater dilution of other wastewater DELCORA receives that is highly concentrated. For example, DELCORA may receive landfill leachate or wastewater from industries that send low flow but high concentrations of solids and other materials. In addition to high volume, Kimberly-Clark's wastewater also has a high load factor, which means the flow of wastewater is continuous and does not exhibit large fluctuations hour-to-hour or day-to-day. And as Mr. Brooks previously testified, the Chester plant operates 24 hours a day, 7 days a week. This constant flow makes Kimberly-Clark's wastewater easier and cheaper to process as compared to wastewater from customers with low load factors.

Q. Mr. DiSantis claims that "Kimberly-Clark's wastewater routinely exhibits spikes of very high total suspended solids and low pH spikes." Are these claims accurate?

A. No. For at least the past five years (if not longer), Kimberly-Clark's TSS has always been within permit limits. In addition, the TSS is paper solids, which as I already explained, is a perfect food for the bacteria DELCORA uses to digest or clean all of its wastewater from all sources. Routinely exhibiting low pH spikes is also not accurate. Kimberly-Clark has exceeded its permit limits for low pH less than ten times in the past

1 five years. Given the volume of wastewater Kimberly-Clark sends to DELCORA (an
2 average of 4 million gallons per day), I do not consider this to be “routine.” In addition,
3 even when Kimberly-Clark’s wastewater does measure low pH events, these events are
4 measured directly at Kimberly-Clark’s discharge pipe, several miles from where the
5 wastewater enters DELCORA’s treatment plant. As such, to my knowledge, DELCORA
6 has never seen a material impact at its plant because the length of the event is usually less
7 than one minute and never more than one hour. Furthermore, pH levels below 5.0 are
8 considered to be a violation of Kimberly-Clark’s permit. Orange juice has a lower pH
9 than what Kimberly-Clark is allowed to send to DELCORA. A rain event with high flow
10 is more disruptive to DELCORA’s system than Kimberly-Clark’s fleeting and sporadic
11 “low” pH levels.

12
13 **Q. Mr. DiSantis also claims that “one of Kimberly Clark’s discharges contains river**
14 **mud which is very low in inert solids that can negatively impact the volatility of**
15 **sludge for incineration.” Is this accurate?**

16 **A.** This claim is misleading. First, the river mud is a harmless, inert substance. Second,
17 while I do agree that Kimberly-Clark’s mud is low in inert solids and that this can impact
18 incineration, the claim is misleading because mud represents a very small fraction of the
19 total volume of wastewater Kimberly-Clark sends to DELCORA. Kimberly-Clark
20 averages 4 million gallons of wastewater per day, and mud is only 50,000 gallons per
21 day, at maximum. That means that the mud is, at most, 1.25% of the total wastewater
22 Kimberly-Clark sends to DELCORA on a daily basis.

1 **Q. Mr. DiSantis compares Kimberly-Clark’s wastewater to wastewater “from**
2 **municipalities, individual homeowners, [and] small commercial customers” and**
3 **implies that the “potential conditions” of Kimberly-Clark’s wastewater are**
4 **somehow more harmful. Do you agree?**

5 A. Absolutely not. Wastewater from residential sources and municipalities contains a wide
6 range of harmful substances including excrement, blood, vomit, food items, paint, paint
7 thinner, pesticides, used oil, and pharmaceuticals. People flush all types of products
8 down their toilets. Pharmaceuticals are also present in human waste because they are
9 excreted. This is in addition to the multitude of bacteria and viruses found in excrement.
10 And to the extent that the DELCORA system captures municipal storm water, that water
11 contains pesticides, herbicides, used oil, garbage, yard trimmings, leaves, dead animals,
12 and a host of other substances found on the streets. None of these harmful substances are
13 found in Kimberly-Clark’s wastewater, which contains paper fibers and mud from the
14 Delaware river. As such, Kimberly-Clark’s wastewater should be much easier and
15 cheaper to process as compared to wastewater from municipalities, individual
16 homeowners, and small commercial customers.

17
18 **Q. Have you had an opportunity to review the rebuttal testimony submitted by Mr.**
19 **Bubel?**

20 A. Yes.

21
22 **Q. Have Kimberly-Clark’s concerns regarding Aqua’s ability to administer the**
23 **Industrial Pretreatment Program been assuaged by Mr. Bubel’s rebuttal testimony?**

1 A. No. While this is admittedly the most detail Aqua has provided regarding its ability to
2 administer the IPP and obtain all necessary permits, Mr. Bubel's testimony simply
3 discusses what Aqua "expects" to happen and steps Aqua "plans" to take in the future. If
4 the transaction is approved, Kimberly-Clark and the other industrial customers need
5 certainty regarding their ability to maintain operations and continue discharging
6 wastewater. Kimberly-Clark suggests that if Aqua is confident it can administer the IPP
7 and obtain all necessary permits, then conditions should be imposed that bar
8 consummation of the transaction until the permit issues are resolved. Aqua should not be
9 allowed to complete the transaction unless it secures the permit changes it claims it can
10 easily obtain.

11
12 **Q. Does this conclude your surrebuttal testimony?**

13 A. At this time, yes. I reserve the right to supplement my testimony if additional
14 information becomes available.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application of Aqua Pennsylvania Wastewater,	:	
Inc. pursuant to Sections 507, 1102 and 1329 of	:	
the Public Utility Code for, inter alia, approval of	:	
the acquisition of the wastewater system assets of	:	Docket No. A-2019-3015173
the Delaware County Regional Water Quality	:	
Control Authority	:	

Direct Testimony of
Samantha Reiner

on Behalf of
Edgmont Township

September 29, 2020

Table of Contents

Introduction.....	1
Relationship between Edgmont Township and DELCORA.....	3
Concerns with Ratesetting Under Aqua Ownership	6
<i>Philadelphia-Related Costs.....</i>	<i>7</i>
<i>Contributed Property.....</i>	<i>9</i>
Relief Requested.....	13

Introduction

Q. Please state your name, job title, and business address.

A. My name is Samantha Reiner. I am a Managerial Consultant to Edgmont Township, currently serving as the Interim Township Manager. The business address at the township is 1000 Gradyville Road, P.O. Box 247, Gradyville, PA 19039.

Q. Please briefly summarize your relevant employment history, education, and experience.

A. 2020: Presently Managerial Consultant and Interim Township Manager for Edgmont Township; 1997-2018 Township Manager for Edgmont Township; 2018-2019 Zoning Officer for Edgmont Township; 1991-1997 Sewer Authority Manager for Bethel Township. I have been involved in sewer authority management, construction of sewers and township management for the better part of the past thirty (30) years. I am a professional Township Manager, certified in dozens of municipal disciplines by the Pennsylvania State Association of Township Officials.

Q. In your current position with Edgmont Township, what are your responsibilities?

A. Oversight of all aspects of the Township, including the Crum Creek Sewer District project I talk about later. I was the Township's point person on the sewer project, and the appointed Board Member on the Central Delaware County Authority (CDCA), an authority controlling the conveyance of untreated sewage from 12 member municipalities, of which Edgmont is one, to the Delaware County Regional Water Quality Control Authority ("DELCORA") for treatment and disposal.

1 **Q. As part of those responsibilities, do you have any interaction with DELCORA and**
2 **the provision of wastewater service in the Crum Creek Sewer District?**

3 A. Yes. I have had extensive interaction over the past decades with DELCORA.

4 **Q. Please describe your responsibilities and involvement with DELCORA and the**
5 **provision of wastewater service.**

6 A. About 20 years ago, Aqua had been planning a sewer system that would serve the eastern
7 part of Edgmont and the western portion of our neighboring township to the east
8 (Newtown). By the early 2000s, it became clear that Aqua wouldn't be able to provide
9 adequate capacity to serve the eastern portion of Edgmont. So I began attending
10 meetings, on behalf of Edgmont Township, with many of the DELCORA representatives,
11 including engineers, chairman, controllers, and project managers. Edgmont pursued a
12 connection to infrastructure in place under the control of CDCA which ultimately
13 connected to DELCORA for treatment. Edgmont joined CDCA and entered into a
14 Memorandum of Understanding (MOU) with DELCORA. The MOU outlined
15 DELCORA's willingness to construct and manage the Crum Creek Sewer System in
16 Edgmont. I continued working with the DELCORA management team, as well as
17 Edgmont's engineer and Solicitor, towards getting a formal Agreement, and then
18 throughout the construction of the sewer project.

19 Throughout the planning and construction process, I was Edgmont's point person
20 in working with DELCORA and the township's professionals. I had many years of
21 experience working with another sewer authority, so I was able to represent Edgmont's
22 interests during the planning and construction process.

1 **Relationship between Edgmont Township and DELCORA**

2 **Q. The Application that Aqua Pennsylvania Wastewater Inc. (“Aqua”) and**
3 **DELCORA filed with the Commission included Exhibit F81. Have you reviewed**
4 **that document?**

5 A. Yes, that is the final agreement between Edgmont and DELCORA.

6 **Q. Before DELCORA and Aqua entered into an Asset Purchase Agreement, were you**
7 **familiar with the agreement between DELCORA and Edgmont Township?**

8 A. Yes. Very familiar. I reviewed and commented on several drafts of the Agreement on
9 behalf of Edgmont Township, was present at the public meeting at which it was approved
10 and signed, and in fact my signature appears on the October 17, 2012 original document.

11 **Q. What is your understanding of the meaning and purpose of the agreement between**
12 **DELCORA and Edgmont Township? In answering, please understand that I am not**
13 **asking you for a legal opinion, but for your understanding of the relationship with**
14 **DELCORA as it relates to your duties with Edgmont Township.**

15 A. The Agreement formalized the Memorandum of Understanding by setting forth specific
16 terms of the finance, design, construction, installation, ownership, operation, maintenance
17 and repair duties and responsibilities for the Crum Creek Sewer District System. The
18 document was clear in that it set forth the project cost, capital buy-in costs paid to CDCA,
19 and buy out options. It enabled the elected officials of Edgmont Township to explain to
20 the public served by this district what to expect in sewer costs.

1 **Q. How much did it cost to build the Crum Creek Sewer District system?**

2 A. There are two parts to that. Some of the sewer infrastructure already existed and was
3 being used to transfer wastewater to small treatment plants that were failing. The
4 existing pipes were all given to DELCORA at no cost. Then DELCORA spent about
5 \$11.3 million to connect all the existing pieces and connect it to CDCA's main
6 interceptor line.

7 **Q. How is that cost being paid for?**

8 A. Edgmont received a grant for some of the work which we paid over to DELCORA.
9 Existing homes and businesses in the sewer district paid a connection fee to DELCORA
10 that defrayed some of the construction cost. The remainder was financed by DELCORA
11 and Edgmont customers are required to pay all of the debt service (principal, interest, and
12 a debt-service coverage requirement). As new customers are added, they (or their
13 developers) pay a connection fee to DELCORA which helps to pay down the debt. In
14 addition, customers in Edgmont pay very high rates to DELCORA (a home pays \$1,275
15 per year), and about half to two-thirds of that is for debt service on the debt.

16 That process has worked well. The system went into service in February 2016.
17 By the end of 2020 -- less than five years -- the remaining balance on the debt will be
18 about \$4 million. We expect two large developments to be built within the next year or so,
19 which will pay millions of dollars in connection fees. By late 2021 or early 2022, we
20 expect the debt balance to be only \$1 million or less. Once the debt is fully paid off,
21 which I expect to be in no more than two or three years, the rates our residents pay to
22 DELCORA should be reduced by at least 50%. So essentially all of the pipes, easements,

1 and other property that's part of the Crum Creek Sewer District has been, or soon will be,
2 paid for by customers.

3 **Q. To your understanding, and again not as a legal opinion, does the agreement allow**
4 **DELCORA to transfer its obligations to Aqua or anyone else?**

5 A. To the best of my knowledge, there was never any discussion by either party to the
6 Agreement that the system would be 'taken over' by a third party. The only discussion I
7 have ever been aware of was the opportunity for Edgmont to terminate the Agreement if
8 the original construction prices came back much higher than expected. We did include in
9 the agreement, though, a buy-back provision in case DELCORA ever did decide to sell or
10 stop operating the system, plus a requirement that we have to consent to any assignment
11 of the contract.

12 **Q. Has Edgmont Township consented to the assignment of your DELCORA agreement**
13 **to Aqua?**

14 A. No.

15 **Q. To the best of your knowledge, why hasn't Edgmont Township consented to the**
16 **assignment of the agreement to Aqua?**

17 A. Edgmont Township sewer customers in the Crum Creek Sewer District currently pay
18 very high sewer rates: \$1,275 annually for a residence. The customers all were told at the
19 beginning of the project they would be paying for the debt service until it was paid off,
20 and then their rates would be reduced accordingly to cover Operation and Maintenance
21 for the Crum Creek Sewer District, costs that were estimated at a much lower amount.

1 Transfer to a third party, especially a for-profit company like Aqua, is not consistent with
2 the promises made to our residents and businesses and would not provide for the
3 reduction in rates people were promised when the debt is paid off.

4 **Q. Aqua has asked the PUC to recognize the agreement between Edgmont Township**
5 **and DELCORA as an agreement between you and Aqua. Is there any agreement**
6 **between Edgmont and Aqua?**

7 A. No.

8 **Q. To your understanding, is it possible for Aqua to just step into DELCORA's shoes**
9 **under your agreement with DELCORA?**

10 A. No. Our agreement with DELCORA requires DELCORA to obtain grants and to follow a
11 particular process to set rates. As I understand it, Aqua would not be eligible for most
12 government grants. I also understand the PUC has a role in setting rates for Aqua.

13 **Concerns with Ratesetting Under Aqua Ownership**

14 **Q. Are those differences in ratesetting among the reasons you have not consented to**
15 **DELCORA's assignment of your agreement to Aqua?**

16 A. Yes. Those rate-setting requirements prevent DELCORA from charging us for costs that
17 are not related to serving our community. As counsel explained the PUC ratemaking
18 process to me, it's very possible that Aqua would attempt to have rates set that combine
19 costs across all of DELCORA, or even across all of Aqua's holdings in Pennsylvania.

1 **Q. Are there any other aspects of the likely ratesetting process under Aqua ownership**
2 **that cause you to be concerned?**

3 A. Yes, we have two additional concerns about Aqua’s potential ownership of the system.
4 First, we are very concerned that Aqua will try to charge customers in Edgmont for costs
5 related to treating wastewater by Philadelphia Water Department (“PWD”) or of Aqua
6 bypassing PWD by building new mains and greatly expanding DELCORA’s treatment
7 plant in the City of Chester. Second, Aqua does not plan to give Edgmont customers any
8 credit for the millions of dollars’ worth of sewer system that Edgmont customers paid for
9 and contributed to DELCORA.

10 ***Philadelphia-Related Costs***

11 **Q. Please describe your first concern: the potential for you to pay for PWD-related**
12 **costs under Aqua ownership.**

13 A. If the deal is approved, Aqua plans to invest hundreds of millions of dollars to transport
14 wastewater flows from Eastern Delaware County to an expanded treatment plant in
15 Chester.¹ The investment is designed to bypass flows currently going to PWD. I
16 understand that DELCORA would construct a similar project if it remains in business.

17 The difference is that under DELCORA ownership, customers in Edgmont would
18 not be responsible for any of the costs associated with bypassing PWD. DELCORA’s
19 ratesetting process and our contract limit DELCORA to charging Edgmont customers for
20 costs directly related to serving those customers. Further, if DELCORA remains in

¹ Municipal Protestants Exhibit 4.

1 charge, it could try to obtain grants or very low interest loans to pay for the project.

2 DELCORA also would have an incentive to try to minimize the cost of the project, for
3 example by controlling wet weather flows to free up capacity in the Chester treatment
4 plant.

5 Under Aqua ownership, however, ratesetting would be under the PUC and there
6 would be no guarantee that Edgmont customers would not have to pay some of the PWD
7 bypass costs. Counsel has told me that the PUC has a policy of “single tariff pricing”
8 which tries to move all customers of a utility toward paying the same rate for service.²
9 That would be an absolute disaster for Edgmont customers -- raising rates by hundreds of
10 dollars a year more than they would be under DELCORA ownership.

11 Frankly, I don’t know how an elected public official could ever explain to a sewer
12 customer that through no fault of its own, the Township’s sewer customers are now
13 required to absorb the costs of fixing a very expensive problem that has nothing at all to
14 do with the sewer system that DELCORA designed, built and maintained for them.

15 **Q. As you understand your agreement with DELCORA, are you charged any of**
16 **PWD’s treatment costs?**

17 **A.** No. As I understand our agreement with DELCORA, we are not charged those costs
18 today and would not pay them in the future under our existing contract with DELCORA.

² See Municipal Protestants Exhibit 5.

1 **Q. As you understand the likely ratesetting process Aqua would use, would you be**
2 **charged PWD's treatment costs, or the costs of bypassing PWD, in the future?**

3 A. Yes, we think we might be. Aqua prepared a projection of the amount it would charge us
4 and it appears to include costs related to the bypass of PWD.

5 **Q. Can you be more specific about what projection of costs and rates you're talking**
6 **about?**

7 A. Yes. The projection was provided in response to Office of Consumer Advocate
8 interrogatory III-12. I understand that this is being marked as Municipal Protestants
9 Exhibit 1. There isn't a specific projection for Edgmont rates in that exhibit, but it's clear
10 to me that Aqua's projections are based on each rate area receiving the same percentage
11 increases, and those increases are extremely large: 47% in 2022, 16% in 2025, and 24%
12 in 2028. I do understand, though, that Aqua has said it does not yet know how it will set
13 rates specifically for Edgmont.³

14 ***Contributed Property***

15 **Q. Your second ratemaking concern relates to the way in which contributed property**
16 **would be reflected in Aqua's rates. Can you quantify the value of property**
17 **contributed by Edgmont customers to DELCORA?**

18 A. I can quantify some of the value but not all of it. Edgmont Township had multiple
19 commercial and residential neighborhoods that had sewer infrastructure already in place.
20 DELCORA built the connecting pieces and converted pump stations that resulted in a

³ Municipal Protestants Exh. 3 (Aqua admissions), pp. 1-2.

1 cohesive system to collect and convey effluent from the entire Crum Creek Sewer
2 District into CDCA's system, which ultimately flows to DELCORA for treatment. There
3 were dozens of property easements and miles of pipes already in place, essentially all of
4 which was contributed by the business owners and residents to the DELCORA project at
5 no cost to DELCORA. I do not know the specific value of that property, but it was
6 substantial.

7 I can, however, quantify the contributions made by developers and customers to
8 DELCORA associated with the construction project. The numbers I refer to are taken
9 from DELCORA's admissions related to Edgmont, Municipal Protestants Exhibit 2,
10 pages 3-4.

11 Edgmont Township obtained grants totaling almost \$900,000 to help fund the
12 connection to DELCORA. That money was given to DELCORA to help pay for the
13 project.

14 Edgmont customers and property developers paid DELCORA connection fees
15 during 2016 totaling more than \$2.8 million. That money went to defray the construction
16 costs.

17 DELCORA received a reimbursement from a third party of about \$70,000 for
18 some of the construction work.

19 Edgmont customers have been paying debt service on the loan since early 2016
20 when the project was completed.

1 Finally, there has been additional development in the Crum Creek Sewer District
2 and developers have paid connection fees to DELCORA that also are used to pay down
3 the debt for the project.

4 In total, from the original \$11.3 million cost of the project, at the end of 2020
5 DELCORA projects the remaining balance on the loan will be only \$4 million. So, since
6 2016, customers and developers have contributed about \$7.3 million to DELCORA for
7 the construction project, plus the value of all the pre-existing infrastructure.

8 **Q. How is that contributed property treated by DELCORA when setting your rates.**

9 A. As I understand DELCORA's ratesetting process, since it has not issued debt to pay for
10 contributed property, contributed property is not included in rates. Of course,
11 DELCORA still has to operate and maintain the property, but there is no debt cost related
12 to property that's contributed.

13 **Q. To the best of your knowledge, how does Aqua intend to treat property contributed
14 by Edgmont customers and developers when setting your rates in the future?**

15 A. According to paragraphs 60 and 61 of its Application, Aqua is asking the PUC to include
16 the full purchase price of \$276.5 million in its rate base. As I understand it, Aqua is
17 asking that all the property we contributed to DELCORA just be ignored. This is
18 confirmed by Aqua in its admissions.⁴

19 As counsel explained how rate base is handled in a PUC rate case, the rate base is
20 depreciated over time and Aqua would be allowed to earn a profit on the undepreciated

⁴ Municipal Protestants Exhibit 3, pp. 3-4.

1 rate base. So Aqua wants to earn a return on property that was given to DELCORA at no
2 cost by Edgmont residents and businesses, developers, and the Commonwealth.

3 **Q. Is that confirmed by your review of Municipal Protestants Exhibit 1?**

4 A. Yes. It appears to me that Aqua is basing its rate calculations on earning a profit on the
5 entire \$276.5 million purchase price it will pay to DELCORA without any deduction for
6 property in the Crum Creek Sewer District that was contributed to DELCORA.

7 **Q. Why is that a concern to you?**

8 A. Our residents, businesses, and developers paid substantial up-front capital contributions
9 to DELCORA and gave property to DELCORA, all designed to keep the quarterly rates
10 for sewer service as low as possible after the debt is paid off. DELCORA now wants to
11 turn around and sell the property we gave it, and Aqua wants to pretend that their
12 investors paid for all of that property. It's not right and it's not fair. We already paid for
13 the property. We shouldn't have to pay for it again through Aqua's rates.

14 **Q. To your understanding, and again I'm not asking for a legal opinion, are there**
15 **provisions in your agreement with DELCORA that discuss contributed property?**

16 A. Yes. Second 3.f. of the agreement (Exhibit F81) says: "Both DELCORA and the
17 Township shall endeavor, where possible to cause all or portions of the Crum Creek
18 Sewer District System, where possible, to be constructed by private developers in
19 connection with private development, and to the extent practicable, without
20 reimbursement for subsequent connections." We have worked with developers and done
21 that, resulting in significant contributions from developers to DELCORA.

Relief Requested

Q. What do you want the PUC to do?

A. Edgmont Township is asking the PUC to reject the proposed deal between Aqua and DELCORA. DELCORA does not have the right to sell the property it uses to serve us, it does not have the right to assign our contract to Aqua, and it does not have the right to stop operating the system. The transaction would greatly increase our rates and not provide any benefits to residents and businesses in Edgmont Township. In addition, it's terribly unfair for Aqua to ignore the fact that we gave millions of dollars' worth of property to DELCORA, and to ask us to pay for that property a second time. Finally, Aqua has asked the PUC to recognize our agreement with DELCORA as an agreement between us and Aqua, but we do not have an agreement with Aqua.

Q. If the Commission disagrees and approves the transaction, what do you recommend?

A. First, I would strongly oppose that outcome unless the PUC imposes conditions on Aqua that recognize Edgmont Township's rights under our contract with DELCORA.

Q. How would the PUC recognize your rights under the contract?

A. The Commission should require Aqua to use the same rate-setting process that DELCORA has used, including limiting the costs we pay to the actual cost to directly serve our residents and businesses. Since none of our wastewater flows to PWD, we should not pay any of the costs associated with bypassing PWD and expanding the Chester treatment plant to handle those flows.

1 In addition, Aqua should be required to significantly reduce the rates paid by
2 Edgmont residents and businesses to recognize the significant value of property
3 contributed by Edgmont residents and businesses to DELCORA, and the fact that the
4 debt DELCORA used to finance the construction will be retired by DELCORA as part of
5 the transaction with Aqua. It also should be made clear that any future contributions of
6 property from developers must be deducted from Aqua's rate base. We expect more than
7 \$2 million worth of additional developer contributions during the next 18 months (adding
8 more than 400 housing units in the Crum Creek Sewer District). It would be grossly
9 unfair for Aqua to accept that property from developers and attempt to charge customers
10 a profit on that property.

11 **Q. Is there anything else you want the PUC to consider when deciding this case?**

12 A. Edgmont Township has sewer customers who are struggling to pay their rates today.
13 Anything but a large reduction in their sewer bill going forward would be a tremendous
14 burden on them and could put them out of business or out of their homes. Under
15 DELCORA ownership, we expect rates to be substantially reduced in the next two or
16 three years when the construction debt will be fully paid.

17 **Q. Does this conclude your direct testimony?**

18 A. Yes, it does.

VERIFICATION

I, Samantha Reiner, the Interim Township Manager of Edgmont Township, Delaware County, Pennsylvania, hereby state that Edgmont Statement 1 represents my direct testimony that was prepared by me and under my direction and supervision and that the statements in Edgmont Statement 1 are true and correct to the best of my knowledge, information and belief. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: September 29, 2020



BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application of Aqua Pennsylvania Wastewater, :
Inc. pursuant to Sections 507, 1102 and 1329 of :
the Public Utility Code for, inter alia, approval of : Docket No. A-2019-3015173
the acquisition of the wastewater system assets of :
the Delaware County Regional Water Quality :
Control Authority :

Direct Testimony of
Joseph Possenti, Jr.

on Behalf of
Lower Chichester Township

September 29, 2020

Table of Contents

Introduction.....	1
Relationship between Lower Chichester and DELCORA	2
Concerns with Ratesetting Under Aqua Ownership	7
<i>Philadelphia-Related Costs.....</i>	<i>7</i>
<i>Contributed Property.....</i>	<i>8</i>
Relief Requested.....	9

List of Schedules

Schedule JP-1	Contributions by Lower Chichester Township toward future LTCP costs, 2016 - 2020
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Introduction

Q. Please state your name, job title, and business address.

A. My name is Joseph Possenti, Jr. My brother and I run Possenti Consulting LLC, a firm that specializes in providing consulting and management services for municipalities. We have provided these services for almost a dozen municipalities during the past 20 years. At present, among my other responsibilities, I serve as the Township Manager for Lower Chichester Township (“Lower Chichester”). My business address is 241 E. Peters Lane, Aston, PA 19014.

Q. Please briefly summarize your relevant employment history, education, and experience.

A. I have a Bachelor’s degree in Business Administration from Temple University. I have done management, finance, and code enforcement work for various Townships and Boroughs in Delaware, Chester, and Bucks County since 2000.

Q. Why is Lower Chichester interested in this case?

A. Lower Chichester owns the wastewater collection system in the township. The system is connected to the Delaware County Regional Water Quality Control Authority (“DELCORA”) transmission network and ultimately treated in DELCORA’s Western Region treatment plant. In other words, Lower Chichester is a wholesale customer of DELCORA.

1 **Q. What do you do for Lower Chichester?**

2 A. As the Township Manager, I am responsible for overseeing the operations of the
3 township, including budgeting, financial management, accounts payable and receivable,
4 and related functions.

5 **Q. As part of those responsibilities, do you have any interaction with DELCORA and**
6 **the provision of wastewater service for your service area?**

7 A. Yes.

8 **Q. Please describe your responsibilities and involvement with DELCORA and the**
9 **provision of wastewater service.**

10 A. It is my responsibility to be knowledgeable of Lower Chichester's contracts and financial
11 obligations, which includes the agreement and service relationship with DELCORA. I
12 am particularly focused on issues like billing, budgeting, and any service limitations that
13 might exist.

14 **Relationship between Lower Chichester and DELCORA**

15 **Q. I have provided you with a copy of Exhibit F84 attached to Aqua's application. Are**
16 **you familiar with this document?**

17 A. Yes, this is a copy of the agreement between Lower Chichester and DELCORA.

1 **Q. Before DELCORA and Aqua entered into an Asset Purchase Agreement, were you**
2 **familiar with the agreement between DELCORA and Lower Chichester?**

3 A. Yes. I have been working with Lower Chichester for many years. I help prepare the
4 annual budget for the township, and wastewater treatment is one of our largest expenses,
5 so I try to monitor DELCORA's charges and any operational issues very closely.

6 **Q. What is your understanding of the meaning and purpose of the agreement between**
7 **DELCORA and the township? In answering, please understand that I am not**
8 **asking you for a legal opinion, but for your understanding of the relationship with**
9 **DELCORA as it relates to your duties with Lower Chichester.**

10 A. The agreement with DELCORA dates from 1977, which is before my time with the
11 township. As part of my job, though, I have become familiar with the reasons for the
12 agreement. As I understand it, the township has had a wastewater collection system for
13 more than 100 years. There was an old agreement from 1919 that had the township's
14 wastewater piped to Marcus Hook Borough for treatment.

15 With the formation of DELCORA and DELCORA's plans to build a large
16 regional treatment plant in the City of Chester, Marcus Hook would abandon its treatment
17 plant and all wastewater would be diverted to DELCORA's new plant. Rather than have
18 multi-party agreements, DELCORA apparently decided it would make more sense to
19 have agreements directly with each municipality that had a collection system.

20 The 1977 agreement with DELCORA included the construction of an interceptor
21 known as the Marcus Hook Bypass, as well as sewage treatment at the new plant. The
22 agreement has specific terms that define how DELCORA will bill the township for

1 service, what costs can be billed to the township, operation of the treatment plant,
2 industrial pretreatment, obtaining grant funding, and so on.

3 **Q. Are you familiar with Sections 8.13 and 8.14 of your agreement with DELCORA**
4 **(Exhibit F84)?**

5 A. Yes. While I am not a lawyer, I can read these sections as a business person. To me,
6 they say that DELCORA cannot assign the agreement, other than assigning revenues for
7 financing purposes, without Lower Chichester's consent.

8 **Q. Has Lower Chichester consented to the assignment of the DELCORA agreement to**
9 **Aqua?**

10 A. No.

11 **Q. To the best of your knowledge, why hasn't the township consented to the assignment**
12 **of the agreement to Aqua?**

13 A. To the best of my knowledge, the township feels that there is no financial benefit to our
14 customers. Under the township's agreement with DELCORA, the costs we can be
15 charged are well defined. My understanding is that we can be charged only for costs that
16 directly relate to providing the township with service. We cannot be charged for costs or
17 plant that does not serve township customers.

18 **Q. From your work, are you generally familiar with DELCORA's budgeting and**
19 **billing process, as it relates to Lower Chichester?**

20 A. Yes. Part of my responsibility with the township is to review and pay the bills from
21 DELCORA, review DELCORA's annual budget and how it affects the township's budget

1 (which I also help prepare), track our wastewater flows as compared to DELCORA's
2 budgeted level of flows from us, and review the annual true-up we receive from
3 DELCORA.

4 **Q. What is the annual true-up you receive from DELCORA?**

5 A. DELCORA bills us quarterly based on budget estimates prepared in the fourth quarter of
6 the previous year. This includes estimates of expenses, debt service, and wastewater
7 flows. After DELCORA's annual audit, DELCORA reconciles the previous year's
8 budget (and our sewage flows) to actuals. Based on the annual reconciliation, we may
9 owe DELCORA money (which typically is due during the summer) or we may receive a
10 credit from DELCORA which we can apply to our next bill.

11 **Q. To the best of your knowledge, will Aqua use that same process?**

12 A. No. As I understand it, Aqua plans to bill Lower Chichester based on actual metered
13 flows with no annual true-up of expenses.¹

14 **Q. Does that cause you any concerns?**

15 A. Yes. Our wastewater treatment bill isn't like a gas or electric bill. The bill from
16 DELCORA is one of our largest expenses -- this year we're budgeted to pay DELCORA
17 \$485,000. Our budgeting process decides how much we need to charge our customers
18 for sewer service, and a big part of that is how much we will owe to DELCORA for
19 treatment. DELCORA's estimating and reconciliation process lets us develop an annual
20 budget to recover our costs, maintain a reasonable reserve, and maintain our collection

¹ Municipal Protestants Exhibit 3 (Aqua admissions), p. 6, response to #4.

1 system. I don't think this will be possible with Aqua. As I understand it, Aqua will
2 charge us based on actual consumption and it won't reconcile costs, which means costs
3 could be very different from what we budgeted.

4 **Q. Is that one of the reasons Lower Chichester has not agreed to the assignment to**
5 **Aqua?**

6 A. Yes.

7 **Q. Aqua has asked the PUC to recognize the agreement between Lower Chichester and**
8 **DELCORA as an agreement between the township and Aqua. Is there any**
9 **agreement between the township and Aqua?**

10 A. No.

11 **Q. To your understanding, is it possible for Aqua to just step into DELCORA's shoes**
12 **under your agreement with DELCORA?**

13 A. No. Our contract with DELCORA has specific requirements for cost recovery,
14 ratesetting, and obtaining government grants that Aqua cannot comply with. So really
15 Aqua (or DELCORA) is asking us to change our contract, not simply assign it to Aqua.
16 We are not willing to do that unless someone can show us how this is better for Lower
17 Chichester's residents and businesses.

1 **Concerns with Ratesetting Under Aqua Ownership**

2 **Q. Are differences in ratesetting between DELCORA and Aqua among the reasons you**
3 **have not consented to DELCORA's assignment of your agreement to Aqua?**

4 A. Yes. The rate-setting requirements as defined in our DELCORA agreement prevent
5 DELCORA from charging us for costs that are not related to serving the township.

6 ***Philadelphia-Related Costs***

7 **Q. Are there specific costs that concern you?**

8 A. Yes. We do not know if Aqua intends to limit our charges to the same types of costs we
9 pay DELCORA. We are very concerned about this because DELCORA and Aqua plan to
10 construct a big bypass to divert flows that currently go to Philadelphia and have them
11 treated in DELCORA's plant in Chester. None of our flows go to Philadelphia now and
12 we do not think we should pay the costs of diverting flows from Philadelphia to Chester
13 (or the costs of expanding the Chester plant to handle the increased load). Under our
14 agreement with DELCORA, as I understand it, the costs of bypassing Philadelphia would
15 be paid by Eastern Region customers, not by Lower Chichester. We have no idea what
16 Aqua plans to do or what the PUC might require in the future.

17 **Q. Are those costs expected to be significant?**

18 A. Yes. I believe Aqua and DELCORA estimate the cost to be almost twice the cost of
19 Aqua's purchase of DELCORA -- \$400 or \$500 million.² None of that cost will benefit

² See Municipal Protestants Exhibit 4.

1 Lower Chichester, but we are very concerned that Aqua would require us to pay for some
2 of it.³

3 **Q. As you understand your agreement with DELCORA, are you charged any**
4 **Philadelphia treatment costs?**

5 A. No. We are not charged those costs today and would not pay them in the future under
6 our existing contract with DELCORA.

7 ***Contributed Property***

8 **Q. Has the township and its customers made any significant capital contributions to**
9 **DELCORA?**

10 A. Yes, in 2016 DELCORA started charging Lower Chichester \$0.32 per 1000 gallons as a
11 contribution toward future Long Term Control Plan (“LTCP”) costs. Since 2017 the fee
12 has been \$0.34 per 1000 gallons. Schedule JP-1 is my calculation of the amount we have
13 paid to DELCORA for future LTCP costs. Lower Chichester has paid approximately
14 \$309,000 to DELCORA to pay costs associated with future stormwater controls.

15 **Q. Do you know what DELCORA does with the money you contribute toward future**
16 **LTCP costs?**

17 A. Yes. DELCORA has a Reserve for Future Long Term Control Plan costs as part of its
18 Revenue Fund cash account.⁴ Lower Chichester’s LTCP payments go into this reserve.⁵

³ See Municipal Protestants Exhibit 5.

⁴ Municipal Protestants Exhibit 2 (DELCORA admissions), p. 10 #24-25.

⁵ Id., p. 7 #16.

1 **Q. Do you know what will happen to the Reserve for Future Long Term Control Plan**
2 **costs as part of DELCORA's deal with Aqua?**

3 A. Yes, the Reserve fund will stay with DELCORA.⁶ The money will not be used to pay for
4 future LTCP costs.

5 **Relief Requested**

6 **Q. What do you want the PUC to do?**

7 A. We are asking the PUC to reject the proposed deal between Aqua and DELCORA.
8 DELCORA does not have the right to sell the property it uses to serve the township, it
9 does not have the right to assign our contract to Aqua, and it does not have the right to let
10 someone else own or operate the system without our approval. Aqua ownership would
11 greatly increase our rates and not provide any benefits to the township or our customers.
12 Finally, Aqua has asked the PUC to recognize our agreement with DELCORA as an
13 agreement between Lower Chichester and Aqua, but we do not have an agreement with
14 Aqua.

15 **Q. If the PUC disagrees with you, are there ways the PUC could protect Lower**
16 **Chichester and its customers?**

17 A. The Commission should require Aqua to use the same rate-setting process that
18 DELCORA has used, including limiting the costs we pay to the actual cost to directly
19 serve our customers. We should not pay any of the costs of bypassing Philadelphia and
20 expanding the Western Region treatment plant.

⁶ Id., p. 10 #27.

1 In addition, all of the money we have paid for future LTCP control should be
2 returned to the township. We can use that money to help maintain our system and reduce
3 our own stormwater flows.

4 **Q. Does this conclude your direct testimony?**

5 **A. Yes, it does.**

Contributions by Lower Chichester Township toward future LTCP costs, 2016 - 2020

<u>Year</u>	<u>Rate per 1000 gal.</u>	<u>1000 gal. billed</u>	<u>Total paid</u>
2016	\$0.32	190,320	\$ 60,902
2017	\$0.34	182,500	62,050
2018	\$0.34	182,500	62,050
2019	\$0.34	182,500	62,050
2020	\$0.34	182,500	62,050
Total			\$ 309,102

Source: DELCORA response to Lower Chichester I-3, Attachment 1

VERIFICATION

I, Joseph Possenti, Jr., the Township Manager for Lower Chichester Township, hereby state that Lower Chichester Statement 1 represents my direct testimony that was prepared by me and under my direction and supervision and that the statements in Lower Chichester Statement 1 and the information in accompanying Schedule JP-1 are true and correct to the best of my knowledge, information and belief. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: September 29, 2020



BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application of Aqua Pennsylvania Wastewater,	:	
Inc. pursuant to Sections 507, 1102 and 1329 of	:	
the Public Utility Code for, inter alia, approval of	:	
the acquisition of the wastewater system assets of	:	Docket No. A-2019-3015173
the Delaware County Regional Water Quality	:	
Control Authority	:	

Direct Testimony of
Cecelia Nelson

on Behalf of
Southwest Delaware County Municipal Authority

September 29, 2020

Table of Contents

Introduction.....	1
Relationship between SWDCMA and DELCORA.....	3
Concerns with Ratesetting Under Aqua Ownership	10
<i>Philadelphia-Related Costs</i>	11
<i>Contributed Property</i>	13
Relief Requested.....	16

List of Schedules

Schedule CN-1	Contributions by SWDCMA toward future LTCP costs, 2016 - 2020
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Introduction

Q. Please state your name, job title, and business address.

A. Cecelia Nelson, Authority Administrator of the Southwest Delaware County Municipal Authority (“SWDCMA” or “the Authority”) located at 1 Gamble Lane, Aston, PA 19014.

Q. Please briefly summarize your relevant employment history, education, and experience.

A. I am a high school graduate with a core curriculum in business/accounting. I have held management positions of accounting and administrative offices for businesses in the printing and publishing industry, wholesale distribution, government contractors for the Department of Defense and the electronic monitoring industry for more than 35 years.

Q. What does SWDCMA do?

A. SWDCMA is a municipal authority that was formed in 1957 by Aston Township to provide wastewater service within the township. Over the years, SWDCMA expanded to serve parts of Chester Township, Concord Township, Upper Chichester Township, Brookhaven Borough, and Chester Heights Borough. Up until 2014, the Authority owned and operated a wastewater treatment plant. In November 2014, SWDCMA retired its treatment plant and all wastewater is conveyed to the Delaware County Regional Water Quality Control Authority (“DELCORA”) for treatment.

1 **Q. In your current position with SWDCMA, what are your responsibilities?**

2 A. As the Authority Administrator, I am responsible for the preparation and reporting of the
3 financial condition of the Authority. I oversee a staff of four employees, work with
4 Board appointed professionals and am charged with enforcing the policies of the
5 Authority as set by the Board of Directors. This position includes, but is not limited to,
6 customer billing, customer collections, contract management and overseeing collection
7 system maintenance and improvements.

8 **Q. As part of those responsibilities, do you have any interaction with DELCORA and**
9 **the provision of wastewater service for your service area?**

10 A. Yes.

11 **Q. Please describe your responsibilities and involvement with DELCORA and the**
12 **provision of wastewater service.**

13 A. As Authority Administrator, it is my responsibility to be knowledgeable of the
14 Authority's contracts, which includes the Agreement of Service with DELCORA dated
15 December 21, 2009, and amended on December 1, 2013. The issues I help address with
16 DELCORA include, but are not limited to, the operation and maintenance of the
17 facilities, wastewater quality restrictions and the determination of the annual service
18 charges. It is my responsibility to obtain the upcoming year's estimated flows and cost
19 per thousand gallons in order to complete our annual budget process, which includes a
20 recommendation of whether a customer rate increase is necessary.

1 **Relationship between SWDCMA and DELCORA**

2 **Q. I have provided you with copies of Exhibits F110 and F111 attached to Aqua's**
3 **application. Are you familiar with those documents?**

4 A. Yes, those are copies of SWDCMA's contract, as amended, with DELCORA. Exhibit
5 F110 is the 2009 agreement; F111 is the 2013 amendment to the agreement.

6 **Q. Before DELCORA and Aqua entered into an Asset Purchase Agreement, were you**
7 **familiar with the agreement between DELCORA and SWDCMA?**

8 A. Yes. As part of my financial duties, I prepare the annual budget to present to the Finance
9 Committee. Since treatment cost is our largest expense and therefore necessary to
10 complete the annual budget, it is my responsibility to obtain the estimated flows and cost
11 per thousand gallons for the upcoming year from DELCORA.

12 **Q. What is your understanding of the meaning and purpose of the agreement between**
13 **DELCORA and SWDCMA? In answering, please understand that I am not asking**
14 **you for a legal opinion, but for your understanding of the relationship with**
15 **DELCORA as it relates to your duties with SWDCMA.**

16 A. To understand the purpose of the DELCORA agreement, there first needs to be some
17 history provided. I was hired by SWDCMA in September 2010; the Agreement of
18 Service with DELCORA was signed in December 2009. When I was hired, the Authority
19 had an aging treatment plant in need of major repairs and a staff of approximately 40
20 employees. The agreement moved all of our flows to DELCORA, allowed us to
21 decommission the old treatment plant in Aston, and significantly reduced our payroll and

1 operating costs. This has allowed SWDCMA to spend money on deferred maintenance
2 to improve our system and reduce our wet weather flows, known as infiltration and
3 inflow (“I&I”).

4 **Q. Did SWDCMA incur any costs to connect to DELCORA?**

5 A. Yes. SWDCMA is responsible for approximately 60% of the costs of the Chester Ridley
6 Creek Pump Station (“CRCPS”) and force main that were built to connect the Authority,
7 a neighboring authority, and another township to the DELCORA system. Our share of
8 the CRCPS construction costs totals about \$10.3 million. In addition, the Authority paid
9 more than \$1.6 million to decommission and tear down our old treatment plant.

10 **Q. How did the Authority pay for the almost \$12 million in up-front costs to connect to**
11 **DELCORA?**

12 A. We borrowed the approximately \$1 million and paid \$600,000 out of reserves to
13 demolish the old treatment plant. Our share of the costs to build the CRCPS and force
14 main is being financed by DELCORA over 20 years. We pay a surcharge of
15 approximately \$0.79 per 1000 gallons to DELCORA to cover the debt service (including
16 DELCORA’s debt-service coverage requirement) on the debt that financed the CRCPS.¹
17 We started paying that surcharge in 2015 and it’s expected to continue until roughly the
18 end of 2034.

¹ Municipal Protestants Exhibit 2 (DELCORA Admissions), p. 10 #22.

1 **Q. As you understand it, why was the Authority willing to pay almost \$12 million to**
2 **connect to DELCORA?**

3 A. The long-term benefit of transitioning flows to DELCORA was the long-term
4 relationship we expected to have with another municipal authority. Obviously, we are
5 very familiar with municipal authorities and we know that as government bodies, we do
6 not pay excessive salaries to our officers or have common stock that we need to pay
7 dividends on. Authorities borrow money at low rates and do not have to pay income
8 taxes. We expected our long-term relationship with DELCORA to be very cost-effective
9 for our customers.

10 Our contract has a term of 25 years, with an option to renew for an additional 25
11 years. The DELCORA service agreement clearly defined what we would be responsible
12 to pay for; thereby, removing the possibility of unexpected expenses or being forced to
13 pay for costs which provide no benefit to our customers.

14 **Q. Are you familiar with Sections 9.11 and 9.12 of your agreement with DELCORA**
15 **(Exhibit F110)?**

16 A. Yes. This is the part of the contract that says DELCORA cannot assign the agreement,
17 other than assigning revenues for financing purposes, without SWDCMA's consent.

18 **Q. Has SWDCMA consented to the assignment of your DELCORA agreement to**
19 **Aqua?**

20 A. No.

1 **Q. To the best of your knowledge, why hasn't SWDCMA consented to the assignment**
2 **of the agreement to Aqua?**

3 A. To the best of my knowledge, the Authority feels that there is no financial benefit to
4 SWDCMA's customers to assigning the DELCORA service agreement to Aqua. Under
5 the current DELCORA agreement, the costs that comprise our billing rate are clearly
6 defined and consist only of the infrastructure that was constructed to provide treatment
7 service to our customers. Those rates are charged for every metered gallon of flow that
8 goes through the CRCPS to DELCORA for treatment which includes I&I from our
9 system. Under our current agreement, the Authority will be paying back approximately
10 \$10.3 million (60% of \$17.1 million for the Chester Ridley Creek Pump Station and force
11 main) plus interest over the next 20 years. Our DELCORA rates are based on being a
12 wholesale customer and the agreement defines the specific costs that are included in our
13 treatment cost per thousand gallons.

14 **Q. From your work, are you familiar with DELCORA's budgeting and billing process,**
15 **as it relates to SWDCMA?**

16 A. Yes. Part of my responsibility with the Authority is to review and pay the bills from
17 DELCORA, review DELCORA's annual budget and how it affects SWDCMA's budget
18 (which I also help prepare), track our wastewater flows as compared to DELCORA's
19 budgeted level of flows from us, and review the annual true-up we receive from
20 DELCORA.

1 **Q. What is the annual true-up you receive from DELCORA?**

2 A. DELCORA bills us quarterly based on estimated costs and estimated wastewater flows.
3 Each year, after DELCORA's annual audit, DELCORA reconciles the previous year's
4 budget -- both costs and flows -- to actuals. The treatment cost rate is adjusted to balance
5 DELCORA's annual budget. To clarify, in years where the actual flows exceed the
6 estimated flows, the cost per thousand gallons usually is reduced for all of the flows
7 treated (unless there were significant increases in operating costs). In years where the
8 actual flows fall short of the estimated flows, the cost per thousand gallons probably will
9 be increased but only to the level needed to balance their budget.

10 **Q. Can you provide an example?**

11 A. Yes, I will use 2019 as an example. For 2019, DELCORA estimated SWDCMA would
12 have a flow of 897,900,000 gallons and its budget for 2019 was based on charging us a
13 rate of \$3.24 per 1000 gallons, or approximately \$2.9 million for the year. Our actual
14 flows for 2019 were much higher than expected, totaling 1,090,805,000 gallons. This
15 resulted in DELCORA incurring additional costs to serve us, but it also reduced the rate
16 per 1000 gallons for certain fixed costs (such as debt service on the CRCPS). For
17 instance, instead of paying \$0.79 per 1000 gallons for CRCPS debt service, the increased
18 consumption lowered that rate to \$0.66 per 1000 gallons. In total, the true-up reduced
19 our rate by 20 cents per 1000 gallons to \$3.04. But after applying that rate to the higher
20 flow, it resulted in the Authority owing DELCORA a total of \$3.3 million for the year, or
21 a true-up of approximately \$400,000.

1 Because I track our flow rates very closely, we knew we would need to make a
2 significant payment to DELCORA when the true-up was completed. So we built
3 approximately \$400,000 into our budget (and the rates our customers pay) for 2020 to
4 cover the expected true-up payment.

5 **Q. To the best of your knowledge, will Aqua use that same process?**

6 A. No. As I understand it, Aqua plans to bill SWDCMA based on actual metered flows with
7 no annual true-up of expenses.² So if it's a particularly wet year like 2019 and the
8 Authority's flows are higher than expected, Aqua will reap a windfall. If it's a very dry
9 year and our flows are less than expected, then Aqua will receive less revenues than
10 expected.

11 **Q. Can you provide an example using the same information for 2019?**

12 A. Yes. For the sake of this example I assume Aqua will charge us exactly the same rate
13 that DELCORA projected. In reality, of course, Aqua's rates are likely to be higher
14 because of higher capital costs, overheads, and taxes. So Aqua would have charged us a
15 rate of \$3.24 per 1000 gallons for the entire 1,090,085,000 flow that we had during 2019,
16 or a total of \$3.5 million, compared to the expected amount of \$2.9 million. That's
17 \$600,000 we would not have been able to build into our budget or the rates we charge our
18 customers.

19 That is \$200,000 more than DELCORA charged us by reconciling expenses,
20 capital recovery, and flows. More importantly, as I understand it Aqua would require us

² Municipal Protestants Exhibit 3 (Aqua admissions), p. 9, response to #4.

1 to pay that extra \$600,000 during 2019. In contrast DELCORA essentially gives us an
2 additional six or seven months to pay the reconciliation amount (we can estimate it at
3 year-end, but the exact amount isn't known until DELCORA's audit is completed).

4 **Q. Does that cause you any concerns?**

5 A. Yes. I have to develop an annual budget which the Authority's board reviews, modifies,
6 and approves. Part of that budgeting process is determining the rate we need to charge
7 our customers for all the costs of operating the collection system, paying debt service on
8 our debt, and paying DELCORA's treatment costs (including debt service on CRCPS).
9 The estimating and reconciliation process DELCORA uses allows us to develop our
10 annual budgets accurately and on time because we know what DELCORA will charge us
11 during the coming year. We also have a very good idea of the likely reconciliation we'll
12 need to pay during the next year because I track our actual consumption versus the
13 budget estimate.

14 It does not appear this will be possible with Aqua. As I understand it, Aqua will
15 charge us based on actual consumption which means costs could be very different from
16 what we budgeted.

17 **Q. Is that one of the reasons the Authority has not agreed to the assignment to Aqua?**

18 A. Yes.

1 **Q. Aqua has asked the PUC to recognize the agreement between SWDCMA and**
2 **DELCORA as an agreement between you and Aqua. Is there any agreement**
3 **between you and Aqua?**

4 A. No.

5 **Q. To your understanding, is it possible for Aqua to just step into DELCORA's shoes**
6 **under your agreement with DELCORA?**

7 A. No. As a blanket statement, an investor-owned company like Aqua does not operate in
8 the same manner as an authority because a public entity is focused on profits for their
9 shareholders. As an authority, DELCORA is required to make reasonable rate increases
10 to allow for the maintenance and operation of their systems and to satisfy debt service
11 covenants. One of the key ongoing portions of our agreement with DELCORA requires
12 DELCORA to follow a particular process to set rates and to include specific components
13 in our billing rate. Contractually, DELCORA is also required to utilize grants whenever
14 possible, as a means of financing projects. I do not see how Aqua could operate under
15 these conditions and still maintain the profits needed for their shareholders.

16 **Concerns with Ratesetting Under Aqua Ownership**

17 **Q. Are differences in ratesetting between DELCORA and Aqua among the reasons you**
18 **have not consented to DELCORA's assignment of your agreement to Aqua?**

19 A. Yes. The rate-setting requirements as defined in our service agreement prevent
20 DELCORA from charging us for costs that are not related to serving our community.

1 **Q. Are there any other aspects of the likely ratesetting process under Aqua ownership**
2 **that cause you to be concerned?**

3 A. Yes. The Authority entered into the service agreement with DELCORA to bring stability
4 to our customers' rates and to provide the Authority the financial ability to perform long
5 overdue maintenance and repairs of our collection system. The Authority agreed to pay
6 for the infrastructure necessary to allow DELCORA to provide wastewater treatment
7 service; however, with this asset purchase by Aqua, the Authority may now be subject to
8 paying for infrastructure that provides no service to our customers.

9 ***Philadelphia-Related Costs***

10 **Q. Are there specific costs that concern you?**

11 A. Yes. We do not know if our costs to Aqua will be limited to the same types and
12 categories of costs that DELCORA charges to us. This is a particular concern because
13 DELCORA and Aqua are planning to redirect flows that currently go to Philadelphia to
14 an expanded Western Region treatment plant in Chester. SWDCMA's flows go to the
15 Western Region plant, but none of our flows go to Philadelphia. Under DELCORA, my
16 understanding is that the costs of bypassing Philadelphia for Eastern Region customers
17 would be paid by Eastern Region customers. Under Aqua's ownership, we have no idea
18 how those costs would be allocated.

1 **Q. Are those costs expected to be significant?**

2 A. Yes. I have heard Aqua and DELCORA estimate the cost of the Philadelphia bypass to
3 be \$400 million or more.³ None of that cost will benefit SWDCMA, but we are very
4 concerned that Aqua would require us to pay some of that cost.⁴

5 **Q. As you understand your agreement with DELCORA, are you charged any of**
6 **PWD's treatment costs?**

7 A. No. We are not charged those costs today and would not pay them in the future under
8 our existing contract with DELCORA.

9 **Q. As you understand the likely ratesetting process Aqua would use, would you be**
10 **charged PWD's treatment costs, or the costs of bypassing PWD, in the future?**

11 A. It is my understanding that Aqua will construct the infrastructure needed to divert flows
12 from the PWD to DELCORA's plant in Chester. Aqua will then submit a rate case to
13 PUC to recover their costs to build this infrastructure. Once approved by PUC, the new
14 Aqua rates will include the recovery of their costs for the infrastructure, as well as
15 ongoing repair, maintenance, and replacement costs for the infrastructure. We have no
16 idea how Aqua will propose to collect those costs from customers and whether
17 SWDCMA will be required to pay some of those costs.⁵

³ Municipal Protestants Exhibit 4.

⁴ Municipal Protestants Exhibit 5.

⁵ See Municipal Protestants Exhibit 3 (Aqua admissions), pp. 9-10 #5-8.

1 ***Contributed Property***

2 **Q.** You mentioned earlier that you and the other users of the CRCPS are paying the
3 debt service on DELCORA's cost to build that project. I believe you said
4 SWDCMA's share of the cost is \$10.3 million, is that correct?

5 **A.** Yes, that is correct.

6 **Q.** How much are you required to pay for CRCPS debt service?

7 **A.** We are required to pay approximately \$695,000 per year for 20 years, or a total of
8 approximately \$13.9 million.

9 **Q.** How much have you paid so far?

10 **A.** As of the end of 2020, we will have completed six years of payments, or approximately
11 \$4,170,000. I estimate approximately \$2.4 to \$2.5 million of that amount has been
12 payments toward the principal amount of the loan with the remainder being for interest
13 and DELCORA's debt service coverage requirement.

14 **Q.** How is that contributed property treated by DELCORA when setting your rates.

15 **A.** As I understand it, we are responsible for paying off the debt service on that property.
16 When our payments are completed in 2034, our rates would be reduced by about
17 \$695,000 per year to eliminate the debt service payment.

1 **Q. To the best of your knowledge, how does Aqua intend to treat contributed funds**
2 **when setting your rates in the future?**

3 A. As I understand it, Aqua will not give us credit for any of the amounts we have paid
4 toward the principal. In addition, Aqua will include its full purchase price in the rate base
5 on which it earns a profit, which is more than the net cost of DELCORA's plant.⁶
6 Roughly speaking, we have paid \$2.5 million toward the \$10.3 million cost of the
7 CRCPS, so there's a remaining balance of about \$7.8 million.

8 Aqua is paying \$276.5 million for plant Aqua claims has a depreciated original
9 cost of \$191.8 million,⁷ or about 44% more than book value. So in effect I estimate Aqua
10 would be asking to earn a profit on about \$12.6 million associated with the Authority's
11 share of the CRCPS⁸ even though we have paid down the plant balance to about \$7.8
12 million. In addition, of course, Aqua's capital costs are much higher than the
13 approximately 3.3% interest we're paying to DELCORA on the CRCPS debt. Over the
14 14-year remaining on our loan obligation, this will cost our customers millions of dollars,
15 plus customers will keep paying profits to Aqua on the investment for another 20 years,
16 even though our obligation should have been fully retired.

17 **Q. Why is that a concern to you?**

18 A. I cannot say it enough: we have a contract with DELCORA. SWDCMA signed that
19 contract to provide long-term rate stability and certainty to our customers. We agreed to
20 pay millions of dollars to connect to DELCORA, and now that money and the long-term

⁶ Municipal Protestants Exhibit 3 (Aqua admissions), pp. 10-11, #9-10.

⁷ Aqua Application ¶ 22.

⁸ Estimated as \$10.3 million less six years of depreciation at 2.5% per year (40 years straight line depreciation), which equals \$8.755 million; then increased by 44% to reflect Aqua's purchase price, or a total of \$12.6 million.

1 rate stability we agreed to, are being ignored. We paid for the plant and DELCORA is
2 trying to sell it without giving us credit for what we paid.

3 **Q. Has SWDCMA made other significant capital contributions to DELCORA?**

4 A. Yes, in 2016 DELCORA started charging SWDCMA \$0.32 per 1000 gallons as a
5 contribution toward future Long Term Control Plan (“LTCP”) costs. In 2017, the
6 contribution amount increased to \$0.34 per 1000 gallons. I’m attaching as Schedule
7 CN-1 my calculation of the amount we have paid to DELCORA for future LTCP costs.
8 The schedule shows that SWDCMA has paid approximately \$1.5 million to DELCORA
9 to help pay costs associated with future stormwater controls under a future LTCP.

10 **Q. Do you know what DELCORA does with the money you contribute toward future**
11 **LTCP costs?**

12 A. Yes. DELCORA has established a Reserve for Future Long Term Control Plan costs as
13 part of its Revenue Fund cash account. As of January 29, 2020, DELCORA’s balance in
14 the Reserve for Future Long Term Control Plan costs was \$27,880,000. The contribution
15 SWDCMA makes for each 1000 gallons of flow goes into this reserve.⁹

⁹ Municipal Protestants Exhibit 2 (DELCORA admissions), p. 10 #24-26.

1 **Q. Do you know what will happen to the Reserve for Future Long Term Control Plan**
2 **costs as part of DELCORA's deal with Aqua?**

3 A. Yes, the Reserve fund will stay with DELCORA.¹⁰ Thus, the money will not be used to
4 pay for future LTCP costs. Instead, Aqua will pay those future costs and apparently
5 include them in the rates they charge to SWDCMA and other customers.

6 **Q. From your review of Municipal Protestants Exhibit 1, is Aqua giving you any credit**
7 **for having contributed millions of dollars' worth of payments to DELCORA?**

8 A. No. It appears to me that Aqua is basing its rate calculations on earning a profit on the
9 \$276.5 million purchase price it will pay to DELCORA without any deduction for funds
10 we already contributed to DELCORA to pay for these investments. This is confirmed by
11 Aqua in its admissions.¹¹

12 **Relief Requested**

13 **Q. What do you want the PUC to do?**

14 A. SWDCMA is asking the PUC to reject the proposed deal between Aqua and DELCORA.
15 DELCORA does not have the right to sell the property it uses to serve us, it does not have
16 the right to assign our contract to Aqua, and it does not have the right to stop operating
17 the system. The transaction would greatly increase our rates and not provide any benefits
18 to SWDCMA or our customers. In addition, it's terribly unfair for Aqua to ignore the fact
19 that we paid funds totaling more than \$5 million to DELCORA, and to ask us to pay for

¹⁰ Id., #27.

¹¹ Municipal Protestants Exhibit 3, p. 10 #11.

1 that property a second time. Finally, Aqua has asked the PUC to recognize our agreement
2 with DELCORA as an agreement between SWDCMA and Aqua, but we do not have an
3 agreement with Aqua.

4 **Q. If the Commission disagrees and approves the transaction, what do you**
5 **recommend?**

6 A. First, I would strongly oppose that. This deal should not be approved -- it would cost
7 SWDCMA and our customers millions of dollars and ignore on our contract with
8 DELCORA.

9 **Q. But if the PUC disagrees with you, are there ways the PUC could protect SWDCMA**
10 **and its customers?**

11 A. The Commission should require Aqua to use the same rate-setting process that
12 DELCORA has used, including limiting the costs we pay to the actual cost to directly
13 serve our customers. Since none of our wastewater flows to Philadelphia, we should not
14 pay any of the costs associated with bypassing Philadelphia and expanding the Western
15 Region treatment plant to handle those flows.

16 In addition to the funds paid toward the CRCPS and force main, the Authority has
17 contributed more than \$1.5 million to DELCORA's Long Term Control Plan. It is my
18 understanding that this plan was developed in response to the EPA's findings against
19 DELCORA but has never been approved by the EPA for implementation. If Aqua is
20 going to include the property we contributed to, and ignore our payments toward the
21 Long Term Control Plan, then all of those funds should be returned to SWDCMA. We

1 can use that money to pay for improvements to our own collection system that could
2 directly reduce I&I, reduce Aqua's treatment costs, and provide a direct benefit to our
3 customers.

4 **Q. Does this conclude your direct testimony?**

5 **A. Yes, it does.**

Contributions by SWDCMA toward future LTCP costs, 2016 - 2020

<u>Year</u>	<u>Rate per 1000 gal.</u>	<u>1000 gal. billed</u>	<u>Total paid</u>
2016	\$0.32	966,240	\$ 309,197
2017	\$0.34	930,750	316,455
2018	\$0.34	867,970	295,110
2019	\$0.34	897,900	305,286
2020	\$0.34	967,250	328,865
Total			\$ 1,554,913

Source: DELCORA response to SWDCMA II-4, Attachment 1

VERIFICATION

I, Cecelia Nelson, the Authority Manager for the Southwest Delaware County Municipal Authority, hereby state that SWDCMA Statement 1 represents my direct testimony that was prepared by me and under my direction and supervision and that the statements in SWDCMA Statement 1 and the information in accompanying Schedule CN-1 are true and correct to the best of my knowledge, information and belief. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: September 29, 2020



BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application of Aqua Pennsylvania Wastewater,	:	
Inc. pursuant to Sections 507, 1102 and 1329 of	:	
the Public Utility Code for, inter alia, approval of	:	
the acquisition of the wastewater system assets of	:	Docket No. A-2019-3015173
the Delaware County Regional Water Quality	:	
Control Authority	:	

Direct Testimony of
Michael J. Ciach

on Behalf of
Upland Borough

September 29, 2020

Table of Contents

Introduction.....	1
Relationship between Upland and DELCORA.....	2
Concerns with Ratesetting Under Aqua Ownership	4
Relief Requested.....	5

Introduction

Q. Please state your name, job title, and business address.

A. Michael J. Ciach, Borough Manager/Secretary/Treasurer of Upland Borough, 224 Castle Ave. Upland PA 19015.

Q. Please briefly summarize your relevant employment history, education, and experience.

A. Associates Degree in Technology, Multiple Municipal Government Certifications
27 years in Borough Government (12 as Councilmember, 12 as Mayor and 3 as Borough Manager/Secretary/Treasurer).
20 years of Finance and Business Experience as a Government Account Executive and/or Team Leader for Ricoh Corporation.

Q. In your current position with Upland, what are your responsibilities?

A. I oversee all operations of the Borough Government. All office staff, roads crew, maintenance workers and Code enforcement officials work directly for me as their supervisor. I work on behalf of Borough Council to manage the day to day business and maintenance matters of the Borough Government. I also work with the Chief of Police to assist in any financial matters he may need in the management of his Police Department.

Q. As part of those responsibilities, do you have any interaction with the Delaware County Regional Water Quality Control Authority (“DELCORA”) and the provision of wastewater service in Upland?

A. Yes.

1 **Q. Please describe your responsibilities and involvement with DELCORA and the**
2 **provision of wastewater service.**

3 A. My staff and I periodically and as needed communicate any problems or issues with the
4 Borough Sewer System reported to our office to DELCORA for them to repair or resolve
5 the issue. Plus the Borough building is a customer of DELCORA, so we receive sewer
6 bills from DELCORA.

7 **Relationship between Upland and DELCORA**

8 **Q. The Application that Aqua Pennsylvania Wastewater Inc. (“Aqua”) and**
9 **DELCORA filed with the Commission included Exhibits F139, F140, F141, and**
10 **F142. Have you reviewed those documents?**

11 A. Yes. Exhibits F139 is the original agreement between Upland and DELCORA from
12 1975. At that time, Upland sold its sewer system to DELCORA subject to some
13 conditions. Exhibits F140, F141, and F142 are amendments to the 1975 agreement. The
14 most recent amendment (F142) was signed in 1985.

15 **Q. Before DELCORA and Aqua entered into an Asset Purchase Agreement, were you**
16 **familiar with the agreement between DELCORA and Upland?**

17 A. Yes. I needed to be familiar with and to understand the existing agreement in order to
18 recommend action by council both prior to and after DELCORA and Aqua entered into
19 their agreement. This is especially important now since DELCORA recently attempted to
20 get Upland to approve and sign a new agreement two years before our existing
21 agreement’s end of term.

1 **Q. What is your understanding of the meaning and purpose of the agreement between**
2 **DELCORA and Upland? In answering, please understand that I am not asking you**
3 **for a legal opinion, but for your understanding of the relationship with DELCORA**
4 **as it relates to your duties with Upland.**

5 A. I understand that DELCORA and Upland entered into an agreement for DELCORA to
6 Service and maintain our wastewater/sewer system.

7 **Q. In its Admissions (Municipal Protestants Exhibit 2, page 16, item 11), DELCORA**
8 **acknowledges that the Upland agreement cannot be assigned without Upland's**
9 **consent. Has Upland consented to the assignment of your DELCORA agreement to**
10 **Aqua?**

11 A. No.

12 **Q. To the best of your knowledge, why hasn't Upland consented to the assignment of**
13 **the agreement to Aqua?**

14 A. Because the agreement between Upland and DELCORA states clearly that in the event
15 that DELCORA does not continue to operate the wastewater system, the system in
16 Upland is turned back over to Upland

17 **Q. Aqua has asked the PUC to recognize the agreement between Upland and**
18 **DELCORA as an agreement between you and Aqua. Is there any agreement**
19 **between you and Aqua?**

20 A. No.

1 **Q. To your understanding, is it possible for Aqua to just step into DELCORA's shoes**
2 **under your agreement with DELCORA?**

3 A. No. Our agreement with DELCORA requires DELCORA to obtain grants and to follow a
4 particular process to set rates. As I understand it, Aqua would not be eligible for most
5 government grants. I also understand the PUC is involved in setting rates for Aqua. Plus
6 the agreement requires DELCORA, a nonprofit public authority, to own, operate, and
7 maintain the system. Aqua can't meet that requirement either.

8 **Concerns with Ratesetting Under Aqua Ownership**

9 **Q. Are differences in ratesetting among the reasons you have not consented to**
10 **DELCORA's assignment of your agreement to Aqua?**

11 A. Yes. Upland's agreement with DELCORA prevents DELCORA from charging our
12 residents and businesses for costs that are not related to serving our community. Counsel
13 explained to me that the PUC may let Aqua have rates that combine costs across all of
14 DELCORA's footprint, or even across all of Aqua's sewer systems in Pennsylvania.

15 **Q. Are there any other aspects of the likely ratesetting process under Aqua ownership**
16 **that cause you to be concerned?**

17 A. Yes, I understand that Aqua and DELCORA are planning to bypass the Philadelphia
18 Water Department ("PWD") by building new mains and expanding DELCORA's
19 treatment plant.

1 **Q. Why are you concerned about the potential for Upland residents and businesses to**
2 **pay for PWD-related costs under Aqua ownership?**

3 A. These costs are expected to cause a huge rate increase for our residents and businesses.

4 **Q. As you understand your agreement with DELCORA, are you charged any of**
5 **PWD's treatment costs?**

6 A. No. We are not charged those costs today and would not pay them in the future under
7 our existing contract with DELCORA.

8 **Q. As you understand the likely ratesetting process Aqua would use, would you be**
9 **charged PWD's treatment costs, or the costs of bypassing PWD, in the future?**

10 A. Yes, we think we might be. Aqua prepared a projection of its rate increases and it
11 appears to include costs related to the bypass of PWD.¹

12 **Relief Requested**

13 **Q. What do you want the PUC to do?**

14 A. Upland is asking the PUC to say no to the Aqua-DELCORA deal. DELCORA does not
15 have the right to sell the collection system in Upland. If DELCORA tries to sell it, or get
16 out of the sewer business, then the system in Upland comes back to the Borough.
17 DELCORA is required to continue operating the system, and it does not have the right to
18 assign our contract to Aqua or anyone else without the Borough's approval. Upland is
19 also concerned that the deal will increase sewer rates in Upland and not provide any
20 benefits to us or our customers. Finally, Aqua has asked the PUC to recognize our

¹ Municipal Protestants Exhibit 1.

1 agreement with DELCORA as an agreement between Upland and Aqua, but the Borough
2 does not have an agreement with Aqua.

3 **Q. If the Commission disagrees and approves the transaction, what do you**
4 **recommend?**

5 A. First, I would strongly oppose that outcome unless the PUC imposes conditions on Aqua
6 that recognize Upland's rights under our contract with DELCORA.

7 **Q. How would the PUC recognize your rights under the contract?**

8 A. The Commission should require Aqua to use the same rate-setting process that
9 DELCORA has used, including limiting the costs we pay to the actual cost to directly
10 serve our residents and businesses. Since none of our wastewater flows to PWD, we
11 should not pay any of the costs of the bypass or expansion of the treatment plant.

12 **Q. Is there anything else you want the PUC to consider when deciding this case?**

13 A. Upland is a small Borough tasked with protecting its residents and businesses. I would
14 feel that the PUC was developed with that same "protection of ratepayers" in mind. After
15 all, it is the leadership of the state officials elected by the public who have developed and
16 appointed the officials of the PUC to do just that.

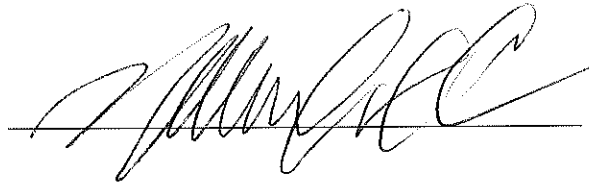
17 **Q. Does this conclude your direct testimony?**

18 A. Yes, it does.

VERIFICATION

I, Michael J. Ciach, the Borough Manager for Upland Borough, hereby state that Upland Statement 1 represents my direct testimony that was prepared by me and under my direction and supervision and that the statements in Upland Statement 1 are true and correct to the best of my knowledge, information and belief. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: September 29, 2020

A handwritten signature in black ink, appearing to read 'Michael J. Ciach', is written over a horizontal line.

Borough of Upland
224 Castle Avenue
Upland, PA 19015

Michael J. Ciach, Borough Mgr.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application of Aqua Pennsylvania Wastewater,	:	
Inc. pursuant to Sections 507, 1102 and 1329 of	:	
the Public Utility Code for, inter alia, approval of	:	
the acquisition of the wastewater system assets of	:	Docket No. A-2019-3015173
the Delaware County Regional Water Quality	:	
Control Authority	:	

**Common Exhibits of
Edgmont Township, Lower Chichester Township,
Southwest Delaware County Municipal Authority,
Trainer Borough, and Upland Borough
(Municipal Protestants)**

Municipal Protestants Exhibit 1	DELCORA response to OCA III-12
Municipal Protestants Exhibit 2	DELCORA admissions
Municipal Protestants Exhibit 3	Aqua admissions
Municipal Protestants Exhibit 4	DELCORA response to KCC-I-32
Municipal Protestants Exhibit 5	Aqua response to KCC-II-12
Municipal Protestants Exhibit 6	Aqua and DELCORA response to SWDCMA-I-2
Municipal Protestants Exhibit 7	Aqua and DELCORA response to Upland-I-7

Respondent: John Pileggi

Date: 8/07/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET III INTERROGATORIES DIRECTED TO DELCORA

OCA-III-12 Refer to the slides at PDF pages 20 through 25 (i.e., the last five pages) in the DELCORA presentation dated May 22, 2020 at:
[<https://secureservercdn.net/198.71.233.109/ggl.de2.myftpupload.com/wp-content/uploads/2020/05/Presentation-5-22-2020.pdf>].

Identify and provide all underlying calculations, analysis and Excel files related to the projections made by or for DELCORA on each of those pages.

RESPONSE:

An excel file, identified as OCA-III-12 Attachment 1 is being provided by electronic mail.

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

[CDCA Analysis]

Revenue Requirement Growth Rate

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	2020	2021	2022	2023	2024	2025
Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369
Amount Over Original Revenue Requirement		0	\$28,121,789	\$28,121,789	\$28,121,789	\$42,597,271
Revenue Requirement - Customer Growth Assumption		59,818,098	61,612,641	63,461,020	65,364,851	67,325,796
Revenue Requirement - Trust Portion		\$0	\$26,327,246	\$24,478,867	\$22,575,036	\$35,089,573
Revenue Requirement - Additional Needed		0	0	0	0	0
Total Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369
Check		ok	ok	ok	ok	ok
Percentage of Year		100%	100%	100%	100%	100%
Number of Months		12.0	12.0	12.0	12.0	12.0
Trust Value - Beginning of Year (BOY)		217,000,000	221,340,000	199,439,554	178,949,478	159,953,431
Interest		4,340,000	4,426,800	3,988,791	3,578,990	3,199,069
Payout from Trust - End of Year (EOY)		0	(26,327,246)	(24,478,867)	(22,575,036)	(35,089,573)
Trust Value - EOY	217,000,000	\$221,340,000	\$199,439,554	\$178,949,478	\$159,953,431	\$128,062,927
Trust Life Check		Yes	Yes	Yes	Yes	Yes

	2022	2023	2024	2025
Customer Bill Paid	\$2.59	\$2.67	\$2.75	\$2.83
Blended Bill		\$2.67	\$2.75	\$2.83
		3.0%	3.0%	3.0%
Customer Bill Calculations	\$26,327,246	\$50,806,113	\$73,381,149	\$108,470,722

		Actual Year (Year End)	Year for chart Year Beginning	Leave PWD	Stay With PWD	Aqua Rates (Actual, No SF)	Aqua Rates (Annual Increase Factor)	
	Rate Case Rate Increases		12/31/2020	1/1/2020	\$2.51	\$2.43	\$2.51	\$2.51
Rate Case			12/31/2021	1/1/2021	\$2.73	\$2.56	\$2.51	\$2.51
	47.01218%		12/31/2022	1/1/2022	\$3.04	\$2.87	\$3.70	\$2.59
			12/31/2023	1/1/2023	\$3.44	\$3.03	\$3.70	\$2.67
Rate Case			12/31/2024	1/1/2024	\$3.87	\$3.17	\$3.70	\$2.75
	16.46066%		12/31/2025	1/1/2025	\$4.68	\$3.62	\$4.30	\$2.83
			12/31/2026	1/1/2026	\$5.19	\$3.86	\$4.30	\$2.91
Rate Case			12/31/2027	1/1/2027	\$5.34	\$3.97	\$4.30	\$3.00
	24.16052%		12/31/2028	1/1/2028	\$5.96	\$4.58	\$5.34	\$3.09
			12/31/2029	1/1/2029	\$6.07	\$4.79	\$5.34	\$3.19
Rate Case			12/31/2030	1/1/2030	\$6.18	\$4.91	\$5.34	\$3.28
	2.00000%		12/31/2031	1/1/2031	\$6.29	\$5.53	\$5.45	\$3.38
			12/31/2032	1/1/2032	\$6.40	\$5.71	\$5.45	\$3.48
Rate Case			12/31/2033	1/1/2033	\$6.52	\$5.83	\$5.45	\$3.58
	2.00000%		12/31/2034	1/1/2034	\$6.63	\$6.37	\$5.56	\$3.69
			12/31/2035	1/1/2035	\$6.75	\$6.76	\$5.56	\$3.80
Rate Case			12/31/2036	1/1/2036	\$6.88	\$6.87	\$5.56	\$3.92
	2.00000%		12/31/2037	1/1/2037	\$6.88	\$7.66	\$5.67	\$4.03
			12/31/2038	1/1/2038	\$6.88	\$7.87	\$5.67	\$4.16
			12/31/2039	1/1/2039	\$6.88	\$7.99	\$5.67	\$4.28

Rate Case	Rate Case Rate Increases
Rate Case	47.01218%
Rate Case	16.46066%
Rate Case	24.16052%
Rate Case	2.00000%
Rate Case	2.00000%
Rate Case	2.00000%

	2026	2027	2028	2029	2030	2031
Customer Bill Paid	\$2.91	\$3.00	\$3.09	\$4.66	\$5.34	\$5.45
Blended Bill	\$2.91	\$3.00	\$3.09	\$4.66	\$5.34	\$5.45
	3.0%	3.0%	3.0%	50.7%	14.7%	2.0%
Customer Bill Calculations	\$141,540,521	\$172,529,953	\$226,120,693	\$242,416,316	\$242,416,316	\$242,416,316

Leave PWD - 10/2/2019 PFM			
Projection ANNUAL			
		Aqua Rates (Annual Increase Factor)	Savings
Rate Case Rate Increases		\$2.51	\$8,693,981.13
		\$2.51	\$10,057,344.10
	47.01218%	\$2.59	\$10,905,025.72
		\$2.67	\$12,170,666.17
		\$2.75	\$13,769,449.99
	16.46066%	\$2.83	\$15,467,584.02
		\$2.91	\$18,715,944.70
		\$3.00	\$20,763,878.90
	24.16052%	\$3.09	\$21,368,828.28
		\$4.66	\$23,843,212.83
		\$5.34	\$24,272,390.66
	2.00000%	\$5.45	\$24,709,293.69
		\$5.45	\$25,154,060.98
		\$5.45	\$25,606,834.07
	2.00000%	\$5.56	\$26,067,757.09
		\$5.56	\$26,536,976.72
		\$5.56	\$27,014,642.30
	2.00000%	\$5.67	\$27,500,905.86
		\$5.67	\$27,500,905.86
		\$5.67	\$27,500,905.86
			\$87.08

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate	0.000%	0.000%	2.000%	0.000%	0.000%	2.000%	0.000%
	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19
	2032	2033	2034	2035	2036	2037	2038
Revenue Requirement	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631
Amount Over Original Revenue Requirement	69,884,546	69,884,546	72,478,599	72,478,599	72,478,599	75,124,533	75,124,533
Revenue Requirement - Customer Growth Assumption	82,802,237	85,286,304	87,844,894	90,480,240	93,194,648	95,990,487	98,870,202
Revenue Requirement - Trust Portion	0	0	0	0	0	0	0
Revenue Requirement - Additional Needed	46,900,407	44,416,340	44,451,803	41,816,457	39,102,049	38,952,144	36,072,429
Total Revenue Requirement	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631
Check	ok	ok	ok	ok	ok	ok	ok
Percentage of Year	0%	0%	0%	0%	0%	0%	0%
Number of Months	-	-	-	-	-	-	-
Trust Value - Beginning of Year (BOY)	0	0	0	0	0	0	0
Interest	0	0	0	0	0	0	0
Payout from Trust - End of Year (EOY)	0	0	0	0	0	0	0
Trust Value - EOY	0	0	0	0	0	0	0
Trust Life Check	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted

	2032	2033	2034	2035	2036	2037	2038
Customer Bill Paid	\$5.45	\$5.45	\$5.56	\$5.56	\$5.56	\$5.67	\$5.67
Blended Bill	\$5.45	\$5.45	\$5.56	\$5.56	\$5.56	\$5.67	\$5.67

Customer Bill Calculations

	Stay With PWD - 10/2/2019 PFM Projection ANNUAL	Leave PWD - 10/2/2019 PFM Projection ANNUAL	Stay With PWD - 10/2/2019 PFM Projection ANNUAL
	\$8,693,981.13		
Rate Case Rate Increases	\$9,720,593.36	15.68%	11.81%
	\$10,230,622.36	8.43%	5.25%
Rate Case	\$11,496,309.05	11.61%	12.37%
	\$12,133,080.05	13.14%	5.54%
	\$12,669,884.22	12.33%	4.42%
Rate Case	\$14,465,178.36	21.00%	14.17%
	\$15,449,240.70	10.94%	6.80%
	\$15,892,975.78	2.91%	2.87%
Rate Case	\$18,330,910.78	11.58%	15.34%
	\$19,165,216.73	1.80%	4.55%
	\$19,642,308.68	1.80%	2.49%
Rate Case	\$22,127,818.71	1.80%	12.65%
	\$22,833,188.83	1.80%	3.19%
	\$23,304,718.21	1.80%	2.07%
Rate Case	\$25,476,998.73	1.80%	9.32%
	\$27,054,467.85	1.80%	6.19%
	\$27,489,224.35	1.80%	1.61%
Rate Case	\$30,625,353.82	0.00%	11.41%
	\$31,499,505.28	0.00%	2.85%
	\$31,970,798.81	0.00%	1.50%

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate	0.000%
Year 20	
	2039
Revenue Requirement	134,942,631
Amount Over Original Revenue Requirement	75,124,533
Revenue Requirement - Customer Growth Assumption	101,836,308
Revenue Requirement - Trust Portion	0
Revenue Requirement - Additional Needed	33,106,323
Total Revenue Requirement	134,942,631
Check	ok
Percentage of Year	0%
Number of Months	-

Trust Value - Beginning of Year (BOY)	0
Interest	0
Payout from Trust - End of Year (EOY)	0
Trust Value - EOY	0
Trust Life Check	Trust Exhausted

	2039
Customer Bill Paid	\$5.67
Blended Bill	\$5.67

Customer Bill Calculations

Rate Case Rate Increases

Rate Case	47.01218%
Rate Case	16.46066%
Rate Case	24.16052%
Rate Case	2.00000%
Rate Case	2.00000%
Rate Case	2.00000%

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

[DCJA Analysis]

		47.012%		0.000%		0.000%		16.461%	
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
		2020	2021	2022	2023	2024	2025		
Revenue Requirement			59,818,098	87,939,887	87,939,887	87,939,887	102,415,369		
Amount Over Original Revenue Requirement			0	\$28,121,789	\$28,121,789	\$28,121,789	\$42,597,271		
Revenue Requirement - Customer Growth Assumption			59,818,098	61,612,641	63,461,020	65,364,851	67,325,796		
Revenue Requirement - Trust Portion			\$0	\$26,327,246	\$24,478,867	\$22,575,036	\$35,089,573		
Revenue Requirement - Additional Needed			0	0	0	0	0		
Total Revenue Requirement			59,818,098	87,939,887	87,939,887	87,939,887	102,415,369		
Check			ok	ok	ok	ok	ok		
Percentage of Year			100%	100%	100%	100%	100%		
Number of Months			12.0	12.0	12.0	12.0	12.0		
Trust Value - Beginning of Year (BOY)			217,000,000	221,340,000	199,439,554	178,949,478	159,953,431		
Interest			4,340,000	4,426,800	3,988,791	3,578,990	3,199,069		
Payout from Trust - End of Year (EOY)			0	(26,327,246)	(24,478,867)	(22,575,036)	(35,089,573)		
Trust Value - EOY		217,000,000	\$221,340,000	\$199,439,554	\$178,949,478	\$159,953,431	\$128,062,927		
Trust Life Check			Yes	Yes	Yes	Yes	Yes		

			2022	2023	2024	2025
Customer Bill Paid			\$4.91	\$5.06	\$5.21	\$5.36
Blended Bill				\$5.06	\$5.21	\$5.36
				3.0%	3.0%	3.0%
Customer Bill Calculations			\$26,327,246	\$50,806,113	\$73,381,149	\$108,470,722

		Actual Year (Year End)	Year for chart Year Beginning	Leave PWD	Stay With PWD	Aqua Rates (Actual, No SF)	Aqua Rates (Annual Increase Factor)	
Rate Case Rate Increases			12/31/2020	1/1/2020	\$4.77	\$4.61	\$4.77	\$4.77
Rate Case	47.01218%		12/31/2021	1/1/2021	\$5.17	\$4.85	\$4.77	\$4.77
			12/31/2022	1/1/2022	\$5.77	\$5.45	\$7.01	\$4.91
			12/31/2023	1/1/2023	\$6.52	\$5.75	\$7.01	\$5.06
Rate Case	16.46066%		12/31/2024	1/1/2024	\$7.33	\$6.00	\$7.01	\$5.21
			12/31/2025	1/1/2025	\$8.87	\$6.85	\$8.16	\$5.36
			12/31/2026	1/1/2026	\$9.84	\$7.32	\$8.16	\$5.52
Rate Case	24.16052%		12/31/2027	1/1/2027	\$10.12	\$7.53	\$8.16	\$5.69
			12/31/2028	1/1/2028	\$11.30	\$8.69	\$10.13	\$5.86
			12/31/2029	1/1/2029	\$11.50	\$9.08	\$10.13	\$6.04
Rate Case	2.00000%		12/31/2030	1/1/2030	\$11.71	\$9.31	\$10.13	\$6.22
			12/31/2031	1/1/2031	\$11.92	\$10.48	\$10.33	\$6.40
			12/31/2032	1/1/2032	\$12.13	\$10.82	\$10.33	\$6.60
Rate Case	2.00000%		12/31/2033	1/1/2033	\$12.35	\$11.04	\$10.33	\$6.79
			12/31/2034	1/1/2034	\$12.57	\$12.07	\$10.54	\$7.00
			12/31/2035	1/1/2035	\$12.57	\$12.82	\$10.54	\$7.21
Rate Case	2.00000%		12/31/2036	1/1/2036	\$12.57	\$13.02	\$10.54	\$7.42
			12/31/2037	1/1/2037	\$12.57	\$14.51	\$10.75	\$7.65
			12/31/2038	1/1/2038	\$12.57	\$14.92	\$10.75	\$7.88
			12/31/2039	1/1/2039	\$12.57	\$15.15	\$10.75	\$8.11

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate	0.000%	0.000%	24.161%	0.000%	0.000%	2.000%
	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
	2026	2027	2028	2029	2030	2031
Revenue Requirement	102,415,369	102,415,369	127,159,455	127,159,455	127,159,455	129,702,644
Amount Over Original Revenue Requirement	\$42,597,271	\$42,597,271	\$67,341,357	\$67,341,357	\$67,341,357	69,884,546
Revenue Requirement - Customer Growth Assumption	69,345,570	71,425,937	73,568,715	75,775,777	78,049,050	80,390,522
Revenue Requirement - Trust Portion	\$33,069,799	\$30,989,432	\$53,590,740	\$16,295,624	\$0	0
Revenue Requirement - Additional Needed	0	0	0	35,088,055	49,110,405	49,312,122
Total Revenue Requirement	102,415,369	102,415,369	127,159,455	127,159,455	127,159,455	129,702,644
Check	ok	ok	ok	ok	ok	ok
Percentage of Year	100%	100%	100%	32%	0%	0%
Number of Months	12.0	12.0	12.0	3.8	-	-
					\$49,110,405	
Trust Value - Beginning of Year (BOY)	128,062,927	97,554,387	68,516,042	16,295,624	0	0
Interest	2,561,259	1,951,088	1,370,321	0	0	0
Payout from Trust - End of Year (EOY)	(33,069,799)	(30,989,432)	(53,590,740)	(16,295,624)	0	0
Trust Value - EOY	\$97,554,387	\$68,516,042	\$16,295,624	\$0	\$0	0
Trust Life Check	Yes	Yes	Yes	Trust Exhausted	Trust Exhausted	Trust Exhausted

	2026	2027	2028	2029	2030	2031
Customer Bill Paid	\$5.52	\$5.69	\$5.86	\$8.83	\$10.13	\$10.33
Blended Bill	\$5.52	\$5.69	\$5.86	\$8.83	\$10.13	\$10.33
	3.0%	3.0%	3.0%	50.7%	14.7%	2.0%
Customer Bill Calculations	\$141,540,521	\$172,529,953	\$226,120,693	\$242,416,316	\$242,416,316	\$242,416,316

		Aqua Rates (Annual Increase Factor)	Savings	Leave PWD - 10/2/2019 PFM Projection ANNUAL
Rate Case Rate Increases		\$4.77		\$16,476,574.98
Rate Case	47.01218%	\$4.77	\$1.61	\$19,060,380.03
		\$4.91	\$3.43	\$20,666,881.07
		\$5.06	\$5.87	\$23,065,485.27
		\$5.21	\$8.49	\$26,095,452.93
Rate Case	16.46066%	\$5.36	\$14.02	\$29,313,706.14
		\$5.52	\$17.25	\$35,469,902.88
		\$5.69	\$17.74	\$39,351,086.98
		\$5.86	\$21.75	\$40,497,569.09
Rate Case	24.16052%	\$8.83	\$10.67	\$45,186,949.24
		\$10.13	\$6.31	\$46,000,314.33
		\$10.33	\$6.34	\$46,828,319.99
		\$10.33	\$7.20	\$47,671,229.75
Rate Case	2.00000%	\$10.33	\$8.07	\$48,529,311.88
		\$10.54	\$8.14	\$49,402,839.50
		\$10.54	\$8.14	\$50,292,090.61
		\$10.54	\$8.14	\$50,292,090.61
Rate Case	2.00000%	\$10.75	\$153.17	\$50,292,090.61
		\$10.75		\$50,292,090.61
		\$10.75		\$50,292,090.61

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate	0.000%	0.000%	2.000%	0.000%	0.000%	2.000%	0.000%
	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19
	2032	2033	2034	2035	2036	2037	2038
Revenue Requirement	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631
Amount Over Original Revenue Requirement	69,884,546	69,884,546	72,478,599	72,478,599	72,478,599	75,124,533	75,124,533
Revenue Requirement - Customer Growth Assumption	82,802,237	85,286,304	87,844,894	90,480,240	93,194,648	95,990,487	98,870,202
Revenue Requirement - Trust Portion	0	0	0	0	0	0	0
Revenue Requirement - Additional Needed	46,900,407	44,416,340	44,451,803	41,816,457	39,102,049	38,952,144	36,072,429
Total Revenue Requirement	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631
Check	ok	ok	ok	ok	ok	ok	ok
Percentage of Year	0%	0%	0%	0%	0%	0%	0%
Number of Months	-	-	-	-	-	-	-
Trust Value - Beginning of Year (BOY)	0	0	0	0	0	0	0
Interest	0	0	0	0	0	0	0
Payout from Trust - End of Year (EOY)	0	0	0	0	0	0	0
Trust Value - EOY	0	0	0	0	0	0	0
Trust Life Check	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted

	2032	2033	2034	2035	2036	2037	2038
Customer Bill Paid	\$10.33	\$10.33	\$10.54	\$10.54	\$10.54	\$10.75	\$10.75
Blended Bill	\$10.33	\$10.33	\$10.54	\$10.54	\$10.54	\$10.75	\$10.75

Customer Bill Calculations

	Stay With PWD - 10/2/2019 PFM Projection ANNUAL	Leave PWD - 10/2/2019 PFM Projection ANNUAL	Stay With PWD - 10/2/2019 PFM Projection ANNUAL
Rate Case Rate Increases	\$16,476,574.98		
	\$18,422,180.02	15.68%	11.81%
	\$19,388,771.83	8.43%	5.25%
Rate Case	\$21,787,463.68	11.61%	12.37%
	\$22,994,253.18	13.14%	5.54%
	\$24,011,588.51	12.33%	4.42%
Rate Case	\$27,413,976.67	21.00%	14.17%
	\$29,278,942.41	10.94%	6.80%
	\$30,119,895.97	2.91%	2.87%
Rate Case	\$34,740,198.01	11.58%	15.34%
	\$36,321,349.88	1.80%	4.55%
	\$37,225,520.40	1.80%	2.49%
Rate Case	\$41,935,985.23	1.80%	12.65%
	\$43,272,781.74	1.80%	3.19%
	\$44,166,410.22	1.80%	2.07%
Rate Case	\$48,283,251.78	1.80%	9.32%
	\$51,272,824.43	0.00%	6.19%
	\$52,096,762.05	0.00%	1.61%
Rate Case	\$58,040,261.54	0.00%	11.41%
	\$59,696,927.44	0.00%	2.85%
	\$60,590,108.95	0.00%	1.50%

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate	0.000%
Year 20	
	2039
Revenue Requirement	134,942,631
Amount Over Original Revenue Requirement	75,124,533
Revenue Requirement - Customer Growth Assumption	101,836,308
Revenue Requirement - Trust Portion	0
Revenue Requirement - Additional Needed	33,106,323
Total Revenue Requirement	134,942,631
Check	ok
Percentage of Year	0%
Number of Months	-

Trust Value - Beginning of Year (BOY)	0
Interest	0
Payout from Trust - End of Year (EOY)	0
Trust Value - EOY	0
Trust Life Check	Trust Exhausted

	2039
Customer Bill Paid	\$10.75
Blended Bill	\$10.75

Customer Bill Calculations

Rate Case Rate Increases

Rate Case	47.01218%
Rate Case	16.46066%
Rate Case	24.16052%
Rate Case	2.00000%
Rate Case	2.00000%
Rate Case	2.00000%

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

[Muckinipates analysis]

Revenue Requirement Growth Rate		47.012%	0.000%	0.000%	16.461%	0.000%	
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
	2020	2021	2022	2023	2024	2025	2026
Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369	102,415,369
Amount Over Original Revenue Requirement		0	\$28,121,789	\$28,121,789	\$28,121,789	\$42,597,271	\$42,597,271
Revenue Requirement - Customer Growth Assumption		59,818,098	61,612,641	63,461,020	65,364,851	67,325,796	69,345,570
Revenue Requirement - Trust Portion		\$0	\$26,327,246	\$24,478,867	\$22,575,036	\$35,089,573	\$33,069,799
Revenue Requirement - Additional Needed		0	0	0	0	0	0
Total Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369	102,415,369
Check		ok	ok	ok	ok	ok	ok
Percentage of Year		100%	100%	100%	100%	100%	100%
Number of Months		12.0	12.0	12.0	12.0	12.0	12.0

Trust Value - Beginning of Year (BOY)		217,000,000	221,340,000	199,439,554	178,949,478	159,953,431	128,062,927
Interest		4,340,000	4,426,800	3,988,791	3,578,990	3,199,069	2,561,259
Payout from Trust - End of Year (EOY)		0	(26,327,246)	(24,478,867)	(22,575,036)	(35,089,573)	(33,069,799)
Trust Value - EOY		217,000,000	\$221,340,000	\$199,439,554	\$178,949,478	\$159,953,431	\$128,062,927
Trust Life Check			Yes	Yes	Yes	Yes	Yes

		2022	2023	2024	2025	2026
Customer Bill Paid		\$1.13	\$1.17	\$1.20	\$1.24	\$1.28
Blended Bill			\$1.17	\$1.20	\$1.24	\$1.28
Customer Bill Calculations		\$26,327,246	\$50,806,113	\$73,381,149	\$108,470,722	\$141,540,521

	Actual Year (Year End)	Year for chart Year Beginning	Leave PWD	Stay With PWD	Aqua Rates (Actual, No SF)	Aqua Rates (Annual Increase Factor)	Aqua Rates (Annual Increase Factor)
Rate Case Rate Increases		12/31/2020	1/1/2020	\$1.10	\$1.06	\$1.10	\$1.10
		12/31/2021	1/1/2021	\$1.19	\$1.12	\$1.10	\$1.10
Rate Case	47.01218%	12/31/2022	1/1/2022	\$1.33	\$1.26	\$1.13	\$1.13
		12/31/2023	1/1/2023	\$1.51	\$1.33	\$1.62	\$1.17
		12/31/2024	1/1/2024	\$1.69	\$1.39	\$1.62	\$1.20
Rate Case	16.46066%	12/31/2025	1/1/2025	\$2.05	\$1.58	\$1.88	\$1.24
		12/31/2026	1/1/2026	\$2.27	\$1.69	\$1.88	\$1.28
		12/31/2027	1/1/2027	\$2.34	\$1.74	\$1.88	\$1.31
Rate Case	24.16052%	12/31/2028	1/1/2028	\$2.61	\$2.01	\$2.34	\$1.35
		12/31/2029	1/1/2029	\$2.66	\$2.10	\$2.34	\$1.39
		12/31/2030	1/1/2030	\$2.70	\$2.15	\$2.34	\$1.44
Rate Case	2.00000%	12/31/2031	1/1/2031	\$2.75	\$2.42	\$2.39	\$1.48
		12/31/2032	1/1/2032	\$2.80	\$2.50	\$2.39	\$1.52
		12/31/2033	1/1/2033	\$2.85	\$2.55	\$2.39	\$1.57
Rate Case	2.00000%	12/31/2034	1/1/2034	\$2.90	\$2.79	\$2.43	\$1.62
		12/31/2035	1/1/2035	\$2.90	\$2.96	\$2.43	\$1.66
		12/31/2036	1/1/2036	\$2.90	\$3.01	\$2.43	\$1.71
Rate Case	2.00000%	12/31/2037	1/1/2037	\$2.90	\$3.35	\$2.48	\$1.77
		12/31/2038	1/1/2038	\$2.90	\$3.45	\$2.48	\$1.82
		12/31/2039	1/1/2039	\$2.90	\$3.50	\$2.48	\$1.87

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

	0.000%		24.161%		0.000%		0.000%		2.000%		0.000%		0.000%	
	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21
	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Revenue Requirement	102,415,369	127,159,455	127,159,455	127,159,455	129,702,644	129,702,644	129,702,644	129,702,644	129,702,644	129,702,644	129,702,644	129,702,644	129,702,644	129,702,644
Amount Over Original Revenue Requirement	\$42,597,271	\$67,341,357	\$67,341,357	\$67,341,357	69,884,546	69,884,546	69,884,546	69,884,546	69,884,546	69,884,546	69,884,546	69,884,546	69,884,546	69,884,546
Revenue Requirement - Customer Growth Assumption	71,425,937	73,568,715	75,775,777	78,049,050	80,390,522	82,802,237	85,286,304	87,844,871	90,469,538	93,159,405	95,913,572	98,732,139	101,615,206	104,562,773
Revenue Requirement - Trust Portion	\$30,989,432	\$53,590,740	\$16,295,624	\$0	0	0	0	0	0	0	0	0	0	0
Revenue Requirement - Additional Needed	0	0	35,088,055	49,110,405	49,312,122	46,900,407	44,416,340	41,932,273	39,448,206	36,964,139	34,480,072	31,996,005	29,511,938	27,027,871
Total Revenue Requirement	102,415,369	127,159,455	127,159,455	127,159,455	129,702,644	129,702,644	129,702,644	129,702,644	129,702,644	129,702,644	129,702,644	129,702,644	129,702,644	129,702,644
Check	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok
Percentage of Year	100%	100%	32%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Number of Months	12.0	12.0	3.8	-	-	-	-	-	-	-	-	-	-	-
				\$49,110,405										
Trust Value - Beginning of Year (BOY)	97,554,387	68,516,042	16,295,624	0	0	0	0	0	0	0	0	0	0	0
Interest	1,951,088	1,370,321	0	0	0	0	0	0	0	0	0	0	0	0
Payout from Trust - End of Year (EOY)	(30,989,432)	(53,590,740)	(16,295,624)	0	0	0	0	0	0	0	0	0	0	0
Trust Value - EOY	\$68,516,042	\$16,295,624	\$0	\$0	0	0	0	0	0	0	0	0	0	0
Trust Life Check	Yes	Yes	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted

	2027	2028	2029	2030	2031	2032	2033
Customer Bill Paid	\$1.31	\$1.35	\$2.04	\$2.34	\$2.39	\$2.39	\$2.39
Blended Bill	\$1.31	\$1.35	\$2.04	\$2.34	\$2.39	\$2.39	\$2.39
	3.0%	3.0%	50.7%	14.7%	2.0%		
Customer Bill Calculations	\$172,529,953	\$226,120,693	\$242,416,316	\$242,416,316	\$242,416,316		

		Leave PWD - 10/2/2019 PFM Projection ANNUAL		Stay With PWD - 10/2/2019 PFM Projection ANNUAL		Leave PWD - 10/2/2019 PFM Projection ANNUAL	
Rate Case Rate Increases		\$3,806,113.80		\$3,806,113.80			
		\$4,402,976.68		\$4,255,551.51		15.68%	
		\$4,774,080.86		\$4,478,835.69		8.43%	
Rate Case	47.01218%	\$5,328,162.07		\$5,032,937.14		11.61%	
		\$6,028,089.19		\$5,311,707.35		13.14%	
		\$6,771,510.56		\$5,546,713.35		12.33%	
Rate Case	16.46066%	\$8,193,601.34		\$6,332,670.17		21.00%	
		\$9,090,160.75		\$6,763,480.09		10.94%	
		\$9,354,999.86		\$6,957,741.64		2.91%	
Rate Case	24.16052%	\$10,438,253.78		\$8,025,038.41		11.58%	
		\$10,626,142.35		\$8,390,286.89		1.80%	
		\$10,817,412.92		\$8,599,151.65		1.80%	
Rate Case	2.00000%	\$11,012,126.35		\$9,687,276.17		1.80%	
		\$11,210,344.62		\$9,996,078.19		1.80%	
		\$11,412,130.83		\$10,202,507.72		1.80%	
Rate Case	2.00000%	\$11,617,549.18		\$11,153,504.37		1.80%	
		\$11,617,549.18		\$11,844,100.18		0.00%	
		\$11,617,549.18		\$12,034,431.02		0.00%	
Rate Case	2.00000%	\$11,617,549.18		\$13,407,388.41		0.00%	
		\$11,617,549.18		\$13,790,080.75		0.00%	
		\$11,617,549.18		\$13,996,407.03		0.00%	
		\$11,685,152.61		\$15,394,706.26		0.58%	
		\$12,089,085.61		\$15,993,532.95		3.46%	
		\$12,344,363.62		\$16,452,760.66		2.11%	

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate	2.000%	0.000%	0.000%	2.000%	0.000%	0.000%
	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
	2034	2035	2036	2037	2038	2039
Revenue Requirement	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
Amount Over Original Revenue Requirement	72,478,599	72,478,599	72,478,599	75,124,533	75,124,533	75,124,533
Revenue Requirement - Customer Growth Assumption	87,844,894	90,480,240	93,194,648	95,990,487	98,870,202	101,836,308
Revenue Requirement - Trust Portion	0	0	0	0	0	0
Revenue Requirement - Additional Needed	44,451,803	41,816,457	39,102,049	38,952,144	36,072,429	33,106,323
Total Revenue Requirement	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
Check	ok	ok	ok	ok	ok	ok
Percentage of Year	0%	0%	0%	0%	0%	0%
Number of Months	-	-	-	-	-	-
Trust Value - Beginning of Year (BOY)	0	0	0	0	0	0
Interest	0	0	0	0	0	0
Payout from Trust - End of Year (EOY)	0	0	0	0	0	0
Trust Value - EOY	0	0	0	0	0	0
Trust Life Check	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted

	2034	2035	2036	2037	2038	2039
Customer Bill Paid	\$2.43	\$2.43	\$2.43	\$2.48	\$2.48	\$2.48
Blended Bill	\$2.43	\$2.43	\$2.43	\$2.48	\$2.48	\$2.48

Customer Bill Calculations

Stay With PWD -
10/2/2019 PFM
Projection ANNUAL

Rate Case Rate Increases	11.81%
	5.25%
Rate Case	47.01218%
	12.37%
	5.54%
Rate Case	16.46066%
	4.42%
	14.17%
	6.80%
Rate Case	24.16052%
	2.87%
	15.34%
	4.55%
Rate Case	2.00000%
	2.49%
	12.65%
	3.19%
Rate Case	2.00000%
	2.07%
	9.32%
	6.19%
Rate Case	2.00000%
	1.61%
	11.41%
	2.85%
	1.50%
	9.99%
	3.89%
	2.87%

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

[SWDCMA analysis]

Revenue Requirement Growth Rate

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	2020	2021	2022	2023	2024	2025
Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369
Amount Over Original Revenue Requirement		0	\$28,121,789	\$28,121,789	\$28,121,789	\$42,597,271
Revenue Requirement - Customer Growth Assumption		59,818,098	61,612,641	63,461,020	65,364,851	67,325,796
Revenue Requirement - Trust Portion		\$0	\$26,327,246	\$24,478,867	\$22,575,036	\$35,089,573
Revenue Requirement - Additional Needed		0	0	0	0	0
Total Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369
Check		ok	ok	ok	ok	ok
Percentage of Year		100%	100%	100%	100%	100%
Number of Months		12.0	12.0	12.0	12.0	12.0

Trust Value - Beginning of Year (BOY)		217,000,000	221,340,000	199,439,554	178,949,478	159,953,431
Interest		4,340,000	4,426,800	3,988,791	3,578,990	3,199,069
Payout from Trust - End of Year (EOY)		0	(26,327,246)	(24,478,867)	(22,575,036)	(35,089,573)
Trust Value - EOY	217,000,000	\$221,340,000	\$199,439,554	\$178,949,478	\$159,953,431	\$128,062,927
Trust Life Check		Yes	Yes	Yes	Yes	Yes

	2022	2023	2024	2025
Customer Bill Paid	\$0.81	\$0.84	\$0.86	\$0.89

Blended Bill		\$0.84	\$0.86	\$0.89
		3.0%	3.0%	3.0%
Customer Bill Calculations	\$26,327,246	\$50,806,113	\$73,381,149	\$108,470,722

	Actual Year (Year End)	Year for chart Year Beginning	Leave PWD	Stay With PWD	Aqua Rates (Actual, No SF)	Aqua Rates (Annual Increase Factor)
Rate Case Rate Increases	12/31/2020	1/1/2020	\$0.79	\$0.77	\$0.79	\$0.79
Rate Case	12/31/2021	1/1/2021	\$0.85	\$0.80	\$0.79	\$0.79
	12/31/2022	1/1/2022	\$0.93	\$0.89	\$1.16	\$0.81
	12/31/2023	1/1/2023	\$1.03	\$0.93	\$1.16	\$0.84
	12/31/2024	1/1/2024	\$1.14	\$0.97	\$1.16	\$0.86
Rate Case	12/31/2025	1/1/2025	\$1.35	\$1.09	\$1.35	\$0.89
	12/31/2026	1/1/2026	\$1.48	\$1.15	\$1.35	\$0.91
	12/31/2027	1/1/2027	\$1.52	\$1.19	\$1.35	\$0.94
Rate Case	12/31/2028	1/1/2028	\$1.68	\$1.34	\$1.68	\$0.97
	12/31/2029	1/1/2029	\$1.71	\$1.40	\$1.68	\$1.00
	12/31/2030	1/1/2030	\$1.74	\$1.44	\$1.68	\$1.03
Rate Case	12/31/2031	1/1/2031	\$1.78	\$1.60	\$1.71	\$1.06
	12/31/2032	1/1/2032	\$1.81	\$1.65	\$1.71	\$1.09
	12/31/2033	1/1/2033	\$1.84	\$1.68	\$1.71	\$1.12
Rate Case	12/31/2034	1/1/2034	\$1.87	\$1.83	\$1.74	\$1.16
	12/31/2035	1/1/2035	\$1.87	\$1.93	\$1.74	\$1.19
	12/31/2036	1/1/2036	\$1.87	\$1.97	\$1.74	\$1.23
Rate Case	12/31/2037	1/1/2037	\$1.87	\$2.17	\$1.78	\$1.26
	12/31/2038	1/1/2038	\$1.87	\$2.23	\$1.78	\$1.30
	12/31/2039	1/1/2039	\$1.88	\$2.27	\$1.78	\$1.34

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate	0.000%	0.000%	24.161%	0.000%	0.000%	2.000%
	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
	2026	2027	2028	2029	2030	2031
Revenue Requirement	102,415,369	102,415,369	127,159,455	127,159,455	127,159,455	129,702,644
Amount Over Original Revenue Requirement	\$42,597,271	\$42,597,271	\$67,341,357	\$67,341,357	\$67,341,357	69,884,546
Revenue Requirement - Customer Growth Assumption	69,345,570	71,425,937	73,568,715	75,775,777	78,049,050	80,390,522
Revenue Requirement - Trust Portion	\$33,069,799	\$30,989,432	\$53,590,740	\$16,295,624	\$0	0
Revenue Requirement - Additional Needed	0	0	0	35,088,055	49,110,405	49,312,122
Total Revenue Requirement	102,415,369	102,415,369	127,159,455	127,159,455	127,159,455	129,702,644
Check	ok	ok	ok	ok	ok	ok
Percentage of Year	100%	100%	100%	32%	0%	0%
Number of Months	12.0	12.0	12.0	3.8	-	-
					\$49,110,405	
Trust Value - Beginning of Year (BOY)	128,062,927	97,554,387	68,516,042	16,295,624	0	0
Interest	2,561,259	1,951,088	1,370,321	0	0	0
Payout from Trust - End of Year (EOY)	(33,069,799)	(30,989,432)	(53,590,740)	(16,295,624)	0	0
Trust Value - EOY	\$97,554,387	\$68,516,042	\$16,295,624	\$0	\$0	0
Trust Life Check	Yes	Yes	Yes	Trust Exhausted	Trust Exhausted	Trust Exhausted

	2026	2027	2028	2029	2030	2031
Customer Bill Paid	\$0.91	\$0.94	\$0.97	\$1.46	\$1.68	\$1.71
Blended Bill	\$0.91	\$0.94	\$0.97	\$1.46	\$1.68	\$1.71
	3.0%	3.0%	3.0%	50.7%	14.7%	2.0%
Customer Bill Calculations	\$141,540,521	\$172,529,953	\$226,120,693	\$242,416,316	\$242,416,316	\$242,416,316

		Aqua Rates (Annual Increase Factor)	Savings		
	Rate Case Rate Increases				\$2,819,621.65
		\$0.79			\$3,153,161.41
Rate Case		\$0.79	\$0.23		\$3,382,467.91
	47.01218%	\$0.81	\$0.47		\$3,715,506.89
		\$0.84	\$0.79		\$4,131,368.95
Rate Case		\$0.86	\$1.13		\$4,572,386.14
	16.46066%	\$0.89	\$1.85		\$5,396,570.04
		\$0.91	\$2.27		\$5,925,238.44
Rate Case		\$0.94	\$2.33		\$6,098,562.38
	24.16052%	\$0.97	\$2.86		\$6,733,876.48
		\$1.46	\$1.01		\$6,855,086.25
Rate Case		\$1.68	\$0.28		\$6,978,477.81
	2.00000%	\$1.71	\$0.27		\$7,104,090.41
		\$1.71	\$0.40		\$7,231,964.03
Rate Case		\$1.71	\$0.53		\$7,362,139.39
	2.00000%	\$1.74	\$0.52		\$7,494,657.90
		\$1.74	\$0.52		\$7,494,657.90
Rate Case		\$1.74	\$0.52		\$7,494,657.90
	2.00000%	\$1.78	\$15.95		\$7,494,657.90
		\$1.78			\$7,494,657.90
		\$1.78			\$7,529,349.71

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate

	0.000%	0.000%	2.000%	0.000%	0.000%	2.000%	0.000%
	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19
	2032	2033	2034	2035	2036	2037	2038
Revenue Requirement	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631
Amount Over Original Revenue Requirement	69,884,546	69,884,546	72,478,599	72,478,599	72,478,599	75,124,533	75,124,533
Revenue Requirement - Customer Growth Assumption	82,802,237	85,286,304	87,844,894	90,480,240	93,194,648	95,990,487	98,870,202
Revenue Requirement - Trust Portion	0	0	0	0	0	0	0
Revenue Requirement - Additional Needed	46,900,407	44,416,340	44,451,803	41,816,457	39,102,049	38,952,144	36,072,429
Total Revenue Requirement	129,702,644	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631
Check	ok	ok	ok	ok	ok	ok	ok
Percentage of Year	0%	0%	0%	0%	0%	0%	0%
Number of Months	-	-	-	-	-	-	-

Trust Value - Beginning of Year (BOY)

0

0

0

0

0

0

0

Interest

0

0

0

0

0

0

0

Payout from Trust - End of Year (EOY)

0

0

0

0

0

0

0

Trust Value - EOY

0

0

0

0

0

0

0

Trust Life Check

Trust Exhausted

Trust Exhausted

Trust Exhausted

Trust Exhausted

Trust Exhausted

Trust Exhausted

Trust Exhausted

	2032	2033	2034	2035	2036	2037	2038
Customer Bill Paid	\$1.71	\$1.71	\$1.74	\$1.74	\$1.74	\$1.78	\$1.78
Blended Bill	\$1.71	\$1.71	\$1.74	\$1.74	\$1.74	\$1.78	\$1.78

Customer Bill Calculations

	Stay With PWD - 10/2/2019 PFM Projection ANNUAL	Leave PWD - 10/2/2019 PFM Projection ANNUAL	Stay With PWD - 10/2/2019 PFM Projection ANNUAL
	\$2,819,621.65		
Rate Case Rate Increases	\$3,070,070.81	11.83%	8.88%
	\$3,216,064.18	7.27%	4.76%
Rate Case	\$3,549,114.57	9.85%	10.36%
	\$3,727,607.53	11.19%	5.03%
	\$3,882,075.70	10.67%	4.14%
Rate Case	\$4,347,726.86	18.03%	11.99%
	\$4,613,893.24	9.80%	6.12%
	\$4,747,438.82	2.93%	2.89%
Rate Case	\$5,373,759.28	10.42%	13.19%
	\$5,605,140.25	1.80%	4.31%
	\$5,749,147.15	1.80%	2.57%
Rate Case	\$6,389,504.06	1.80%	11.14%
	\$6,591,437.76	1.80%	3.16%
	\$6,736,509.76	1.80%	2.20%
Rate Case	\$7,302,090.52	1.80%	8.40%
	\$7,721,793.86	0.00%	5.75%
	\$7,860,456.11	0.00%	1.80%
Rate Case	\$8,666,602.59	0.00%	10.26%
	\$8,915,593.71	0.00%	2.87%
	\$9,066,181.83	0.46%	1.69%

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate	0.000%
Year 20	
	2039
Revenue Requirement	134,942,631
Amount Over Original Revenue Requirement	75,124,533
Revenue Requirement - Customer Growth Assumption	101,836,308
Revenue Requirement - Trust Portion	0
Revenue Requirement - Additional Needed	33,106,323
Total Revenue Requirement	134,942,631
Check	ok
Percentage of Year	0%
Number of Months	-

Trust Value - Beginning of Year (BOY)	0
Interest	0
Payout from Trust - End of Year (EOY)	0
Trust Value - EOY	0
Trust Life Check	Trust Exhausted

	2039
Customer Bill Paid	\$1.78
Blended Bill	\$1.78

Customer Bill Calculations

Rate Case Rate Increases

Rate Case	47.01218%
Rate Case	16.46066%
Rate Case	24.16052%
Rate Case	2.00000%
Rate Case	2.00000%
Rate Case	2.00000%

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

[Middletown analysis]

Revenue Requirement Growth Rate			47.012%	0.000%	0.000%	16.461%
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	2020	2021	2022	2023	2024	2025
Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369
Amount Over Original Revenue Requirement		0	\$28,121,789	\$28,121,789	\$28,121,789	\$42,597,271
Revenue Requirement - Customer Growth Assumption		59,818,098	61,612,641	63,461,020	65,364,851	67,325,796
Revenue Requirement - Trust Portion		\$0	\$26,327,246	\$24,478,867	\$22,575,036	\$35,089,573
Revenue Requirement - Additional Needed		0	0	0	0	0
Total Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369
Check		ok	ok	ok	ok	ok
Percentage of Year		100%	100%	100%	100%	100%
Number of Months		12.0	12.0	12.0	12.0	12.0
Trust Value - Beginning of Year (BOY)		217,000,000	221,340,000	199,439,554	178,949,478	159,953,431
Interest		4,340,000	4,426,800	3,988,791	3,578,990	3,199,069
Payout from Trust - End of Year (EOY)		0	(26,327,246)	(24,478,867)	(22,575,036)	(35,089,573)
Trust Value - EOY	217,000,000	\$221,340,000	\$199,439,554	\$178,949,478	\$159,953,431	\$128,062,927
Trust Life Check		Yes	Yes	Yes	Yes	Yes

			2022	2023	2024	2025
Customer Bill Paid			\$0.55	\$0.57	\$0.58	\$0.60
Blended Bill				\$0.57	\$0.58	\$0.60
				3.0%	3.0%	3.0%
Customer Bill Calculations			\$26,327,246	\$50,806,113	\$73,381,149	\$108,470,722

		Actual Year (Year End)	Year for chart Year Beginning	Leave PWD	Stay With PWD	Aqua Rates (Actual, No SF)	Aqua Rates (Annual Increase Factor)
	Rate Case Rate Increases		12/31/2020	1/1/2020	\$0.53	\$0.52	\$0.53
Rate Case			12/31/2021	1/1/2021	\$0.57	\$0.55	\$0.53
			12/31/2022	1/1/2022	\$0.63	\$0.60	\$0.79
	47.01218%		12/31/2023	1/1/2023	\$0.70	\$0.63	\$0.79
Rate Case			12/31/2024	1/1/2024	\$0.77	\$0.66	\$0.79
			12/31/2025	1/1/2025	\$0.91	\$0.74	\$0.91
	16.46066%		12/31/2026	1/1/2026	\$1.00	\$0.78	\$0.91
Rate Case			12/31/2027	1/1/2027	\$1.03	\$0.80	\$0.91
			12/31/2028	1/1/2028	\$1.14	\$0.91	\$1.14
	24.16052%		12/31/2029	1/1/2029	\$1.16	\$0.95	\$1.14
Rate Case			12/31/2030	1/1/2030	\$1.18	\$0.97	\$1.14
			12/31/2031	1/1/2031	\$1.20	\$1.08	\$1.16
	2.00000%		12/31/2032	1/1/2032	\$1.23	\$1.12	\$1.16
Rate Case			12/31/2033	1/1/2033	\$1.25	\$1.14	\$1.16
			12/31/2034	1/1/2034	\$1.27	\$1.24	\$1.18
	2.00000%		12/31/2035	1/1/2035	\$1.27	\$1.31	\$1.18
Rate Case			12/31/2036	1/1/2036	\$1.27	\$1.33	\$1.18
			12/31/2037	1/1/2037	\$1.27	\$1.47	\$1.21
	2.00000%		12/31/2038	1/1/2038	\$1.27	\$1.51	\$1.21
			12/31/2039	1/1/2039	\$1.28	\$1.54	\$1.21

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate	0.000%	0.000%	24.161%	0.000%	0.000%	2.000%	0.000%
	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
	2026	2027	2028	2029	2030	2031	2032
Revenue Requirement	102,415,369	102,415,369	127,159,455	127,159,455	127,159,455	129,702,644	129,702,644
Amount Over Original Revenue Requirement	\$42,597,271	\$42,597,271	\$67,341,357	\$67,341,357	\$67,341,357	69,884,546	69,884,546
Revenue Requirement - Customer Growth Assumption	69,345,570	71,425,937	73,568,715	75,775,777	78,049,050	80,390,522	82,802,237
Revenue Requirement - Trust Portion	\$33,069,799	\$30,989,432	\$53,590,740	\$16,295,624	\$0	0	0
Revenue Requirement - Additional Needed	0	0	0	35,088,055	49,110,405	49,312,122	46,900,407
Total Revenue Requirement	102,415,369	102,415,369	127,159,455	127,159,455	127,159,455	129,702,644	129,702,644
Check	ok	ok	ok	ok	ok	ok	ok
Percentage of Year	100%	100%	100%	32%	0%	0%	0%
Number of Months	12.0	12.0	12.0	3.8	-	-	-
					\$49,110,405		
Trust Value - Beginning of Year (BOY)	128,062,927	97,554,387	68,516,042	16,295,624	0	0	0
Interest	2,561,259	1,951,088	1,370,321	0	0	0	0
Payout from Trust - End of Year (EOY)	(33,069,799)	(30,989,432)	(53,590,740)	(16,295,624)	0	0	0
Trust Value - EOY	\$97,554,387	\$68,516,042	\$16,295,624	\$0	\$0	0	0
Trust Life Check	Yes	Yes	Yes	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted

	2026	2027	2028	2029	2030	2031	2032
Customer Bill Paid	\$0.62	\$0.64	\$0.66	\$0.99	\$1.14	\$1.16	\$1.16
Blended Bill	\$0.62	\$0.64	\$0.66	\$0.99	\$1.14	\$1.16	\$1.16
	3.0%	3.0%	3.0%	50.7%	14.7%	2.0%	
Customer Bill Calculations	\$141,540,521	\$172,529,953	\$226,120,693	\$242,416,316	\$242,416,316	\$242,416,316	

		Leave PWD - 10/2/2019 PFM Projection ANNUAL		Stay With PWD - 10/2/2019 PFM Projection ANNUAL	
		Aqua Rates (Annual Increase Factor)	Savings		
Rate Case	47.01218%	\$0.53		\$1,911,517.24	\$1,911,517.24
		\$0.53	\$0.16	\$2,137,635.17	\$2,081,305.23
		\$0.55	\$0.32	\$2,293,089.83	\$2,180,279.09
		\$0.57	\$0.53	\$2,518,868.26	\$2,406,065.26
		\$0.58	\$0.76	\$2,800,795.27	\$2,527,071.70
Rate Case	16.46066%	\$0.60	\$1.25	\$3,099,775.79	\$2,631,790.91
		\$0.62	\$1.54	\$3,658,518.04	\$2,947,471.64
		\$0.64	\$1.58	\$4,016,920.30	\$3,127,914.87
		\$0.66	\$1.94	\$4,134,422.48	\$3,218,449.95
		\$0.99	\$0.69	\$4,565,123.48	\$3,643,053.85
Rate Case	24.16052%	\$1.14	\$0.19	\$4,647,295.70	\$3,799,914.87
		\$1.16	\$0.18	\$4,730,947.02	\$3,897,542.03
		\$1.16	\$0.27	\$4,816,104.07	\$4,331,661.73
		\$1.16	\$0.36	\$4,902,793.94	\$4,468,559.43
		\$1.18	\$0.35	\$4,991,044.23	\$4,566,908.67
Rate Case	2.00000%	\$1.18	\$0.35	\$5,080,883.03	\$4,950,335.06
		\$1.18	\$0.35	\$5,080,883.03	\$5,234,866.21
		\$1.18	\$0.35	\$5,080,883.03	\$5,328,870.06
		\$1.21	\$10.82	\$5,080,883.03	\$5,875,384.12
		\$1.21		\$5,080,883.03	\$6,044,183.65
Rate Case	2.00000%	\$1.21		\$5,104,401.78	\$6,146,272.46
		\$1.21			

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate	0.000%	2.000%	0.000%	0.000%	2.000%	0.000%	0.000%
	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
	2033	2034	2035	2036	2037	2038	2039
Revenue Requirement	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
Amount Over Original Revenue Requirement	69,884,546	72,478,599	72,478,599	72,478,599	75,124,533	75,124,533	75,124,533
Revenue Requirement - Customer Growth Assumption	85,286,304	87,844,894	90,480,240	93,194,648	95,990,487	98,870,202	101,836,308
Revenue Requirement - Trust Portion	0	0	0	0	0	0	0
Revenue Requirement - Additional Needed	44,416,340	44,451,803	41,816,457	39,102,049	38,952,144	36,072,429	33,106,323
Total Revenue Requirement	129,702,644	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
Check	ok	ok	ok	ok	ok	ok	ok
Percentage of Year	0%	0%	0%	0%	0%	0%	0%
Number of Months	-	-	-	-	-	-	-
Trust Value - Beginning of Year (BOY)	0	0	0	0	0	0	0
Interest	0	0	0	0	0	0	0
Payout from Trust - End of Year (EOY)	0	0	0	0	0	0	0
Trust Value - EOY	0	0	0	0	0	0	0
Trust Life Check	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted

	2033	2034	2035	2036	2037	2038	2039
Customer Bill Paid	\$1.16	\$1.18	\$1.18	\$1.18	\$1.21	\$1.21	\$1.21
Blended Bill	\$1.16	\$1.18	\$1.18	\$1.18	\$1.21	\$1.21	\$1.21

Customer Bill Calculations

Leave PWD - 10/2/2019 PFM Projection ANNUAL	Stay With PWD - 10/2/2019 PFM Projection ANNUAL
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Rate Case Rate Increases	11.83%	
	7.27%	4.76%
Rate Case	47.01218%	10.36%
	9.85%	5.03%
	11.19%	4.14%
Rate Case	16.46066%	18.03%
	10.67%	11.99%
	18.03%	9.80%
	9.80%	6.12%
	2.93%	2.89%
Rate Case	24.16052%	10.42%
	13.19%	1.80%
	4.31%	1.80%
Rate Case	2.00000%	1.80%
	2.57%	1.80%
	11.14%	1.80%
	3.16%	1.80%
	2.20%	1.80%
Rate Case	2.00000%	1.80%
	8.40%	0.00%
	5.75%	0.00%
	1.80%	0.00%
Rate Case	2.00000%	0.00%
	10.26%	0.00%
	2.87%	0.46%
	1.69%	

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

[SDCA analysis]

Revenue Requirement Growth Rate		47.012%	0.000%	0.000%	16.461%	0.000%	
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
	2020	2021	2022	2023	2024	2025	2026
Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369	102,415,369
Amount Over Original Revenue Requirement		0	\$28,121,789	\$28,121,789	\$28,121,789	\$42,597,271	\$42,597,271
Revenue Requirement - Customer Growth Assumption		59,818,098	61,612,641	63,461,020	65,364,851	67,325,796	69,345,570
Revenue Requirement - Trust Portion		\$0	\$26,327,246	\$24,478,867	\$22,575,036	\$35,089,573	\$33,069,799
Revenue Requirement - Additional Needed		0	0	0	0	0	0
Total Revenue Requirement		59,818,098	87,939,887	87,939,887	87,939,887	102,415,369	102,415,369
Check		ok	ok	ok	ok	ok	ok
Percentage of Year		100%	100%	100%	100%	100%	100%
Number of Months		12.0	12.0	12.0	12.0	12.0	12.0

Trust Value - Beginning of Year (BOY)		217,000,000	221,340,000	199,439,554	178,949,478	159,953,431	128,062,927
Interest		4,340,000	4,426,800	3,988,791	3,578,990	3,199,069	2,561,259
Payout from Trust - End of Year (EOY)		0	(26,327,246)	(24,478,867)	(22,575,036)	(35,089,573)	(33,069,799)
Trust Value - EOY		217,000,000	\$221,340,000	\$199,439,554	\$178,949,478	\$159,953,431	\$128,062,927
Trust Life Check			Yes	Yes	Yes	Yes	Yes

			2022	2023	2024	2025	2026
Customer Bill Paid			\$0.58	\$0.60	\$0.62	\$0.64	\$0.66
Blended Bill				\$0.60	\$0.62	\$0.64	\$0.66
Customer Bill Calculations			\$26,327,246	\$50,806,113	\$73,381,149	\$108,470,722	\$141,540,521

	Actual Year (Year End)	Year for chart Year Beginning	Leave PWD	Stay With PWD	Aqua Rates (Actual, No SF)	Aqua Rates (Annual Increase Factor)	Aqua Rates (Annual Increase Factor)
Rate Case Rate Increases		12/31/2020	1/1/2020	\$0.57	\$0.55	\$0.57	\$0.57
		12/31/2021	1/1/2021	\$0.61	\$0.58	\$0.57	\$0.57
Rate Case	47.01218%	12/31/2022	1/1/2022	\$0.68	\$0.65	\$0.83	\$0.58
		12/31/2023	1/1/2023	\$0.77	\$0.68	\$0.83	\$0.60
		12/31/2024	1/1/2024	\$0.86	\$0.71	\$0.83	\$0.62
Rate Case	16.46066%	12/31/2025	1/1/2025	\$1.04	\$0.81	\$0.97	\$0.64
		12/31/2026	1/1/2026	\$1.15	\$0.86	\$0.97	\$0.66
		12/31/2027	1/1/2027	\$1.18	\$0.89	\$0.97	\$0.68
Rate Case	24.16052%	12/31/2028	1/1/2028	\$1.31	\$1.02	\$1.21	\$0.70
		12/31/2029	1/1/2029	\$1.34	\$1.06	\$1.21	\$0.72
		12/31/2030	1/1/2030	\$1.36	\$1.09	\$1.21	\$0.74
Rate Case	2.00000%	12/31/2031	1/1/2031	\$1.39	\$1.22	\$1.23	\$0.76
		12/31/2032	1/1/2032	\$1.41	\$1.26	\$1.23	\$0.79
		12/31/2033	1/1/2033	\$1.44	\$1.29	\$1.23	\$0.81
Rate Case	2.00000%	12/31/2034	1/1/2034	\$1.46	\$1.41	\$1.26	\$0.83
		12/31/2035	1/1/2035	\$1.46	\$1.49	\$1.26	\$0.86
		12/31/2036	1/1/2036	\$1.46	\$1.52	\$1.26	\$0.88
Rate Case	2.00000%	12/31/2037	1/1/2037	\$1.46	\$1.69	\$1.28	\$0.91
		12/31/2038	1/1/2038	\$1.46	\$1.74	\$1.28	\$0.94
		12/31/2039	1/1/2039	\$1.46	\$1.76	\$1.28	\$0.97

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate	0.000%	24.161%	0.000%	0.000%	2.000%	0.000%	0.000%
	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14
	2027	2028	2029	2030	2031	2032	2033
Revenue Requirement	102,415,369	127,159,455	127,159,455	127,159,455	129,702,644	129,702,644	129,702,644
Amount Over Original Revenue Requirement	\$42,597,271	\$67,341,357	\$67,341,357	\$67,341,357	69,884,546	69,884,546	69,884,546
Revenue Requirement - Customer Growth Assumption	71,425,937	73,568,715	75,775,777	78,049,050	80,390,522	82,802,237	85,286,304
Revenue Requirement - Trust Portion	\$30,989,432	\$53,590,740	\$16,295,624	\$0	0	0	0
Revenue Requirement - Additional Needed	0	0	35,088,055	49,110,405	49,312,122	46,900,407	44,416,340
Total Revenue Requirement	102,415,369	127,159,455	127,159,455	127,159,455	129,702,644	129,702,644	129,702,644
Check	ok	ok	ok	ok	ok	ok	ok
Percentage of Year	100%	100%	32%	0%	0%	0%	0%
Number of Months	12.0	12.0	3.8	-	-	-	-
				\$49,110,405			
Trust Value - Beginning of Year (BOY)	97,554,387	68,516,042	16,295,624	0	0	0	0
Interest	1,951,088	1,370,321	0	0	0	0	0
Payout from Trust - End of Year (EOY)	(30,989,432)	(53,590,740)	(16,295,624)	0	0	0	0
Trust Value - EOY	\$68,516,042	\$16,295,624	\$0	\$0	0	0	0
Trust Life Check	Yes	Yes	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted

	2027	2028	2029	2030	2031	2032	2033
Customer Bill Paid	\$0.68	\$0.70	\$1.05	\$1.21	\$1.23	\$1.23	\$1.23
Blended Bill	\$0.68	\$0.70	\$1.05	\$1.21	\$1.23	\$1.23	\$1.23
	3.0%	3.0%	50.7%	14.7%	2.0%		
Customer Bill Calculations	\$172,529,953	\$226,120,693	\$242,416,316	\$242,416,316	\$242,416,316		

					Leave PWD - 10/2/2019 PFM Projection ANNUAL	Stay With PWD - 10/2/2019 PFM Projection ANNUAL	Leave PWD - 10/2/2019 PFM Projection ANNUAL
Rate Case Rate Increases		Savings	Year for chart	Year Beginning	\$2,012,498.55	\$2,012,498.55	
			1/1/2020		\$2,271,431.17	\$2,199,390.65	12.87%
Rate Case	47.01218%	\$0.18	1/1/2021		\$2,456,370.68	\$2,312,096.71	8.14%
		\$0.39	1/1/2022		\$2,730,831.31	\$2,586,567.23	11.17%
		\$0.67	1/1/2023		\$3,076,671.86	\$2,726,606.01	12.66%
Rate Case	16.46066%	\$0.96	1/1/2024		\$3,443,880.70	\$2,845,373.52	11.94%
		\$1.59	1/1/2025		\$4,142,844.80	\$3,233,485.55	20.30%
		\$1.95	1/1/2026		\$4,585,125.13	\$3,448,173.58	10.68%
Rate Case	24.16052%	\$2.01	1/1/2027		\$4,718,835.24	\$3,547,395.38	2.92%
		\$2.46	1/1/2028		\$5,252,599.28	\$4,073,361.83	11.31%
		\$1.14	1/1/2029		\$5,347,146.06	\$4,256,399.32	1.80%
Rate Case	2.00000%	\$0.61	1/1/2030		\$5,443,394.69	\$4,363,155.31	1.80%
		\$0.62	1/1/2031		\$5,541,375.80	\$4,899,709.54	1.80%
		\$0.72	1/1/2032		\$5,641,120.56	\$5,055,586.46	1.80%
Rate Case	2.00000%	\$0.82	1/1/2033		\$5,742,660.73	\$5,161,587.57	1.80%
		\$0.82	1/1/2034		\$5,846,028.62	\$5,631,581.33	1.80%
		\$0.82	1/1/2035		\$5,846,028.62	\$5,974,486.53	0.00%
Rate Case	2.00000%	\$0.82	1/1/2036		\$5,846,028.62	\$6,073,096.35	0.00%
		\$16.58	1/1/2037		\$5,846,028.62	\$6,749,774.41	0.00%
			1/1/2038		\$5,846,028.62	\$6,942,724.49	0.00%
			1/1/2039		\$5,846,028.62	\$7,049,670.17	0.00%
			1/0/1900		\$5,926,563.12	\$7,739,266.88	1.38%
			1/0/1900		\$6,130,443.82	\$8,038,383.97	3.44%
			1/0/1900		\$6,261,877.90	\$8,269,479.74	2.14%

Beginning Trust Value	\$217,000,000
Trust Return	2.00%
Desired Rate Increase	3.00%
Year End Conventioned Assumed	

Revenue Requirement Growth Rate	2.000%	0.000%	0.000%	2.000%	0.000%	0.000%
	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
	2034	2035	2036	2037	2038	2039
Revenue Requirement	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
Amount Over Original Revenue Requirement	72,478,599	72,478,599	72,478,599	75,124,533	75,124,533	75,124,533
Revenue Requirement - Customer Growth Assumption	87,844,894	90,480,240	93,194,648	95,990,487	98,870,202	101,836,308
Revenue Requirement - Trust Portion	0	0	0	0	0	0
Revenue Requirement - Additional Needed	44,451,803	41,816,457	39,102,049	38,952,144	36,072,429	33,106,323
Total Revenue Requirement	132,296,697	132,296,697	132,296,697	134,942,631	134,942,631	134,942,631
Check	ok	ok	ok	ok	ok	ok
Percentage of Year	0%	0%	0%	0%	0%	0%
Number of Months	-	-	-	-	-	-
Trust Value - Beginning of Year (BOY)	0	0	0	0	0	0
Interest	0	0	0	0	0	0
Payout from Trust - End of Year (EOY)	0	0	0	0	0	0
Trust Value - EOY	0	0	0	0	0	0
Trust Life Check	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted	Trust Exhausted

	2034	2035	2036	2037	2038	2039
Customer Bill Paid	\$1.26	\$1.26	\$1.26	\$1.28	\$1.28	\$1.28
Blended Bill	\$1.26	\$1.26	\$1.26	\$1.28	\$1.28	\$1.28

Customer Bill Calculations

Stay With PWD -
10/2/2019 PFM
Projection ANNUAL

Rate Case Rate Increases	9.29%
	5.12%
Rate Case	11.87%
	5.41%
Rate Case	4.36%
	13.64%
	6.64%
Rate Case	2.88%
	14.83%
	4.49%
Rate Case	2.51%
	12.30%
	3.18%
Rate Case	2.10%
	9.11%
	6.09%
Rate Case	1.65%
	11.14%
	2.86%
	1.54%
	9.78%
	3.86%
	2.87%

Respondent: John Pileggi

Date: September 17, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

Docket No. A-2019-3015173

EDGMONT TOWNSHIP

SET I REQUESTS FOR ADMISSIONS – DELCORA RESPONSES

1. Certain residents and businesses located in Edgmont are served under a rate schedule that is only for customers located within the township limits.

RESPONSE: Admitted.

2. On October 17, 2012, Edgmont entered into a contract with DELCORA to provide service to the Crum Creek Sewer District of Edgmont, which is appended to the Application as Exhibit F81 (“the Edgmont/DELCORA Agreement”).

RESPONSE: Admitted.

3. Exhibit F81 is a true, correct, and complete copy of the Edgmont/DELCORA Agreement.

RESPONSE: Admitted.

4. The Edgmont/DELCORA Agreement has an initial term of 25 years which expires on October 16, 2037.

RESPONSE: Admitted in part, denied in part. The initial term of the Edgmont/DELCORA Agreement is 25 years, but section 22 of the Edgmont/DELCORA Agreement provides the Township has five (5) options to extend the Edgmont/DELCORA Agreement, with each extension being for a period of five (5) years.

5. Neither DELCORA nor Edgmont is in breach of the Edgmont/DELCORA Agreement.

RESPONSE: Admitted in part, denied in part. DELCORA admits that it is not in breach of the Edgmont/DELCORA Agreement. DELCORA is not aware of Edgmont breaching the agreement but cannot conclusively state that it is not in breach.

6. The Edgmont/DELCORA Agreement is currently in effect.

RESPONSE: Admitted.

7. The Edgmont/DELCORA Agreement requires DELCORA to operate the wastewater system for the Crum Creek Sewer District.

RESPONSE: Denied. Section 18 of the Edgmont/DELCORA Agreement provides Edgmont the option to buyback the Crum Creek Sewer District System, and Section 30 provides DELCORA with an option to assign its rights to receive payments for customers in the Crum Creek Sewer District where required for any financing of the Crum Creek Sewer District System, present or future.

8. DELCORA's rights and obligations under the Edgmont/DELCORA Agreement cannot be assigned without the consent of Edgmont.

RESPONSE: Admitted in part, denied in part. DELCORA's right and obligations under the Edgmont/DELCORA Agreement cannot be assigned without the consent of Edgmont; however, pursuant to Section 29 of the Edgmont/DELCORA Agreement, such consent "shall not be unreasonably withheld, conditioned or delayed." Additionally, Section 30 provides DELCORA with an option to "assign and/or pledge its rights to receive payments for customers in the Crum Creek Sewer District where required for any financing of the Crum Creek Sewer District System, present or future."

9. DELCORA has not received Edgmont's consent to assign the Edgmont/DELCORA Agreement to Aqua.

RESPONSE: Admitted.

10. In the event that DELCORA attempts to sell, lease, or otherwise convey the facilities serving the Crum Creek Sewer District of Edgmont, Edgmont has a right to buy the facilities for the principal remaining on the debt that financed the construction of the facilities (plus any prepayment penalties), or the sum of one dollar if no debt is outstanding.

RESPONSE: Admitted in part, denied in part. Section 18 of the Edgmont/DELCORA Agreement provides that "The Township may acquire the Crum Creek Sewer District System from DELCORA upon eighteen months notice for the sum of One Dollar (\$1.00), plus the principal and any pre-payment penalty remaining and any other costs related to the termination of any debt related to the Crum Creek Sewer District." However, Section 22(c) provides that "During the Term of this Agreement, including any extension thereof, DELCORA shall not sell, lease or convey any other interest in any part or all of the Crum Creek Sewer District System without prior written approval of the Township; provided however that if DELCORA should desire to sell the Crum Creek Sewer District System, the Township shall have a right of first refusal to purchase the System by paying to or on behalf of DELCORA: i) the remaining principal and any pre-payment, penalties and any other costs related to the

termination of debt incurred by DELCORA related to construction of the Crum Creek Sewer District System then outstanding; or ii) if no such sum is outstanding, then the purchase price shall be one dollar (\$1.00)."

11. DELCORA's entry into the Asset Purchase Agreement with Aqua is an attempt by DELCORA to sell, lease, or otherwise convey the facilities serving the Crum Creek Sewer District of Edgmont to Aqua.

RESPONSE: Admitted in part, denied in part. DELCORA's entry into the Asset Purchase Agreement with Aqua is an attempt by DELCORA to sell the facilities serving the Crum Creek Sewer District of Edgmont to Aqua. DELCORA's entry into the Asset Purchase Agreement with Aqua is not an attempt to lease the facilities serving the Crum Creek Sewer District of Edgmont to Aqua.

12. DELCORA will not charge Edgmont a prepayment penalty on the debt that was used to finance the construction of the facilities serving the Crum Creek Sewer District of Edgmont.

RESPONSE: Denied. DELCORA cannot definitively know whether it will charge Edgmont a prepayment penalty on the debt incurred to finance the construction of the facilities serving the Crum Creek Sewer District of Edgmont and is, therefore, unable to admit this statement.

13. DELCORA started serving customers in the Crum Creek Sewer District of Edgmont on or about February 1, 2016.

RESPONSE: Admitted.

14. The original cost of the facilities DELCORA constructed to serve the Crum Creek Sewer District of Edgmont was \$11,328,329.

RESPONSE: Admitted.

15. As of September 30, 2016, DELCORA received tap-in fees from customers in the Crum Creek Sewer District of Edgmont totaling \$2,815,550.

RESPONSE: Admitted.

16. DELCORA received the proceeds of state grants totaling \$898,196 to help pay for the cost of the extension to serve customers in Crum Creek Sewer District of Edgmont.

RESPONSE: Admitted.

17. DELCORA received a third-party reimbursement in the amount of \$71,145 to help pay for the cost of the extension to serve customers in the Crum Creek Sewer District of Edgmont.

RESPONSE: Admitted.

18. As of December 31, 2018, the original cost of the facilities DELCORA constructed to serve the Crum Creek Sewer District of Edgmont (net of accrued depreciation, state grants, initial tap-in fees, and third-party reimbursements) was \$7,033,739.

RESPONSE: Denied. As of December 31, 2018, the original cost of the facilities DELCORA constructed to serve the Crum Creek Sewer District of Edgmont (net of accrued depreciation, state grants, initial tap-in fees, and third-party reimbursements) was \$7,543,437.

19. Customers in the Crum Creek Sewer District of Edgmont are responsible for paying all costs of financing the facilities (except the portion of costs paid through grants, third-party reimbursements, or initial tap-in fees) installed to serve the Crum Creek Sewer District of Edgmont, either through tap-in fees paid after September 2016 or through user charges.

RESPONSE: Admitted.

20. As of the end of 2020, DELCORA estimates the remaining balance on the debt incurred to construct the Crum Creek Sewer District facilities will be \$4,210,403.

RESPONSE: Denied. As of the end of 2020, DELCORA estimates the remaining balance on the debt incurred to construct the Crum Creek Sewer District facilities to be \$4,002,364.

21. DELCORA residential customers in the Crum Creek Sewer District of Edgmont pay an annual flat fee for wastewater service of \$1,275.

RESPONSE: Admitted.

22. DELCORA commercial customers in the Crum Creek Sewer District of Edgmont pay an annual flat fee for wastewater service of \$1,025 per Equivalent Dwelling Unit plus a rate of \$10.25 per 1,000 gallons.

RESPONSE: Admitted.

23. DELCORA's 2020 budget for serving customers in the Crum Creek Sewer District of Edgmont is for total revenues of \$1,148,492, total operations and maintenance expenses of \$341,992, and total debt service on the debt incurred by DELCORA to construct the Crum Creek Sewer District facilities of \$806,500.

RESPONSE: Admitted in part, denied in part. DELCORA's 2020 budget for serving customers in the Crum Creek Sewer District of Edgmont is for total revenues of \$1,148,492, total operations and maintenance expenses of \$341,992. However, DELCORA's 2020 budget also includes expenses of the following: (1) Reserve for Capital at 1.5% of System Costs of \$129,024.25; (2) Reserve for LTCP of \$17,382.32; (3) Common Capital of \$9,713.65 and amortizing of CDCA loan of \$137,375. DELCORA does not budget an amount for debt service on the

debt incurred by DELCORA to construct the Crum Creek Sewer District facilities.

24. Edgmont and DELCORA also are parties to an agreement with Ashford Land Company LLP, Newtown Township, and the Newtown Township Municipal Authority which is appended to the Application as Exhibit F59 (“Multi-Party Agreement”).

RESPONSE: Admitted.

25. Exhibit F59 is a true, correct, and complete copy of the Multi-Party Agreement.

RESPONSE: Admitted.

Respondent: John Pileggi

Date: September 14, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

LOWER CHICHESTER TOWNSHIP

SET I REQUESTS FOR ADMISSIONS – DELCORA RESPONSES

1. Lower Chichester collects wastewater from its customers and transports the wastewater to DELCORA for treatment.

RESPONSE: Admitted.

2. Lower Chichester is a wholesale customer of DELCORA in DELCORA's Western Service Region.

RESPONSE: Admitted.

3. Lower Chichester transports wastewater to DELCORA for treatment pursuant to the terms of a contract entered into by Lower Chichester and DELCORA on April 12, 1977, which is attached to the Application as Exhibit F84 ("the Contract").

RESPONSE: Admitted.

4. Exhibit F84 is a true, correct, and complete copy of the agreement between Lower Chichester and DELCORA.

RESPONSE: Admitted.

5. Neither DELCORA nor Lower Chichester is in breach of the Contract.

RESPONSE: Admitted.

6. The Contract is currently in effect.

RESPONSE: Admitted.

7. The current term of the Contract runs until April 11, 2022.

RESPONSE: Admitted in part, denied in part. The current term of the Contract runs until April 11, 2022, but the Contract provides that it can be renewed for an additional 50 years upon mutual agreement of the parties.

8. DELCORA's rights and obligations under the Contract cannot be assigned without the consent of Lower Chichester.

RESPONSE: Admitted in part, denied in part. Section 8.13 of the Contract provides that the agreement may not be voluntarily assigned by either party

without the consent of the other. However, DELCORA's rights to receive payments under the Contract may be assigned and pledged to Girard Trust Bank, as Trustee under Indenture dated May 1, 1974, or any subsequent Indenture to Secure DELCORA's Sewer Revenue Bonds Series of 1974 or any bonds hereafter issued to cover any project costs of DELCORA.

9. DELCORA has not received Lower Chichester's consent to assign the Contract to Aqua.

RESPONSE: Admitted.

10. The rate Lower Chichester pays to DELCORA in 2020 is based on Lower Chichester having a flow of 182,500,000 (182,500 units of 1000 gallons) during the 2020 calendar year.

RESPONSE: Admitted.

11. Lower Chichester currently pays to DELCORA a rate of \$2.87 per 1000 gallons.

RESPONSE: Admitted.

12. The rate paid by Lower Chichester to DELCORA includes \$0.34 per 1000 gallons as a contribution toward the costs of DELCORA meeting DELCORA's future obligations for stormwater control under a Long Term Control Plan.

RESPONSE: Admitted.

13. Lower Chichester's payment of \$0.34 per 1000 gallons toward DELCORA's Long Term Control Plan costs helps to fund DELCORA's Reserve for Future Long Term Control Plan costs.

RESPONSE: Admitted.

Respondent: John Pileggi

Date: September 14, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SOUTHWEST DELAWARE COUNTY MUNICIPAL AUTHORITY

SET I REQUESTS FOR ADMISSIONS – DELCORA RESPONSES

1. SWDCMA collects wastewater from its customers and transports the wastewater to DELCORA for treatment.

RESPONSE: Admitted.

2. SWDCMA is a wholesale customer of DELCORA in DELCORA's Western Service Region.

RESPONSE: Admitted.

3. SWDCMA transports wastewater to DELCORA for treatment pursuant to the terms of a contract entered into by SWDCMA and DELCORA on December 21, 2009, which is attached to the Application as Exhibit F110.

RESPONSE: Admitted.

4. The contract between SWDCMA and DELCORA was amended on December 17, 2013, which amendment is attached to the Application as Exhibit F111.

RESPONSE: Admitted.

5. Exhibits F110 and F111 (collectively "the Contract") are true, correct, and complete copies of the agreement between SWDCMA and DELCORA.

RESPONSE: Denied. In addition to these documents, there is an Agreement of Sale, located at Exhibit F109.

6. Neither DELCORA nor SWDCMA is in breach of the Contract.

RESPONSE: Admitted.

7. The Contract is currently in effect.

RESPONSE: Admitted.

8. The current term of the Contract runs until December 20, 2034.

RESPONSE: Admitted in part, denied in part. The current term of the Contract runs until December 20, 2034, but the Contract may be renewed by either party for an additional period of 25 years.

9. DELCORA's rights and obligations under the Contract cannot be assigned without the consent of SWDCMA.

RESPONSE: Denied. DELCORA may assign and/or pledge its rights to receive payments from Southwest incident to any financing, present or future.

10. DELCORA has not received SWDCMA's consent to assign the Contract to Aqua.

RESPONSE: Admitted.

11. The Chester Ridley Creek Pump Station and Force Main were built by DELCORA to provide service to SWDCMA and Middletown Township Sewer Authority.

RESPONSE: Admitted.

12. The Chester Ridley Creek Force Main was placed in service in 2014 at a book cost of \$6,290,802.

RESPONSE: Admitted.

13. After depreciation accruals, the net book value of the Chester Ridley Creek Force Main at December 31, 2018, was \$5,448,814.

RESPONSE: Admitted.

14. The Chester Ridley Creek Pump Station was placed in service on or about December 31, 2015, at a book cost of \$10,853,911.

RESPONSE: Admitted.

15. After depreciation accruals, the net book value of the Chester Ridley Creek Pump Station at December 31, 2018, was \$10,039,868.

RESPONSE: Admitted.

16. SWDCMA and Middletown Township Sewer Authority are responsible for paying to DELCORA 100% of the costs associated with the Chester Ridley Creek Pump Station and Force Main, including all principal and interest on the debt DELCORA incurred to construct those facilities.

RESPONSE: Denied. Rose Valley Township is responsible for 2.38% (2020 Budget) of the costs associated with the Chester Ridley Creek Pump Station and Force Main.

17. SWDCMA is current on its payments to DELCORA for all costs associated with the Chester Ridley Creek Pump Station and Force Main, including the payment of principal and interest on the debt DELCORA incurred to construct those facilities.

RESPONSE: Admitted.

18. DELCORA's calculation of the net book value of the Chester Ridley Creek Pump Station and Force Main does not include the contributions made by SWDCMA and Middletown Township Sewer Authority to the cost of those facilities.

RESPONSE: Admitted.

19. DELCORA will retire the debt it incurred to finance the Chester Ridley Creek Pump Station and Force Main as part of the proposed sale of assets to Aqua.

RESPONSE: Admitted.

20. The rate SWDCMA pays to DELCORA in 2020 is based on SWDCMA having a flow of 967,250,000 (967,250 units of 1000 gallons) during the 2020 calendar year.

RESPONSE: Admitted.

21. SWDCMA currently pays to DELCORA a rate of \$3.50 per 1000 gallons.

RESPONSE: Admitted.

22. The rate paid by SWDCMA to DELCORA includes \$0.79 per 1000 gallons for debt service (including coverage) for the Chester Ridley Creek Pump Station and Force Main.

RESPONSE: Admitted.

23. The rate paid by SWDCMA to DELCORA includes \$0.34 per 1000 gallons as a contribution toward the costs of DELCORA meeting DELCORA's future obligations for stormwater control under a Long Term Control Plan.

RESPONSE: Admitted.

24. DELCORA has established a Reserve for Future Long Term Control Plan costs as part of its Revenue Fund cash account.

RESPONSE: Admitted.

25. As of January 29, 2020, DELCORA's balance in the Reserve for Future Long Term Control Plan costs was \$27,880,000.

RESPONSE: Admitted.

26. SWDCMA's payment of \$0.34 per 1000 gallons toward DELCORA's Long Term Control Plan costs helps to fund the Reserve for Future Long Term Control Plan costs.

RESPONSE: Admitted.

27. Under the terms of the Asset Purchase Agreement with Aqua, DELCORA will not transfer the balance in the Reserve for Future Long Term Control Plan fund to Aqua.

RESPONSE: Admitted.

28. DELCORA routinely changes its estimated rates effective January 1 of each year.

RESPONSE: Admitted.

29. After DELCORA's annual audit is complete, DELCORA reconciles the revenues it collected from SWDCMA during the previous year to actual expenditures to serve SWDCMA, and DELCORA issues an invoice or credit to SWDCMA for the difference.

RESPONSE: Admitted.

30. DELCORA usually sends the reconciliation invoice or credit to SWDCMA during the second quarter of the year.

RESPONSE: Admitted.

31. DELCORA expects the transaction with Aqua to close before DELCORA's annual audit for 2020 is completed.

RESPONSE: Denied. DELCORA does not presently know the date of closing so is unable to admit this statement.

32. The Asset Purchase Agreement between DELCORA and Aqua does not make any provision for reconciling 2020 estimated rates to actual expenditures after the transaction closes.

RESPONSE: Admitted.

Respondent: John Pileggi

Date: September 17, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

TRAINER BOROUGH

SET I REQUESTS FOR ADMISSIONS – DELCORA RESPONSES

1. Trainer is a retail customer of DELCORA.

RESPONSE: Admitted.

2. Trainer and the residents and businesses located in Trainer are served under a rate schedule that is only for customers located within the borough limits.

RESPONSE: Admitted.

3. On August 9, 2005, Trainer entered into an Agreement of Sale and Service which, inter alia, provided for the sale of its wastewater distribution system to DELCORA (“the Contract”), which is appended to the Application as Exhibit F137.

RESPONSE: Admitted.

4. Exhibit F137 is a true, correct, and complete copy of the agreement between Trainer and DELCORA.

RESPONSE: Denied. In addition to this document, there is a Service Agreement that predates the agreement between Trainer and DELCORA, located at Exhibit F135.

5. Neither DELCORA nor Trainer is in breach of the Contract.

RESPONSE: Admitted in part, denied in part. DELCORA admits that it is not in breach of the Contract. DELCORA is not aware of Trainer breaching the agreement but cannot conclusively state that it is not in breach.

6. The Contract is currently in full force and effect.

RESPONSE: Admitted.

7. The Contract requires DELCORA to operate the wastewater system.

RESPONSE: Denied. The Contract provides options for Trainer if DELCORA ceases to operate the wastewater system. See response to No. 9 below.

8. The Contract provides the customers of DELCORA located in Trainer Borough shall bear none of the costs of the collection of sewage outside the service area of Trainer Borough.

RESPONSE: Admitted.

9. The Contract states that if DELCORA fails to operate the wastewater system, then the collection system in Trainer reverts to Trainer's ownership, unless Trainer declines to take ownership in which case the Trainer system reverts to the County of Delaware or any other agency, as may be dictated by law.

RESPONSE: Denied as stated. Section 12.4 of the Contract provides that "If at any time in the future during the term of this Section 12 or at the end thereof, Buyer ceases to operate the system being purchased by it hereunder, then the Sewer Properties, such as they may exist at such time, shall revert Seller's ownership, unless Seller declines to accept such reversion, om which case they shall or revert to the County of Delaware or any other agency, as may dictate by law."

10. The Contract prohibits either party from assigning its interest in the Contract.

RESPONSE: Admitted.

11. Trainer and DELCORA have not amended the Contract since 2005.

RESPONSE: Admitted.

12. Trainer and DELCORA have not entered into any separate contract or agreement permitting the assignment of either party's interest in the Contract.

RESPONSE: Admitted in part, denied in part. DELCORA admits that it has not entered into any separate contract or agreement permitting the assignment of either party's interest in the Contract. DELCORA is without information or knowledge about whether Trainer has done so and therefore denies same.

13. The rate Trainer pays to DELCORA in 2020 is based on Trainer residents and businesses having a flow of 39,561,000 (39,561 units of 1000 gallons) during the 2020 calendar year.

RESPONSE: Admitted.

14. Trainer and residents and businesses in Trainer currently pay to DELCORA a rate of \$5.75 per 1000 gallons.

RESPONSE: Admitted.

15. The rate paid by Trainer to DELCORA includes \$0.34 per 1000 gallons as a contribution toward the costs of DELCORA meeting DELCORA's future obligations for stormwater control under a Long Term Control Plan.

RESPONSE: Admitted.

16. Trainer's payment of \$0.34 per 1000 gallons toward DELCORA's Long Term Control Plan costs helps to fund DELCORA's Reserve for Future Long Term Control Plan costs.

RESPONSE: Admitted.

Respondent: John Pileggi

Date: September 14, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

UPLAND BOROUGH

SET I REQUESTS FOR ADMISSIONS – DELCORA RESPONSES

1. Upland is a retail customer of DELCORA.

RESPONSE: Admitted.

2. Upland and the residents and businesses located in Upland are served under a rate schedule that is only for customers located within the borough limits.

RESPONSE: Admitted.

3. On July 22, 1975, Upland entered into a contract to sell its wastewater distribution system to DELCORA, which is appended to the Application as Exhibit F139.

RESPONSE: Admitted.

4. The agreement between Upland and DELCORA was subsequently amended on January 18, 1983, December 21, 1983, and February 12, 1985, which amendments are appended to the Application as Exhibits F140, F141, and F142, respectively.

RESPONSE: Admitted.

5. Exhibits F139, F140, F141, and F142 (collectively “the Contract”) are true, correct, and complete copies of the agreement between Upland and DELCORA.

RESPONSE: Admitted.

6. Neither DELCORA nor Upland is in breach of the Contract.

RESPONSE: Admitted.

7. The Contract is currently in effect.

RESPONSE: Admitted.

8. The current term of the Contract runs until November 17, 2022.

RESPONSE: Admitted in part, denied in part. The current term of the Contract runs until November 17, 2022, but the Contract provides that it can continue thereafter for a term as long as the existence of DELCORA unless terminated by either party on one year’s notice.

9. The Contract requires DELCORA to operate the wastewater system.

RESPONSE: Denied. The Contract provides options for Upland if DELCORA ceases to operate the wastewater system. See response to No. 10 below.

10. The Contract states that if DELCORA fails to operate the wastewater system, then the collection system in Upland reverts to Upland's ownership.

RESPONSE: Denied as stated. Section 13.6 of the Contract provides that "If, at any time in the future, during the term of this Section 13 or at the end thereof, Buyer ceases to operate the system being purchased by it hereunder, then the fixed assets and the Real Property, other than the Treatment Plant and those facilities in the Collection System described in Section 2(d) shall revert to the Seller's ownership rather than to the County of Delaware or any other agency."

11. DELCORA's rights and obligations under the Contract cannot be assigned without the consent of Upland.

RESPONSE: Admitted.

12. DELCORA has not received Upland's consent to assign the Contract to Aqua.

RESPONSE: Admitted.

13. The rate Upland pays to DELCORA in 2020 is based on Upland residents and businesses having a flow of 133,361,000 (133,361 units of 1000 gallons) during the 2020 calendar year.

RESPONSE: Admitted.

14. Upland and residents and businesses in Upland currently pay to DELCORA a rate of \$5.75 per 1000 gallons.

RESPONSE: Admitted.

15. The rate paid by Upland to DELCORA includes \$0.34 per 1000 gallons as a contribution toward the costs of DELCORA meeting DELCORA's future obligations for stormwater control under a Long Term Control Plan.

RESPONSE: Admitted.

16. Upland's payment of \$0.34 per 1000 gallons toward DELCORA's Long Term Control Plan costs helps to fund DELCORA's Reserve for Future Long Term Control Plan costs.

RESPONSE: Admitted.

Respondent: William C. Packer

Date: 9/17/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

EDGMONT TOWNSHIP

REQUESTS FOR ADMISSIONS SET II TO AQUA

1. Aqua is asking the Commission to permit Aqua to charge DELCORA's rates to customers in Edgmont as those rates exist at the time of closing.

RESPONSE: Admitted.

2. Aqua does not know what rate DELCORA will charge to customers in Edgmont during 2021.

RESPONSE: Admitted in part, denied in part. It is admitted that the rate to be charged by DELCORA to Edgmont during 2021 is not known at this time. However, it is denied that the rate will not be known as DELCORA sets rates each November for what will be charged to customers in the following year. The rate to be charged to Edgmont during 2021 will be established and known in November 2020.

3. Aqua estimates that its revenue requirement to serve customers in Edgmont in 2022 would be approximately 47% higher than the amount paid by Edgmont to DELCORA in 2019.

RESPONSE: Denied as stated. Aqua has not estimated the revenue requirement to serve Edgmont, separate and apart from the estimated revenue requirement for the DELCORA system as a whole.

4. Aqua estimates that its revenue requirement to serve customers in Edgmont in 2025 would be approximately 16% higher than the 2022 revenue requirement.

RESPONSE: Denied as stated. Aqua has not estimated the revenue requirement to serve Edgmont, separate and apart from the estimated revenue requirement for the DELCORA system as a whole.

5. Aqua estimates that its revenue requirement to serve customers in Edgmont in 2028 would be approximately 24% higher than the 2025 revenue requirement.

RESPONSE: Denied as stated. Aqua has not estimated the revenue requirement to serve Edgmont, separate and apart from the estimated revenue requirement for the DELCORA system as a whole.

6. Aqua's revenue requirement projections for serving customers in Edgmont assume that those customers will pay a portion of the costs Aqua incurs to eliminate any wastewater flows from the DELCORA system to the Philadelphia Water Department in approximately 2028.

RESPONSE: Denied as stated. See Responses to Lower Chichester's Requests for Admissions to Aqua Nos. 5-7.

7. Aqua is asking the Commission to approve a rate base for the DELCORA assets, at the time of acquisition, equal to the \$276.5 million purchase price of the assets plus an estimated \$750,000 in transaction costs.

RESPONSE: Admitted in part, denied in part. It is admitted that Aqua is requesting the approval of a ratemaking rate base of \$276.5 million. It is denied that Aqua is requesting transaction and closing costs of \$750,000. Transaction and closing costs are not known at this time and will be included in the first base rate case that includes the DELCORA customers after closing.

8. Aqua's proposed rate base for the DELCORA assets does not include a deduction for the proceeds of state grants DELCORA received to construct the facilities used to serve the Crum Creek Sewer District of Edgmont.

RESPONSE: Admitted with the understanding that Section 1329, 66 Pa. C.S. § 1329, provides that the original source of funding for any part of the sewer assets of the selling utility shall not be relevant to determine the value of said assets.

9. Aqua's proposed rate base for the DELCORA assets does not include a reduction for tap-in fees paid by DELCORA customers in the Crum Creek Sewer District of Edgmont.

RESPONSE: Admitted with the understanding that Section 1329, 66 Pa. C.S. § 1329, provides that the original source of funding for any part of the sewer assets of the selling utility shall not be relevant to determine the value of said assets.

10. Aqua's proposed rate base for the DELCORA assets does not include a reduction for third-party reimbursements received by DELCORA to help pay for facilities serving the Crum Creek Sewer District of Edgmont.

RESPONSE: Admitted with the understanding that Section 1329, 66 Pa. C.S. § 1329, provides that the original source of funding for any part of the sewer assets of the selling utility shall not be relevant to determine the value of said assets.

11. Aqua's proposed rate base for the DELCORA assets does not include a reduction for capital contributions to DELCORA made through the annual service charges paid by customers in the Crum Creek Sewer District of Edgmont.

RESPONSE: Admitted with the understanding that Section 1329, 66 Pa. C.S. § 1329, provides that the original source of funding for any part of the sewer assets of the selling utility shall not be relevant to determine the value of said assets.

Respondent: William C. Packer

Date: 9/14/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

LOWER CHICHESTER TOWNSHIP

REQUESTS FOR ADMISSIONS SET II TO AQUA

1. Aqua is asking the Commission to permit Aqua to charge DELCORA's rates to Lower Chichester as those rates exist at the time of closing.

RESPONSE: Admitted.

2. Aqua does not know what rate DELCORA will charge to Lower Chichester during 2021.

RESPONSE: Admitted in part, denied in part. It is admitted that the rate to be charged by DELCORA to Lower Chichester during 2021 is not known at this time. However, it is denied that the rate will not be known as DELCORA sets rates each November for what will be charged to customers in the following year. The rate to be charged to Lower Chichester during 2021 will be established and known in November 2020.

3. The rate DELCORA charges to Lower Chichester during 2021 will be based on DELCORA's estimate of costs and flows associated with DELCORA's service to Lower Chichester.

RESPONSE: Admitted upon information and belief of Aqua.

4. Aqua does not intend to reconcile the rate it charges at closing to actual flows and costs associated with DELCORA's service to Lower Chichester.

RESPONSE: Admitted in part, denied in part with the understanding that DELCORA will not be providing service to Lower Chichester after closing if the Commission approves this transaction. It is admitted that, after closing, Aqua does not intend to reconcile costs associated with service to Lower Chichester. It is denied that, after closing, Aqua does not intend to reconcile actual to estimated flows in billings to Lower Chichester.

5. Aqua estimates that its revenue requirement to serve Lower Chichester in 2022 would be approximately 47% higher than the amount paid by Lower Chichester to DELCORA in 2019.

RESPONSE: Denied as stated. Aqua has not estimated the revenue requirement to serve Lower Chichester, separate and apart from the estimated revenue requirement for the DELCORA system as a whole.

6. Aqua estimates that its revenue requirement to serve Lower Chichester in 2025 would be approximately 16% higher than the 2022 revenue requirement.

RESPONSE: Denied as stated. Aqua has not estimated the revenue requirement to serve Lower Chichester, separate and apart from the estimated revenue requirement for the DELCORA system as a whole.

7. Aqua estimates that its revenue requirement to serve Lower Chichester in 2028 would be approximately 24% higher than the 2025 revenue requirement.

RESPONSE: Denied. Aqua has not estimated the revenue requirement to serve Lower Chichester, separate and apart from the estimated revenue requirement for the DELCORA system as a whole.

8. Aqua's revenue requirement projections for serving Lower Chichester assume that Lower Chichester will pay a portion of the costs Aqua incurs to eliminate any wastewater flows from the DELCORA system to the Philadelphia Water Department in approximately 2028.

RESPONSE: Denied. See Responses to Lower Chichester's Requests for Admissions to Aqua Nos. 5-7.

9. Aqua is asking the Commission to approve a rate base that does not treat any of the assets acquired from DELCORA as being property contributed by Lower Chichester (or any other customers) to DELCORA.

RESPONSE: Admitted.

Respondent: William C. Packer

Date: 9/14/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SOUTHWEST DELAWARE COUNTY MUNICIPAL AUTHORITY

REQUESTS FOR ADMISSIONS SET II TO AQUA

1. Aqua is asking the Commission to permit Aqua to charge DELCORA's rates to SWDCMA as those rates exist at the time of closing.

RESPONSE: Admitted.

2. Aqua does not know what rate DELCORA will charge to SWDCMA during 2021.

RESPONSE: Admitted in part, denied in part. It is admitted that the rate to be charged by DELCORA to SWDCMA during 2021 is not known at this time.

However, it is denied that the rate will not be known as DELCORA sets rates each November for what will be charged to customers in the following year. The rate to be charged to SWDCMA during 2021 will be established and known in November 2020.

3. The rate DELCORA charges to SWDCMA during 2021 will be based on DELCORA's estimate of costs and flows associated with DELCORA's service to SWDCMA.

RESPONSE: Admitted upon information and belief of Aqua.

4. Aqua does not intend to reconcile the rate it charges at closing to actual flows and costs associated with DELCORA's service to SWDCMA.

RESPONSE: Admitted in part, denied in part with the understanding that DELCORA will not be providing service to SWDCMA after closing if the Commission approves this transaction. It is admitted that, after closing, Aqua does not intend to reconcile costs associated with service to SWDCMA. It is denied that, after closing, Aqua does not intend to reconcile actual to estimated flows in billings to SWDCMA.

5. Aqua estimates that its revenue requirement to serve SWDCMA in 2022 would be approximately 47% higher than the amount paid by SWDCMA to DELCORA in 2019.

RESPONSE: Denied as stated. Aqua has not estimated the revenue requirement to serve SWDCMA, separate and apart from the estimated revenue requirement for the DELCORA system as a whole.

6. Aqua estimates that its revenue requirement to serve SWDCMA in 2025 would be approximately 16% higher than the 2022 revenue requirement.

RESPONSE: Denied as stated. Aqua has not estimated the revenue requirement to serve SWDCMA, separate and apart from the estimated revenue requirement for the DELCORA system as a whole.

7. Aqua estimates that its revenue requirement to serve SWDCMA in 2028 would be approximately 24% higher than the 2025 revenue requirement.

RESPONSE: Denied as stated. Aqua has not estimated the revenue requirement to serve SWDCMA, separate and apart from the estimated revenue requirement for the DELCORA system as a whole.

8. Aqua's revenue requirement projections for serving SWDCMA assume that SWDCMA will pay a portion of the costs Aqua incurs to eliminate any wastewater flows from the DELCORA system to the Philadelphia Water Department in approximately 2028.

RESPONSE: Denied. See Responses to SWDCMA's Requests for Admissions to Aqua Nos. 5-7.

9. Aqua is asking the Commission to approve a rate base for the DELCORA assets, at the time of acquisition, equal to the \$276.5 million purchase price of the assets plus an estimated \$750,000 in transaction costs.

RESPONSE: Admitted in part, denied in part. It is admitted that Aqua is requesting the approval of a ratemaking rate base of \$276.5 million. It is denied that Aqua is requesting transaction and closing costs of \$750,000. Transaction and closing costs are not known at this time and will be included in the first base rate case that includes the DELCORA customers after closing.

10. Aqua is asking the Commission to approve a rate base that does not treat any of the assets acquired from DELCORA as being property contributed by SWDCMA (or any other customers) to DELCORA.

RESPONSE: Admitted.

Respondent: William C. Packer

Date: 9/17/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

TRAINER BOROUGH

REQUESTS FOR ADMISSIONS SET II TO AQUA

1. Aqua is asking the Commission to permit Aqua to charge DELCORA's rates to Trainer as those rates exist at the time of closing.

RESPONSE: Admitted.

2. Aqua does not know what rate DELCORA will charge to Trainer during 2021.

RESPONSE: Admitted in part, denied in part. It is admitted that the rate to be charged by DELCORA to Trainer during 2021 is not known at this time. However, it is denied that the rate will not be known as DELCORA sets rates each November for what will be charged to customers in the following year. The rate to be charged to Trainer during 2021 will be established and known in November 2020.

3. The rate DELCORA charges to Trainer during 2021 will be based on DELCORA's estimate of costs and flows associated with DELCORA's service to Trainer.

RESPONSE: Admitted upon information and belief.

4. Aqua does not intend to reconcile the rate it charges at closing to actual flows and costs associated with DELCORA's service to Trainer.

RESPONSE: Admitted in part, denied in part with the understanding that DELCORA will not be providing service to Trainer after closing if the Commission approves this transaction. It is admitted that Aqua does not intend to reconcile the rate it charges at closing to actual flows and costs, as DELCORA sets the rates charged to Trainer customers each November for the subsequent year based upon estimated costs and flows; however, billings to customers for each quarter are based on the customers' consumption in the previous quarter.

5. Aqua estimates that its revenue requirement to serve Trainer in 2022 would be approximately 47% higher than the amount paid by Trainer to DELCORA in 2019.

RESPONSE: Denied as stated. Aqua has not estimated the revenue requirement to serve Trainer, separate and apart from the estimated revenue requirement for the DELCORA system as a whole.

6. Aqua estimates that its revenue requirement to serve Trainer in 2025 would be approximately 16% higher than the 2022 revenue requirement.

RESPONSE: Denied as stated. Aqua has not estimated the revenue requirement to serve Trainer, separate and apart from the estimated revenue requirement for the DELCORA system as a whole.

7. Aqua estimates that its revenue requirement to serve Trainer in 2028 would be approximately 24% higher than the 2025 revenue requirement.

RESPONSE: Denied as stated. Aqua has not estimated the revenue requirement to serve Trainer, separate and apart from the estimated revenue requirement for the DELCORA system as a whole.

8. Aqua's revenue requirement projections for serving Trainer assume that Trainer will pay a portion of the costs Aqua incurs to eliminate any wastewater flows from the DELCORA system to the Philadelphia Water Department in approximately 2028.

RESPONSE: Denied as stated. See Responses to Trainer's Requests for Admissions to Aqua Nos. 5-7.

9. Aqua is asking the Commission to approve a rate base for the DELCORA assets, at the time of acquisition, equal to the \$276.5 million purchase price of the assets plus an estimated \$750,000 in transaction costs.

RESPONSE: Admitted in part, denied in part. It is admitted that Aqua is requesting the approval of a ratemaking rate base of \$276.5 million. It is denied that Aqua is requesting transaction and closing costs of \$750,000. Transaction and closing costs are not known at this time and will be included in the first base rate case that includes the DELCORA customers after closing.

10. Aqua is asking the Commission to approve a rate base that does not treat any of the assets acquired from DELCORA as being property contributed by Trainer (or any other customers) to DELCORA.

RESPONSE: Admitted with the understanding that Section 1329, 66 Pa. C.S. § 1329, provides that the original source of funding for any part of the sewer assets of the selling utility shall not be relevant to determine the value of said assets.

Respondent: William C. Packer

Date: 9/14/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

UPLAND BOROUGH

REQUESTS FOR ADMISSIONS SET II TO AQUA

1. Aqua is asking the Commission to permit Aqua to charge DELCORA's rates to Upland as those rates exist at the time of closing.

RESPONSE: Admitted.

2. Aqua does not know what rate DELCORA will charge to Upland during 2021.

RESPONSE: Admitted in part, denied in part. It is admitted that the rate to be charged by DELCORA to Upland during 2021 is not known at this time. However, it is denied that the rate will not be known as DELCORA sets rates each November for what will be charged to customers in the following year. The rate to be charged to Upland during 2021 will be established and known in November 2020.

3. The rate DELCORA charges to Upland during 2021 will be based on DELCORA's estimate of costs and flows associated with DELCORA's service to Upland.

RESPONSE: Admitted upon information and belief.

4. Aqua does not intend to reconcile the rate it charges at closing to actual flows and costs associated with DELCORA's service to Upland.

RESPONSE: Admitted in part, denied in part with the understanding that DELCORA will not be providing service to Upland after closing if the Commission approves this transaction. It is admitted that Aqua does not intend to reconcile the rate it charges at closing to actual flows and costs, as DELCORA sets the rates charged to Upland customers each November for the subsequent year based upon estimated costs and flows; however, billings to customers for each quarter are based on the customers' consumption in the previous quarter.

5. Aqua estimates that its revenue requirement to serve Upland in 2022 would be approximately 47% higher than the amount paid by Upland to DELCORA in 2019.

RESPONSE: Denied as stated. Aqua has not estimated the revenue requirement to serve Upland, separate and apart from the estimated revenue requirement for the DELCORA system as a whole.

6. Aqua estimates that its revenue requirement to serve Upland in 2025 would be approximately 16% higher than the 2022 revenue requirement.

RESPONSE: Denied as stated. Aqua has not estimated the revenue requirement to serve Upland, separate and apart from the estimated revenue requirement for the DELCORA system as a whole.

7. Aqua estimates that its revenue requirement to serve Upland in 2028 would be approximately 24% higher than the 2025 revenue requirement.

RESPONSE: Denied as stated. Aqua has not estimated the revenue requirement to serve Upland, separate and apart from the estimated revenue requirement for the DELCORA system as a whole.

8. Aqua's revenue requirement projections for serving Upland assume that Upland will pay a portion of the costs Aqua incurs to eliminate any wastewater flows from the DELCORA system to the Philadelphia Water Department in approximately 2028.

RESPONSE: Denied. See Responses to Upland's Requests for Admissions to Aqua Nos. 5-7.

9. Aqua is asking the Commission to approve a rate base for the DELCORA assets, at the time of acquisition, equal to the \$276.5 million purchase price of the assets plus an estimated \$750,000 in transaction costs.

RESPONSE: Admitted in part, denied in part. It is admitted that Aqua is requesting the approval of a ratemaking rate base of \$276.5 million. It is denied that Aqua is requesting transaction and closing costs of \$750,000. Transaction and closing costs are not known at this time and will be included in the first base rate case that includes the DELCORA customers after closing.

10. Aqua is asking the Commission to approve a rate base that does not treat any of the assets acquired from DELCORA as being property contributed by Upland (or any other customers) to DELCORA.

RESPONSE: Admitted.

Respondent: John Pileggi

Date: September 22, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.**DOCKET NO. A-2019-3015173****KIMBERLY-CLARK CORPORATION****SET I INTERROGATORIES DIRECTED TO DELCORA**

KCC-I-32 What is the total estimated cost for improvements to collection equipment, pipelines, pumping stations, and other facilities needed as part of the shift away from use of the Philadelphia Water Department Plant, and what are the major cost components for these improvements?

RESPONSE:

See chart below:

Central PS	\$ 9,400,000
Tunnel All Segments Plus Shafts	\$ 305,000,000
Tunnel Pump Station	\$ 34,270,000
WRTP Upgrades	\$ 53,300,000
Subtotal	\$ 401,970,000
Design Engineering & Field Work	\$ 56,900,000
Total	\$ 458,870,000

Respondent: William C. Packer

Date: 9/22/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

KIMBERLY CLARK CORPORATION

SET II INTERROGATORIES TO AQUA

KCC-II-12 When Aqua initiates its first base rate proceeding, will Aqua seek to impose on the Western Wholesale Industrial customers costs for facilities, equipment, pipelines, or treatment capacity that is not needed for purposes of providing service to the Western Wholesale Industrial customers?

RESPONSE

Yes. While the existing rates of the Western Wholesale Industrial group today may be more reflective of the regional cost aspects of the DELCORA system, future increases in rates will be reflective of the entire cost of the DELCORA system allocated amongst those rate classes being served. This allocation, supported by cost of service analysis, can be both to and from any area of the system in the context of overall rate design with the common goal of achieving fair and reasonable rates for utility service.

Respondent: Robert Willert and Marc A. Lucca

Date: 8/10/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SOUTHWEST DELAWARE COUNTY MUNICIPAL AUTHORITY

SET I INTERROGATORIES

SWDCMA-I-2

For each contract or agreement provided in the “F” exhibits to the Application, please provide the following information:

- a. State whether the municipality or municipal authority has agreed to the assignment of DELCORA’s rights and obligations to Aqua, or otherwise agreed to change or not enforce the agreement with DELCORA.
- b. In each instance where the municipality or municipal authority has agreed to the assignment or other change, please provide a copy of the written assignment or contract amendment between the municipality or municipal authority and DELCORA and/or Aqua.
- c. In each instance where the municipality or municipal authority has agreed to the assignment or change, please state the amount of money or other consideration (if any) paid or to be paid by Aqua and/or DELCORA to the municipality or municipal authority or any official thereof.
- d. In each instance where money or other consideration was paid, or will be paid, for agreement to an assignment or contract change, please state whether the money was paid (or will be paid) by Aqua or DELCORA.
- e. In each instance where money was paid, or will be paid, for agreement to an assignment or contract change, please state how the funds will be accounted for, whether they will affect the transaction price, and Aqua’s proposed ratemaking treatment for the amounts paid if the Commission approves the Application.

RESPONSE

- a. Please see the Application Exhibits F159-163 for those municipalities or municipal authorities that have agreed to assignment.
- b. Please see the response to part a., above.
- c. No consideration for the amendment and assignment of the agreement was made for those that have agreed.
- d. N/A.
- e. N/A.

Respondent: Robert Willert and Marc A. Lucca

Date: August 17, 2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

UPLAND BOROUGH

SET I INTERROGATORIES

UPLAND-I-7

Reference: Asset Purchase Agreement dated as of September 17, 2019 (Exhibit B1 to the Application), section 2.06(b). Concerning this provision:

- a. Please provide a detailed description of the “commercially reasonable and economically feasible arrangement” that Aqua and DELCORA would use to continue providing service to any DELCORA wholesale customers who do not consent to the asset transfer.
- b. Please provide a detailed description of the “commercially reasonable and economically feasible arrangement” that Aqua and DELCORA would use to continue providing service to any DELCORA retail customers who live in municipalities where the municipality does not consent to the asset transfer.
- c. Please provide the proposed form of agreement between Aqua and DELCORA that would be used to facilitate and/or implement the “commercially reasonable and economically feasible arrangements” described in response to (a) and (b), above.
- d. In the event that this provision is triggered after closing (that is, there are Nonassignable Assets as the term is defined in the Asset Purchase Agreement), how would DELCORA determine the rates that would be charged to customers for service?

RESPONSE:

If the Commission approves Aqua’s Application to acquire the assets of DELCORA, Aqua will be the certificated wastewater provider in the requested service territory. Aqua and DELCORA intend to actively discuss with any of the parties the provision of wastewater service, and is committed to providing wastewater service to the DELCORA customers after closing.

Respondent: William C. Packer
Date: 8/10/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SOUTHWEST DELAWARE COUNTY MUNICIPAL AUTHORITY

SET I INTERROGATORIES

SWDCMA-I-4

For each contract or agreement identified in response to the previous question, please indicate the effect (if any) on the proposed transaction and purchase price if the municipality or municipal authority does not agree to the assignment, or otherwise agree to modify the contract or agreement.

RESPONSE

There will be no change to the purchase price if a municipality or municipal authority does not agree to the assignment of their contract. If the Commission approves the proposed transaction Aqua will be the certificated wastewater provider in the requested service territory. If a municipality does not agree to assign and amend their contract such that charges for service will be in accordance with Aqua's tariff, Aqua will continue to provide service to that entity; however, that entity may not be eligible to receive the benefit of the customer assistance payments from the DELCORA Customer Trust. The Company would operate under the provisions of its tariff.

Respondent: John Pileggi
Date: 8/10/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SOUTHWEST DELAWARE COUNTY MUNICIPAL AUTHORITY

SET I INTERROGATORIES

SWDCMA-I-8

Please state whether the “customer assistance payment” would apply to each of the following types of customers:

- a. Those who were retail customers of DELCORA on the date of the Asset Purchase Agreement
- b. Those who were wholesale customers of DELCORA on the date of the Asset Purchase Agreement where the wholesale customer agrees to the assignment of its contract to Aqua
- c. Those who were wholesale customers of DELCORA on the date of the Asset Purchase Agreement where the wholesale customer does not agree to the assignment of its contract to Aqua
- d. Those who become retail customers of DELCORA between the date of the Asset Purchase Agreement and the date of closing
- e. Those who become wholesale customers of DELCORA between the date of the Asset Purchase Agreement and the date of closing
- f. Those who become retail customers of Aqua in the former DELCORA service area after the date of closing
- g. Those who become wholesale customers of Aqua in the former DELCORA service area after the date of closing

RESPONSE

- a. Yes.
- b. Yes.
- c. Please see the response to SWDCMA-I-4.

d. Yes.

e. Yes.

f. Yes.

g. Yes.

Respondent: John Pileggi and William C. Packer
Date: 8/10/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SOUTHWEST DELAWARE COUNTY MUNICIPAL AUTHORITY

SET I INTERROGATORIES

SWDCMA-I-9

Assuming a 12.55% increase in the rates paid by DELCORA customers, and the Applicants' estimate of the net proceeds to DELCORA at closing (that is, the purchase price after retiring DELCORA debt and paying any other applicable expenses), please provide an estimate of the length of time it would take before no more funds are available to make the "customer assistance payments." Please provide a supporting workpaper showing the calculation of the estimate.

RESPONSE

The Company and DELCORA estimate that the Trust will be in use until approximately 2028. Please see the responses to OCA-III-11, OCA-III-12, and I&E-I-1.

Respondent: Robert Willert
Date: 8/10/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SOUTHWEST DELAWARE COUNTY MUNICIPAL AUTHORITY

SET I INTERROGATORIES

SWDCMA-I-10 The MOU is between Aqua and DELCORA and discusses Aqua's continuing obligations to DELCORA (such as providing monthly calculations to DELCORA) and DELCORA's continuing obligations (such as communicating with the Trustee). Concerning this:

- a. Is it the intent of both Aqua and DELCORA that DELCORA will continue to exist after closing?
- b. If the answer to (a) is in the affirmative, what is the expected term of DELCORA's continued existence (for example, perpetual, only until the Trust assets are depleted, a defined term of years, etc.)?
- c. If the answer to (a) is in the negative, please provide a detailed explanation of the relationship between the Trust and Aqua in the absence of DELCORA.

RESPONSE

- a. Yes.
- b. DELCORA is expected to continue to exist until the Trust assets are exhausted.
- c. N/A, see the response to part a., above.

Respondent: William C. Packer
Date: 8/03/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

BUREAU OF INVESTIGATION AND ENFORCEMENT

SET I INTERROGATORIES

I&E-I-1 Reference the direct testimony of Witness William C. Packer (Aqua Exhibit U2, pp.5-7) regarding the proposed Trust. Provide a sample bill, the proposed trust line item amount, and a schedule that shows how the proposed cost reimbursement/customer assistance plan from the proposed trust will be calculated for an average:

- A. Western Residential customers;
- B. Western Commercial customers;
- C. Western Industrial customers;
- D. All flat rate customers; and
- E. All bulk customers.

RESPONSE

Please see I&E-I-1 Attachment 1 and 2. The sample bill is a preliminary draft showing how the DELCORA customer assistance payment will be shown on a typical Western Retail residential bill.



Service To:
Western Retail
123 DRIVE
CHESTER, PA 17985

I&E-1 Attachment 1
 Account Number
000000000000000000
 Aqua Pennsylvania Wastewater
 2150630 PWSID # PA3540071

Aqua Pennsylvania Wastewater
 762 W. Lancaster Avenue
 Bryn Mawr, PA 19010-3489

Toll Free: **877.987.2782**
 Fax: **866.780.8292**
www.aquaamerica.com

Questions about your sewer service?... Contact us before the due date.
 Bill Date **July 28, 2020** Total Amount Due **\$ 40.33** Current Charges Due Date **August 19, 2020**

Billing Detail

For period
 beginning June 24, 2020 and ending July 27, 2020

Amount Owed from Last Bill	\$ 68.40
Total Payments Received	68.40
Remaining Balance	0.00
Sewer Charges 6,810 gals @.006472.....	44.07
Total Current Sewer Charges	44.07
DELCORA Customer Assistance Payment	-3.74
Amount Due	\$ 40.33

Message Center (see reverse side for other information)

- Effective July 1, 2020 the allowable wastewater DSIC is 1.18%. The PA Public Utility Commission permits a maximum wastewater DSIC of 5%.
- The due date refers to current charges and any deferred payment amount only. If you do not pay your bill on time, your service could be subject to interruption. To ensure proper credit, please remember to provide your full 16-digit account number when paying your bill.

RETURN THIS PORTION WITH YOUR PAYMENT



Aqua Pennsylvania Wastewater
 762 W. Lancaster Avenue • Bryn Mawr, PA 19010-3489

MAKE CHECK PAYABLE TO:
Aqua PA WW

Account Number
000000000 0000000

DUE DATE
 08/19/2020

TOTAL AMOUNT DUE
\$40.33

Please Do Not Remit Payment To The Above Address

Cyc=15CK 1up=2517866 EC: P745 BC: P745

Seq=16344

Amount Enclosed \$



Western Retail
 123 DRIVE
 CHESTER, PA 17985

AQUA PA WW
 PO BOX 70279
 PHILADELPHIA PA 19176-0279



00157811610999420000000069219



View your account, pay your current bill, check your daily balance, sign up for paperless billing, make a one-time payment.

[Get Started >](#)

[More Ways To Pay](#)

Save time and cut clutter with paperless billing!

Enroll today in WaterSmart e-Billing. You can cut the clutter of a paper bill, and we'll notify you by email when your bill is available to view online. It's simple, secure, and no additional fees.

Visit – AquaAmerica.com for more details.

I&E-I-1 Attachment 2

Existing Rates:			
Western Retail	\$	5.75	Per 1,000
Western Retail (Marcus Hook)	\$	8.78	Per 1,000
Western Retail Industrial	\$	6.93	Per 1,000
Chester Ridley Creek: SWDCMA	\$	3.50	Per 1,000
Chester Ridley Creek: Middletown	\$	3.50	Per 1,000
Western Wholesale Industrial	\$	3.18	Per 1,000
EDU Wholesale: Brookhaven	\$	2.89	Per 1,000
EDU Wholesale: Nether Providence	\$	2.89	Per 1,000
Eastern Authority: CDCA	\$	2.71	Per 1,000
Eastern Authority: DCJA	\$	2.71	Per 1,000
Eastern Authority: Muckinipates	\$	2.71	Per 1,000
Rose Valley / Nether Providence	\$	972.00	Per EDU
Pocopson Riverside	\$	950.00	Per EDU
Pocopson Preserve	\$	1,400.00	Per EDU
Edgmont Residential	\$	1,275.00	Per EDU
Edgmont Commercial EDU	\$	1,025.00	Per EDU
Edgmont Commercial Volumetric	\$	10.25	Per 1,000
Springhill Farms	\$	69.50	Average Bill

Revenue Deficiency	12.55%
Annual Increase	3.00%
Trust Payment Amount in Year 1 after Rate Case	9.55%

Western Retail

Existing Rate	\$	5.75
Existing Rate Plus 3%	\$	5.92
Full Cost Rate	\$	6.47
Usage Per 1,000 Gallons		6.81
Full Cost Bill	\$	44.07
Customer Bill Existing Rates Plus 3%	\$	40.33
Trust Payment	\$	3.74

Western Retail (Marcus Hook)

Existing Rate	\$	8.78
Existing Rate Plus 3%	\$	9.04
Full Cost Rate	\$	9.88
Usage Per 1,000 Gallons		3.91
Full Cost Bill	\$	38.64
Customer Bill Existing Rates Plus 3%	\$	35.36
Trust Payment	\$	3.28

I&E-I-1 Attachment 2

Western Retail Industrial

Existing Rate	\$	6.93
Existing Rate Plus 3%	\$	7.14
Full Cost Rate	\$	7.80
Usage Per 1,000 Gallons		735.87
Full Cost Bill	\$	5,739.58
Customer Bill Existing Rates Plus 3%	\$	5,252.57
Trust Payment	\$	487.01

Chester Ridley Creek: SWDCMA

Existing Rate	\$	3.50
Existing Rate Plus 3%	\$	3.61
Full Cost Rate	\$	3.94
Usage in 1,000 Gallons		80,604.00
Full Cost Bill	\$	317,519.31
Customer Bill Existing Rates Plus 3%	\$	290,577.42
Trust Payment	\$	26,941.89

Chester Ridley Creek: Middletown

Existing Rate	\$	3.50
Existing Rate Plus 3%	\$	3.61
Full Cost Rate	\$	3.94
Usage in 1,000 Gallons		50,188.00
Full Cost Bill	\$	197,703.08
Customer Bill Existing Rates Plus 3%	\$	180,927.74
Trust Payment	\$	16,775.34

Western Wholesale Industrial

Existing Rate	\$	3.18
Existing Rate Plus 3%	\$	3.28
Full Cost Rate	\$	3.58
Usage in 1,000 Gallons		40,015.00
Full Cost Bill	\$	143,217.29
Customer Bill Existing Rates Plus 3%	\$	131,065.13
Trust Payment	\$	12,152.16

EDU Wholesale: Brookhaven

Existing Rate	\$	2.89
Existing Rate Plus 3%	\$	2.98
Full Cost Rate	\$	3.25
Usage in 1,000 Gallons		22,582.00
Full Cost Bill	\$	73,452.36
Customer Bill Existing Rates Plus 3%	\$	67,219.84
Trust Payment	\$	6,232.52

I&E-I-1 Attachment 2

EDU Wholesale: Nether Providence

Existing Rate	\$	2.89
Existing Rate Plus 3%	\$	2.98
Full Cost Rate	\$	3.25
Usage in 1,000 Gallons		30,977.00
Full Cost Bill	\$	100,758.73
Customer Bill Existing Rates Plus 3%	\$	92,209.24
Trust Payment	\$	8,549.50

Eastern Authority: CDCA

Existing Rate	\$	2.71
Existing Rate Plus 3%	\$	2.79
Full Cost Rate	\$	3.05
Usage in 1,000 Gallons		319,375.00
Full Cost Bill	\$	974,127.28
Customer Bill Existing Rates Plus 3%	\$	891,471.44
Trust Payment	\$	82,655.85

Eastern Authority: DCJA

Existing Rate	\$	2.71
Existing Rate Plus 3%	\$	2.79
Full Cost Rate	\$	3.05
Usage in 1,000 Gallons		623,542.00
Full Cost Bill	\$	1,901,868.57
Customer Bill Existing Rates Plus 3%	\$	1,740,492.78
Trust Payment	\$	161,375.79

Eastern Authority: Muckinipates

Existing Rate	\$	2.71
Existing Rate Plus 3%	\$	2.79
Full Cost Rate	\$	3.05
Usage in 1,000 Gallons		144,479.00
Full Cost Bill	\$	440,676.12
Customer Bill Existing Rates Plus 3%	\$	403,284.23
Trust Payment	\$	37,391.89

Rose Valley / Nether Providence

Existing Rate	\$	972.00
Existing Rate Plus 3%	\$	1,001.16
Full Cost Rate	\$	1,093.99
Usage (EDU Basis)		-
Full Cost Bill	\$	1,093.99
Customer Bill Existing Rates Plus 3%	\$	1,001.16
Trust Payment	\$	92.83

I&E-I-1 Attachment 2

Pocopson Riverside

Existing Rate	\$	950.00
Existing Rate Plus 3%	\$	978.50
Full Cost Rate	\$	1,069.23
Usage (EDU Basis)		-
Full Cost Bill	\$	1,069.23
Customer Bill Existing Rates Plus 3%	\$	978.50
Trust Payment	\$	90.72

Pocopson Preserve

Existing Rate	\$	1,400.00
Existing Rate Plus 3%	\$	1,442.00
Full Cost Rate	\$	1,575.70
Usage (EDU Basis)		-
Full Cost Bill	\$	1,575.70
Customer Bill Existing Rates Plus 3%	\$	1,442.00
Trust Payment	\$	133.70

Edgmont Residential

Existing Rate	\$	1,275.00
Existing Rate Plus 3%	\$	1,313.25
Full Cost Rate	\$	1,435.01
Usage (EDU Basis)		-
Full Cost Bill	\$	1,435.01
Customer Bill Existing Rates Plus 3%	\$	1,313.25
Trust Payment	\$	121.76

Edgmont Commercial Annual EDU

Existing Rate	\$	1,025.00
Existing Rate Plus 3%	\$	1,055.75
Full Cost Rate	\$	1,153.64
Usage (EDU Basis)		-
Full Cost Bill	\$	1,153.64
Customer Bill Existing Rates Plus 3%	\$	1,055.75
Trust Payment	\$	97.89

I&E-I-1 Attachment 2

Edgmont Commercial Volumetric

Existing Rate	\$	10.25
Existing Rate Plus 3%	\$	10.56
Full Cost Rate	\$	11.54
Usage in 1,000 Gallons		29.00
Full Cost Bill	\$	334.55
Customer Bill Existing Rates Plus 3%	\$	306.17
Trust Payment	\$	28.39

Springhill Farms

Existing Average Bill	\$	69.50
Existing Bill Plus 3%	\$	71.59
Full Cost Rate		NA
Usage in 1,000 Gallons		NA
Full Cost Bill	\$	78.22
Customer Bill Existing Rates Plus 3%	\$	71.59
Trust Payment	\$	6.64

Respondent: William C. Packer
Date: 7/27/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

OFFICE OF CONSUMER ADVOCATE

SET II INTERROGATORIES

- OCA-II-22** DELCORA placement of proceeds into trust. Refer to the Application at page 8, paragraph 36, to Exhibit U2, Mr. Packer's testimony and Exhibit U2, Appendix B (Memorandum of Understanding), and to Exhibit W1, Mr. Willert's testimony.
- a. How will Aqua account for the amounts while being held in the trust?
 - b. How will Aqua account for the amounts that are received from the trust?
 - c. How frequently will DELCORA make payments to Aqua from the trust and how will the amounts of such payments be determined?
 - d. Is there a written agreement between Aqua and DELCORA concerning the operation of the trust and payments from the trust to Aqua? If not, explain fully why not. If so, please identify and provide it.
 - e. Have the documents for creating the irrevocable trust been drafted? If "yes" please identify and provide them. If not, when are they expected to be drafted and available for review?
 - f. Have DELCORA and Aqua worked out all of the details of how the trust and payments from it will work? If not, identify remaining details that are still under discussion between DELCORA and Aqua.

RESPONSE

- a. Please see the response to part b.
- b. The Company is not responsible nor involved with any trust accounting. The Company will record accounts receivable for the portion of customer bills rendered to be paid from trust proceeds separate from accounts receivable which is due from customers.

- c. To be clear, DELCORA will not directly make any payments to Aqua. Payments received by Aqua from the Trust will occur at the same frequency of bills issued. The payment amount due from the Trust is the difference in authorized tariff rates and a 3 percent increase each year on the DELCORA existing rate starting on the effective date of new rates of Aqua in the first base rate case that includes DELCORA customers.
- d. Please see the response to OCA-I-36, part e. Attached to my direct testimony, Application Exhibit U2, Appendix B, is the pro forma memorandum of understanding for information sharing to apply payments from the Trust to customer bills. Please see the response to part c., above.
- e. Yes. Please refer to OCA-I-36, part e.
- f. Please see the response to c. and d., above. The memorandum of understanding is a pro forma agreement for information sharing to apply customer assistance payments from the Trust to DELCORA customer bills. To the extent specific personnel, process and procedures dictate the receipt of funds, just as when Aqua receives funds from other sources, the Company can provide any additional process controls at the appropriate time.

Respondent: Mark J. Bubel, Sr.

Date: 10/28/2020

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

SUNOCO PARTNERS MARKETING & TERMINALS L.P.

SET III INTERROGATORIES TO AQUA

SPMT-AQUA-III-16 Please refer to Mr. Bubel's Rebuttal Testimony at Page 7, Lines 13- 18. Is it Aqua's position that Section 2.06 of the Asset Purchase Agreement will apply to the Western Region Wastewater Treatment Plant until DEP, EPA, DELCORA and Aqua jointly petition and receive approval from the United States District Court for the Eastern District of Pennsylvania for the substitution of Aqua for DELCORA in the Consent Decree? If this is not the case, please explain.

RESPONSE

No. The Western Regional Treatment Plant asset will be transferred at closing. As stated in my rebuttal testimony, Aqua and DELCORA will file for substitution of Aqua for DELCORA under the Consent Decree.

Respondent: John Pileggi

Date: 11/02/20

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.**DOCKET NO. A-2019-3015173****UPLAND BOROUGH****SET II INTERROGATORIES DIRECTED TO DELCORA**

UPLAND-II-1

Please state the number of DELCORA customers in each customer class (residential, commercial, etc.) as of the most recent date such information is available, for each of the following areas in which DELCORA provides retail service:

- a. Chester City
- b. Parkside
- c. Upland
- d. Chester Township
- e. Trainer
- f. Marcus Hook
- g. Rose Valley
- h. Nether Providence
- i. Riverside
- j. Preserve
- k. Edgmont

RESPONSE

Customer	Residential	Commercial	Total
Chester City	8,388	1,634	9,972
Parkside	718	25	743
Upland	1,106	220	1,236
Chester Township	437	163	600
Trainer	626	59	685
Marcus Hook	777	85	862
Rose Valley	360	0	360
Nether Providence	0	0	0
Riverside	149	3	152
Preserve	67	0	67

Edgmont	703	31	734
Total	13,1961	2,220	15,411

Please note that commercial accounts include multiple-unit residential properties. For example, a dormitory owned and operated by Widener University is a commercial account. Commercial accounts also include retail businesses.