

EXHIBIT X

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

AQUA PENNSYLVANIA, INC.

DOCKET NO. A-2024-3049015

GREENVILLE WATER AUTHORITY STATEMENT NO. 3

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

**GWA Water System Assets
Fair Market Value Appraisal**

April 2025

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

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

3 A. My name is Dylan W. D'Ascendis. My business address is 3000 Atrium Way, Suite 200,
4 Mount Laurel, NJ 08054.

5
6 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

7 A. I am employed by ScottMadden, Inc. ("ScottMadden") as a Partner.

8
9 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL EDUCATION AND EXPERIENCE.**

10 A. I offer expert testimony on behalf of investor-owned utilities on rate of return issues and
11 class cost of service issues. I am a Utility Valuation Expert ("UVE") (Utility Code
12 9919278) in the Commonwealth of Pennsylvania approved by the Pennsylvania Public
13 Utility Commission (the "Commission" or "PUC"). I also assist in preparing rate filings,
14 including, but not limited to, revenue requirements and original cost and lead/lag studies.
15 I am a graduate of the University of Pennsylvania, where I received a Bachelor of Arts
16 degree in Economic History. I also hold a Master of Business Administration from Rutgers
17 University with a concentration in Finance and International Business, which was
18 conferred with high honors. I have been awarded the professional designations of Certified
19 Rate of Return Analyst ("CRRA") and Certified Valuation Analyst ("CVA"). My full
20 professional qualifications, including my expert witness appearances, are provided in
21 Attachment A to my Direct Testimony.

1 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION?**

2 A. Yes. I have testified before the Commission on several occasions as shown on Attachment

3 A.

4

5 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS**
6 **PROCEEDING?**

7 A. The purpose of my Direct Testimony is to describe the fair market value appraisal of the
8 water system (the “System”) owned by the Municipal Authority of the Borough of
9 Greenville (“GWA” or the “Authority”) that I performed at the request of the Authority.
10 The Authority is selling the System to Aqua Pennsylvania, Inc. (“Aqua”), a subsidiary of
11 Essential Utilities, Inc. ScottMadden’s valuation is entitled “Valuation Report for
12 Greenville Municipal Water Authority as of July 15, 2024” (“Valuation Report”). The
13 appraisal and its report were developed to meet the criteria established in Section 1329 of
14 the Pennsylvania Public Utility Code (“Code”), 66 Pa. C.S. § 1329 (“Determination of the
15 fair market value of water and wastewater assets”).¹

16 In its 2015-2016 legislative session, the Pennsylvania Legislature passed Act 12 of
17 2016 and Governor Wolf signed into law Section 1329 of the Code establishing the
18 legislative guidelines facilitating the acquisition of municipal water and wastewater
19 systems by private investor-owned utilities and other entities which are rate-regulated by
20 the PUC.

¹ On July 2, 2024, the Pennsylvania Public Utility Commission issued its Final Supplemental Implementation Order, the criteria of which this appraisal and report meet. *In re: Implementation of Section 1329 of the Public Utility Code*, Docket No. M-2016-2543193 (“2024 FSIO”).

1 December 7, 2016. ScottMadden has met the requirements to remain on the Commission's
2 registry ever since.

3
4 **Q. HAVE YOU EVER HAD YOUR PROFESSIONAL CREDENTIALS REVOKED**
5 **OR SUSPENDED?**

6 A. No.

7
8 **Q. DO YOU HAVE SPECIFIC EXPERIENCE WITH THE VALUATION AND**
9 **APPRAISAL OF UTILITY ASSETS?**

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

11
12 **Q. HAVE YOU, SCOTTMADDEN, OR ANY OF ITS STAFF DERIVED ANY**
13 **MATERIAL FINANCIAL BENEFIT FROM THE SALE OF THE SYSTEM'S**
14 **ASSETS OTHER THAN FEES FOR YOUR SERVICES RENDERED?**

15 A. No.

16
17 **Q. ARE YOU, SCOTTMADDEN, OR ANY OF ITS STAFF AN IMMEDIATE**
18 **FAMILY MEMBER OF A DIRECTOR, OFFICER, OR EMPLOYEE OF AQUA,**
19 **ENTECH ENGINEERING, INC. OR THE AUTHORITY?**

20 A. No.

21

1 **Q. IS SCOTTMADDEN IN COMPLIANCE WITH APPLICABLE PENNSYLVANIA**
2 **LAWS?**

3 A. Yes.

4
5 **Q. DOES SCOTTMADDEN HAVE THE FINANCIAL AND TECHNICAL FITNESS,**
6 **INCLUDING PROFESSIONAL LICENSES AND TECHNICAL**
7 **CERTIFICATIONS, TO PERFORM A FAIR MARKET VALUATION OF THE**
8 **SYSTEM'S ASSETS?**

9 A. Yes.

10
11 **Q. ARE YOU AWARE OF ANY FACT, INCLUDING BUT NOT LIMITED TO ANY**
12 **POTENTIAL CONFLICT OF INTEREST, WHICH WOULD CAST DOUBT UPON**
13 **YOUR ABILITY TO PROVIDE A THOROUGH, OBJECTIVE, UNBIASED, AND**
14 **FAIR VALUATION IN THIS PROCEEDING?**

15 A. No.

16
17 **Q. ARE YOU ADVOCATING FOR ANY PARTY OR OUTCOME?**

18 A. No. The Ethics Rule of the USPAP, applicable here pursuant to 66 Pa. C.S. § 1329(a)(3),
19 requires that I perform the appraisal with impartiality, objectivity, and independence, and
20 without accommodation of personal interests. In addition, the USPAP Ethics Rule requires
21 that I not perform the assignment with bias, that I must not advocate the cause or interest
22 of any party or issue, and that I must not accept an assignment that includes the reporting
23 of predetermined opinions and conclusions.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

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

A. No, I did not update or revise my appraisal after my Valuation Report was submitted to the Authority.

FEEES PAID FOR UVE SERVICES

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

A. ScottMadden is being compensated on a fee basis, which includes a fixed fee upon delivery of the Valuation Report, and hourly rates for any services rendered thereafter (including this testimony). True, correct, and complete copies of ScottMadden’s invoices to GWA for this matter, as of the date of application filing, are attached to Aqua’s Application as Appendix T2 and I incorporate those invoices in my Direct Testimony as if set forth in their entirety. In summary, ScottMadden will receive \$35,000 in compensation for the Valuation Report, which represents 0.17% of the proposed valuation, and will charge fees on a time and materials basis thereafter.

Q. WILL SCOTTMADDEN RECEIVE FEES FOR ITS SERVICES REGARDLESS OF WHETHER THE COMMISSION APPROVES THE PROPOSED TRANSACTION OR WHETHER IT CLOSES?

A. Yes. 66 Pa. C.S. § 1329(a)((3) mandates that I comply with the USPAP when developing my appraisal. Under the USPAP, I cannot perform the appraisal with bias and acceptance

1 of a fee contingent on a particular outcome such as the transaction closing or Commission
2 approval. This would violate that Ethics Rule.

3
4 **Q. ARE THESE FEES CONSISTENT WITH COMPENSATION RECEIVED FOR**
5 **SIMILAR SERVICES PROVIDED TO OTHER CLIENTS?**

6 A. Yes.

7
8 **FAIR MARKET VALUATION OF THE WATER SYSTEM'S ASSETS**

9 **Q. PLEASE IDENTIFY EXHIBIT R TO THE APPLICATION IN THIS**
10 **PROCEEDING?**

11 A. Exhibit R of Aqua's Application includes the Valuation Report dated July 15, 2024, which
12 was prepared for the Authority and is to be filed in this proceeding.

13
14 **Q. HOW DO YOU RECOGNIZE IT?**

15 A. I personally prepared and supervised ScottMadden personnel in preparing the Valuation
16 Report and recognize it as ScottMadden's work product.

17
18 **Q. IS APPLICATION EXHIBIT R A TRUE, COMPLETE, AND ACCURATE COPY**
19 **OF THE VALUATION REPORT?**

20 A. Yes, and I incorporate it into my Direct Testimony as if set forth in its entirety.

1 **Q. PLEASE DESCRIBE THE PROCESS BY WHICH YOU PREPARED THE**
2 **VALUATION REPORT.**

3 A. In accordance with Section 1329 of the Code, GWA and Aqua engaged Entech
4 Engineering, Inc. (“Entech”) as the licensed engineer to conduct an assessment of the
5 Authority’s tangible assets. GWA engaged ScottMadden to prepare the fair market
6 valuation report for the System. GWA provided financial statements regarding their
7 operations and also provided a copy of The Municipal Authority of the Borough of
8 Greenville Engineering Assessment – Rev. 1 (the “Engineering Assessment”), developed
9 by Entech as required by Section 1329(a)(4). After those activities and data gathering, we
10 developed the appraisal and Valuation Report.

11 The Valuation Report contains a letter of transmittal; a narrative report explaining
12 our methodology and conclusions; a statement of assumptions and limiting conditions; a
13 statement of the Valuation Analyst’s Representations; a statement of the professional
14 qualifications of Dylan W. D’Ascendis, CVA, CRRA and Matthew R. Howard, CVA,
15 CRRA; and various schedules and appendices.

16 The intent of the Valuation Report is to provide the appraisal results, as well as the
17 entire appraisal work file, in sufficient detail to satisfy the parties’ and Commission’s
18 review requirements of Section 1329 and the Commission’s Final Implementation Order,
19 *In re: Implementation of Section 1329 of the Public Utility Code*, Docket No. M-2016-
20 2543193 (Order entered October 27, 2016). This Valuation Report also satisfies the
21 Commission’s 2024 FSIO. In addition to a copy of the Valuation Report, I have provided
22 supporting workpapers for the appraisal. The relevant workpapers have been submitted to
23 the Commission with the Application and provided to the Public Advocates Office in live

1 electronic format. ScottMadden considers the live electronic files, which are in Excel
2 format, to be CONFIDENTIAL.

3
4 **Q. IS THERE ANYTHING THAT YOU WOULD CHANGE IN THE VALUATION**
5 **REPORT SINCE ITS PREPARATION?**

6 A. No.

7
8 **Q. WAS THE FAIR MARKET VALUATION OF THE SYSTEM'S ASSETS**
9 **DETERMINED IN COMPLIANCE WITH THE USPAP?**

10 A. Yes. Included in ScottMadden's cover letter is a statement of the Valuation Report's
11 compliance with USPAP.

12
13 **Q. DID YOU EMPLOY THE COST, MARKET AND INCOME APPROACHES IN**
14 **PREPARING YOUR VALUATION?**

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

18 **Table 1: Summary of Indicated Values**

Valuation Approach	Indicated Value
Cost Approach	\$25,519,893
Market Approach	\$20,164,717
Income Approach	\$15,853,361

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

Q. DID YOU RELY UPON A LICENSED ENGINEERING ASSESSMENT OF THE TANGIBLE ASSETS OF THE SYSTEM IN PERFORMING YOUR VALUATION?

A. Yes. As stated above, GWA and Aqua engaged Entech as the licensed engineer to conduct an assessment of the System’s tangible assets. GWA provided a copy of the Engineering Assessment developed by Entech as required by Section 1329(a)(4). A copy of the Engineering Assessment is included as Exhibit D to the Application.

Q. DID THE ENGINEERING ASSESSMENT INCLUDE AN INVENTORY OF THE USED AND USEFUL UTILITY PLANT ASSETS TO BE TRANSFERRED COMPILED BY YEAR AND ACCOUNT?

A. Yes.

Q. DID THE ENGINEERING ASSESSMENT LIST ALL NON-DEPRECIABLE PROPERTY SUCH AS LAND AND RIGHTS-OF-WAY?

A. Yes.

Q. TO THE BEST OF YOUR KNOWLEDGE, WAS THE ENGINEERING ASSESSMENT DEVELOPED FROM AVAILABLE RECORDS, MAPS, WORK ORDERS, DEBT ISSUES, CLOSING DOCUMENTS FUNDING CONSTRUCTION PROJECTS, AND OTHER SOURCES TO ENSURE AN ACCURATE LISTING OF UTILITY PLANT INVENTORY BY UTILITY ACCOUNT?

1 A. Yes. I note that Entech provided additional data to ScottMadden related to the estimated
2 replacement costs for the Mixers shown on page 10 of Schedule 1 attached to the Valuation
3 Report. In addition, GWA representatives provided ScottMadden with records showing
4 the original construction cost for the water treatment plant as shown on page 5 of Schedule
5 1 attached to the Valuation Report.

6

7 **Q. DO YOU HAVE ANY REASON TO DOUBT THE ACCURACY OF THE**
8 **ENGINEERING ASSESSMENT INVENTORY OF THE ASSETS?**

9 A. No.

10

11 **Q. DID YOU INCORPORATE THE ENGINEERING ASSESSMENT INTO YOUR**
12 **COST APPROACH IN DEVELOPING YOUR VALUATION?**

13 A. Yes.

14

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

17 A. Yes. The use of professional discretion is detailed throughout my Valuation Report, where
18 applicable.

19

1 **Q. PLEASE DESCRIBE ANY ASSUMPTIONS, EXTRAORDINARY**
2 **ASSUMPTIONS, HYPOTHETICAL CONDITIONS, AND/OR LIMITING**
3 **CONDITIONS THAT YOU APPLIED TO THE VALUATION.**

4 A. The Statement of Assumptions and Limiting Conditions and the Valuation Analyst's
5 Representations are provided in Appendices A and B to the Valuation Report (Exhibit R
6 of the Application). Three examples of the limiting conditions for this appraisal are:

- 7 • Original costs were not available for the majority of assets, and as such,
8 ScottMadden relied on estimated replacement costs as outlined in The
9 Municipal Authority of the Borough of Greenville Engineering Assessment,
10 performed by Entech Engineering, Inc., as the basis for estimating original costs
11 in certain instances;
- 12 • An individual breakdown for a majority of original costs for the Water
13 Treatment Plant was not available; and
- 14 • GWA does not maintain a detailed long-term capital expenditure and
15 maintenance plan.
16

17 **Q. HOW DID YOU DEVELOP THE WEIGHTING APPLIED TO EACH APPROACH**
18 **IN YOUR APPRAISAL AND WHY ARE THE INDIVIDUAL WEIGHTS YOU**
19 **CHOSE APPROPRIATE FOR THE PROPOSED TRANSACTION?**

20 A. No method of valuation will produce the exact value of a business. A valuation study
21 cannot incorporate market conditions at the time of sale or predict a potential investor's
22 desire, or lack thereof, to acquire the business. GWA's desire to sell additional assets to
23 the potential acquirer may increase the desire of some investors, and as a result, increase
24 the value of both sets of assets. Our appraisal and Valuation Report cannot incorporate
25 these considerations.

26 I have determined the range of values of the System assets based on the relative
27 weighting of the three valuation methods. The weightings indicate the value placed on

1 each appraisal method from the valuation expert. In my opinion, all three approaches
2 should receive equal weight based on the data provided and the information gathered
3 during discussions with GWA representatives. Providing equal weighting to all three
4 approaches is also consistent with the Commission's requirements in the 2024 FSIO. The
5 ranges of values and relative weightings of the valuation approaches for each scenario are
6 set forth in Table 2, below:

1
2

Table 2: Conclusion of Value for the System

Valuation Approach	Indicated Value	Weight	Weighted Value
Cost	\$25,519,893	1/3	\$8,506,631
Market	\$20,164,717	1/3	\$6,721,572
Income	\$15,853,361	1/3	\$5,284,454
Indicated Value		100%	\$20,512,657

3

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

6 A. ScottMadden Director Matthew R. Howard, CVA, CRRA toured the facilities with GWA
7 representatives on June 20, 2024. To the extent possible, Mr. Howard determined that the
8 conditions of the System were consistent with the Engineering Assessment by Entech. This
9 confirmed the valuation in my models.

10

11 **Cost Approach**

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

14 A. I used a trended original cost method to determine the reproduction cost new, less
15 depreciation ("RCNLD") of the System's assets. In order to arrive at the reproduction cost
16 new for the System's assets, I began with the original cost of the assets provided by the
17 Engineering Assessment and used the Handy-Whitman Index ("HW Index") to determine
18 the current reproduction value. The HW Index is prepared specifically for electric, gas,
19 and water utilities, and is the only publication of its kind available to the public. The HW
20 Index has been published continuously since 1924. The HW Index is comprised of

1 historical index values for various accounts prescribed by the NARUC Uniform System of
2 Accounts, as well as for construction, material, and labor, by geographic region of the
3 United States. For assets not included in the HW Index (specifically automobiles &
4 trucks), I used the Producer Pricing Index. As noted above, however, original costs were
5 not available for a majority of the assets. In those instances, I relied on the estimated
6 replacement costs as provided by Entech. The HW Index was applied to any estimated
7 replacement costs to determine an estimate of the original costs.

8 The trended original cost method consists of the development of adjustment factors
9 from the time when the asset was put into service to the current date. For example, an
10 average main (NARUC account 331) placed into service in 1985 with an original cost of
11 \$100,000 would be trended forward by the ratio of the index value at the current date
12 divided by the index value at the time of installation. The index value of NARUC account
13 331 in January 2024 is 1,165.00, and the index value in 1985 when the assets were installed
14 was 254.00, which means the ratio applied to the original cost of the distribution main
15 would be 4.59. This would translate into a current cost for that main of \$459,000.²

16 The next step in deriving the RCNLD for the System's assets is to quantify the
17 amount of physical deterioration, functional obsolescence, and economic obsolescence of
18 the assets. Physical deterioration is caused by use, wear and tear, and the aging process.
19 Functional obsolescence is caused by changes in design or construction to create
20 efficiencies not present in the current asset. Economic obsolescence is a loss in value due
21 to external factors not in the control of GWA, such as economic conditions. The most
22 common measure of physical deterioration is the reserve held for depreciation, which is

² (1165.00 / 254.00) x \$100,000 = \$459,000.

1 based on the asset's remaining life versus its average useful life. Functional obsolescence
2 is measured by comparing the subject asset to a replacement asset with current technology.
3 The Engineering Assessment found no significant functional obsolescence for the System's
4 assets. Economic obsolescence is usually measured by market conditions, which have been
5 supportive towards the water and wastewater industries in the recent past, as well as
6 prospectively, so I do not believe there is significant economic obsolescence present in the
7 System's assets. Since the only applicable measure of loss of value is physical
8 deterioration, the useful lives for each asset were determined, and reserves for depreciation
9 were calculated for each System asset.

10
11 **Q. HOW DID YOU CALCULATE THE DEPRECIATION RESERVE FOR EACH**
12 **ASSET?**

13 A. First, I determined the useful life for each asset,³ then I reduced the original cost of each
14 asset each year by 1/useful life until the asset was fully depreciated or through 2024,
15 whichever one came first, and put that value into the depreciation reserve.

16
17 **Q. WHAT IS THE INDICATED VALUE OF THE SYSTEM'S ASSETS BASED ON**
18 **THE COST APPROACH?**

19 A. Using the HW Index, and the Producers and Consumers Pricing Indices to trend the original
20 cost, less depreciation of the System's assets forward, I derived a Reproduction Cost New

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 three exceptions. I used a 75-year useful life for mains as determined by the PUC in Docket No. A-2019-3008491, a 50-year useful life for structures, and a 10-year useful life for transportation equipment. My use of both 50 and 10-year useful lives for structures and transportation equipment was not challenged by PUC Staff in Docket No. A-2019-3015173.

1 minus depreciation of \$25,519,893, and an Original Cost minus depreciation of
2 \$13,289,277 as shown on Schedule 1 of Exhibit R.⁴

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

11
12 **Market Approach**

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

16 A. I used the market value of invested capital to net plant multiple and comparable sales
17 methods.

18
19 **Q. PLEASE DISCUSS THE MARKET VALUE OF INVESTED CAPITAL TO NET**
20 **PLANT METHOD.**

21 A. The market value of invested capital to net plant method applies a market value of invested
22 capital to net plant ratio of a comparable risk group to the original cost less depreciation

⁴ The original cost of GWA's System assets is \$24,179,112.

1 (“OCLD”) of the subject company to derive an indicated market value. As shown on page
2 2 of Schedule 2 of Exhibit R, market value of invested capital to net plant ratios of the
3 water utility proxy group used to derive the weighted average cost of capital (“WACC”) in
4 the income approach range from 1.0492x to 1.8654x. Using the System’s OCLD of
5 \$13,829,277,⁵ indicated values range from \$14,509,730 to \$25,797,337 with an average
6 value of \$19,234,987 as shown on page 3 of Schedule 2 of Exhibit R.

7
8 **Q. PLEASE DESCRIBE THE COMPARABLE SALES METHOD.**

9 A. I also researched transactions involving companies who acquired 100% of a water or sewer
10 interest since 2016. That research returned 149 results from around the country, 39 of
11 which were acquisitions in Pennsylvania, which are contained on pages 4-5 of Schedule 2
12 of Exhibit R. A common ratio which can be used to determine the System’s market value
13 is transaction value per equivalent domestic unit (“EDU”). The purchase price per EDU
14 ratios for the relevant transactions are shown on page 5 of Schedule 2 of Exhibit R. As
15 shown on page 5 of Schedule 2 of Exhibit R, the nationwide average purchase price to
16 EDU is 4.53x, while the Pennsylvania average purchase price to EDU is 6.36x. Given the
17 3,873 EDUs served by the System, indicated values using this approach are \$17,542,695,
18 using the nationwide multiple, and \$24,646,197, using the Pennsylvania multiple, with an
19 average of \$21,094,446 for the comparable sales method.

20

⁵ As shown on page 1 of Schedule 1.

1 **Q. DO YOU CONSIDER THE TRANSACTIONS IN SCHEDULE 2 TO BE VALID**
2 **COMPARISONS WITH THE INSTANT TRANSACTION?**

3 A. Yes, the transactions in Schedule 2 represent transactions in which companies acquired
4 100% of a water or sewer interest, as is the case with the instant transaction.

5
6 **Q. WHAT WERE THE RESULTS OF EACH ANALYSIS YOU PERFORMED?**

7 A. The market value of invested capital to net plant analysis produced an indicated value of
8 \$19,234,987. The comparable sales method produced a result of \$21,094,446.

9
10 **Q. WHICH RESULTS WERE USED TO DETERMINE YOUR MARKET**
11 **APPROACH RESULT? PLEASE EXPLAIN WHY THESE RESULTS WERE**
12 **USED.**

13 A. I applied a 50% weighting to the comparable sales method and a 50% weighting to the
14 market value of invested capital to net plant multiple method, for an indicated value of
15 \$20,164,717 for GWA as shown on page 1 of Schedule 2 of Exhibit R. An equal weighting
16 for both approaches is appropriate as there is not sufficient evidence to conclude that the
17 data available or values produced under either approach misstates the value for GWA.

18

19 **Income Approach**

20 **Q. WHAT METHOD DID YOU USE TO DETERMINE THE INCOME APPROACH**
21 **RESULT?**

22 A. I used the discounted cash flow (“DCF”) method.

23

1 **Q. WHAT ASSUMPTIONS DID YOU EMPLOY TO DEVELOP YOUR INCOME**
2 **APPROACH RESULT?**

3 A. In determining the indicated value using the income approach, I made assumptions
4 regarding the System’s operating revenue, operating expenses, and capital requirements.

5 The vast majority of GWA’s revenues are tied to water services. Further, revenues
6 are dependent on two factors: population growth and rate increases. Upon review of U.S.
7 census data for the period 2013 through 2023, I observed that the population for the
8 Borough of Greenville decreased at an annual rate of negative 0.74%, although when
9 reviewed over the last five years, the same data indicates a positive annual change of
10 0.59%. Based on this, I determined that the population and number of customers served
11 will remain flat and subsequently did not apply any population growth factor.

12 In regard to rate increases, representatives from GWA indicated rates were
13 increased 2.0% in 2024. Regarding rate increases beginning in 2025, representatives from
14 GWA indicated that rate increases tend to be influenced more by the previous year’s
15 results, rather than budgeted to account for increases in expenses and capital expenditures.
16 While GWA representatives indicated that rate increases of 3.0% seem appropriate, it is
17 my opinion that modeling assuming rate increases of 4.0% into perpetuity provides a
18 sounder financial outlook for the Authority, ensuring that it can meet all potential capital
19 expenditure needs.

20 As it relates to sewer collection fees, the Authority charges a fee for collecting and
21 processing the fees charged for services by the Borough of Greenville’s wastewater system
22 – the Greenville Sanitary Authority (“GSA”). Given that Aqua Pennsylvania Wastewater,
23 Inc. (“APW”) was in the process of seeking Commission approval for its acquisition of the

1 GSA while I was conducting my appraisal, I determine it is reasonable to assume that APW
2 will collect its charges itself and therefore I assumed that GWA will not receive any
3 revenues from sewer collection fees beginning in 2025.⁶

4 General operating expenses for GWA are primarily comprised of expenses related
5 to the operation of the purification, pumping and distribution systems, as well as
6 administrative and general expenses. GWA budgeted an increase in expenses of 3.40% for
7 2024 and beginning in 2025 all expenses are assumed to increase at the projected level of
8 the Consumer Price Index⁷ (“CPI”).

9 As noted previously, GWA does not maintain a long-term capital expenditure plan.
10 While GWA has identified capital expenditures totaling \$310,970 in 2024, it does not have
11 firm budgets for subsequent years as indicated by GWA representatives.

12 In discussing future capital expenditure needs with GWA representatives they
13 indicated that capital expenditures are determined on a year-to-year basis and are generally
14 75% planned with 25% accounting for unexpected needs. Looking forward, GWA
15 representatives anticipate most capital expenditure needs will be related to water treatment
16 plant needs and improvements (the Engineering Assessment notes that 84% of the
17 distribution system is in good or excellent condition). While there is no long-term capital
18 expenditure budget for GWA, ScottMadden notes that GWA has experienced
19 approximately \$328,000 in depreciation in recent years. As it is likely that annual
20 depreciation will decrease (with the exception of items becoming fully depreciated),

⁶ The PUC approved APW’s acquisition of the GSA. *See Application of APW, pursuant to 66 Pa. C.S.A. §§ 1102 and 1329 for Approval of the Acquisition by APW of the GSA*, Docket No. A-2023-3041695, Opinion and Order dated December 20, 2024.

⁷ I employed a CPI projection of 2.20% per year, based on the long-term CPI projection published by *Blue Chip Financial Forecasts*. *See, Blue Chip Financial Forecasts*, Vol. 43, No. 6, May 31, 2024 at 14; Appendix G, at 2.

1 ScottMadden relied on the 2024 budgeted amount of \$310,970, grown at the rate of
2 inflation into perpetuity, as a reasonable estimate for future annual capital expenditures.

3 GWA representatives anticipate that a new water treatment plant will be needed
4 around 2033, at a currently estimated cost between \$10 and 12 million. I assumed a cost of
5 \$11 million for the plant, split into two \$5.5 million capital expenditures over the course
6 of 2033 and 2034. I grew these \$5.5 million current expenses at the projected level of the
7 CPI from 2024 to the anticipated start of the project in 2033. This projection results in
8 capital expenditures of \$6,689,917 in 2033 and \$6,837,096 in 2034. From 2035 to 2050, I
9 resumed growing the projected annual capital expenditures (\$395,074) at the projected
10 level of CPI into perpetuity.⁸

11
12 **Q. WHAT DISCOUNT RATE DID YOU USE TO CALCULATE YOUR INCOME**
13 **APPROACH?**

14 A. The discount rate is the investor-required expected rate of return on the assets. An investor
15 in any company needs to be compensated for the risk of that investment, and a higher level
16 of risk equates to a higher required rate of return. The overall rate of return in this instance
17 is defined by the weighted average cost of capital (“WACC”). I have calculated a discount
18 rate which relates to the traditional method of financing for publicly-traded water
19 companies, which uses an equal mix between debt and equity capital.

20 For the common equity cost rate, I utilized the Commission authorized return on
21 equity (“ROE”) from the PUC’s report on the quarterly earnings of jurisdictional utilities

⁸ The 2035 capital expenditure value of \$395,074 is the 2024 capital expenditure value of \$310,970 compounded by inflation. $\$395,074 = \$310,970 * (1+2.20\%)^{11}$.

1 for the year ended December 31, 2023. The PUC’s quarterly earnings report sets an ROE
2 of 9.65% which is presented in Appendix J of the Valuation Report.

3 Regarding the capital structure, the PUC’s Final Supplemental Implementation
4 Order proscribes that the quarterly earnings report be used in setting the capital structure.⁹
5 However, because the quarterly earnings report does not provide specific capital structures,
6 ScottMadden relied on a hypothetical capital structure of 50.00% debt and 50.00% equity
7 based on the average capital structure for fiscal year 2023 of the publicly-traded proxy
8 group companies provided in the PUC’s quarterly earnings report as noted above.¹⁰

9 ScottMadden relied on a hypothetical capital structure based on a proxy group of
10 publicly traded water utilities as that reflects the scenario under which GWA would be
11 financed in the open market, as the purchaser of the System would likely finance the
12 System more in line with industry averages.

13 For the debt cost rate used in the WACC calculation, I used a 30-day average
14 Moody’s A2 public utility bond rate of 5.73%.¹¹ ScottMadden relied on the marginal cost
15 for a public utility as that cost reflects the cost an acquirer of the GWA would pay to issue
16 debt or reduce their level of debt in order to achieve the market-based capital structure
17 noted above.

18 Table 3 below illustrates the assumed WACC of an investor-owned water utility.

⁹ Pennsylvania Public Utility Commission, Additional Guidelines for Utility Valuation Experts, 2024 Final Supplemental Implementation Order, Appendix C, July 2, 2024.

¹⁰ The range of equity ratios of the proxy group companies were from 43.91% to 57.59% at 2023 fiscal year end. See, Appendix J, at 3.

¹¹ ScottMadden Valuation Report, Appendix G, at 2.

1
2

Table 3: Assumed WACC for Water Utility Company

Type of Capital	Cost Rate	Ratio	Weighted Cost
Long-Term Debt	5.73%	50.00%	2.87%
Common Equity	9.65%	<u>50.00%</u>	<u>4.83%</u>
Total		100.00%	7.70%

3

4 **Q. IF YOU USED A TERMINAL VALUE IN YOUR DCF ANALYSIS, WHAT IS THE**
5 **NUMBER OF YEARS OVER WHICH THE CASH FLOWS ARE CONSIDERED?**

6 A. I considered those cash flows over 26 years (2024 – 2050). By 2050 it is expected that
7 GWA will reach steady state operations, meaning cash flows earned in 2050 are reflective
8 of those expected going forward into perpetuity.

9

10 **Q. WHAT IS THE INDICATED VALUE OF THE SYSTEM USING THE INCOME**
11 **APPROACH?**

12 A. Inputting the estimated revenue, expense, and capital expenditure data into the model
13 resulted in an indicated value of \$15,853,361.

14

15 **CONCLUSION**

16 **Q. WHAT IS YOUR CONCLUSION REGARDING THE FAIR MARKET VALUE OF**
17 **THE SYSTEM’S ASSETS TO BE PURCHASED BY AQUA?**

18 A. The fair market value of the System’s assets is \$20,512,657 as of July 15, 2024. The results
19 of my appraisal and conclusions are summarized in the following table:

1

Table 4: Conclusion of Value for the System

Valuation Approach	Indicated Value	Weight	Weighted Value
Cost	\$25,519,893	1/3	\$8,506,631
Market	\$20,164,717	1/3	\$6,721,572
Income	\$15,853,361	1/3	\$5,284,454
Indicated Value		100%	\$20,512,657

2

3 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

4 A. Yes, it does; however, I reserve the right to supplement my Direct Testimony as additional
5 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). Dylan joined ScottMadden in 2016 and has become a leading expert witness with respect to cost of capital and capital structure. He has served as a consultant for investor-owned and municipal utilities and authorities for 15 years. Dylan has testified as an expert witness on over 150 occasions regarding rate of return, cost of service, rate design, and valuation before more than 35 regulatory jurisdictions in the United States and Canada, an American Arbitration Association panel, and the Superior Court of Rhode Island. He also maintains the benchmark index against which the Hennessy Gas Utility Mutual Fund performance is measured. Dylan holds a B.A. in economic history from the University of Pennsylvania and an M.B.A. with concentrations in finance and international business from Rutgers University.

Areas of Specialization

- Regulation and Rates
- Rate of Return
- Valuation
- Mutual Fund Benchmarking
- Capital Market Risk
- Regulatory Strategy
- Cost of Service

Recent Expert Testimony Submission/Appearance

- Regulatory Commission of Alaska – Capital Structure
- Federal Energy Regulatory Commission – Rate of Return
- Public Utility Commission of Texas – Return on Equity
- Hawaii Public Utilities Commission – Cost of Service / Rate Design
- Pennsylvania Public Utility Commission - Valuation

Recent Assignments

- Provided expert testimony on the cost of capital for ratemaking purposes before numerous state utility regulatory agencies
- 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 Articles 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				
ENSTAR Natural Gas Company	08/22	ENSTAR Natural Gas Company	Docket No. TA334-4	Rate of Return
Cook Inlet Natural Gas Storage Alaska, LLC	07/21	Cook Inlet Natural Gas Storage Alaska, LLC	Docket No. TA45-733	Capital Structure
Alaska Power Company	09/20	Alaska Power Company; Goat Lake Hydro, Inc.; BBL Hydro, Inc.	Tariff Nos. TA886-2; TA6-521; TA4-573	Capital Structure
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.	02/23	AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.	Proceeding ID. 27084	Determination of Cost-of-Capital Parameters
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	12/22	Arizona Water Company – Eastern Group	Docket No. W-01445A-22-0286	Rate of Return
EPCOR Water Arizona, Inc.	08/22	EPCOR Water Arizona, Inc.	Docket No. WS-01303A-22-0236	Rate of Return
EPCOR Water Arizona, Inc.	06/20	EPCOR Water Arizona, Inc.	Docket No. WS-01303A-20-0177	Rate of Return
Arizona Water Company	12/19	Arizona Water Company – Western Group	Docket No. W-01445A-19-0278	Rate of Return
Arizona Water Company	08/18	Arizona Water Company – Northern Group	Docket No. W-01445A-18-0164	Rate of Return
Arkansas Public Service Commission				
Southwestern Electric Power Co.	07/21	Southwestern Electric Power Co.	Docket No. 21-070-U	Return on Equity
CenterPoint Energy Resources Corp.	05/21	CenterPoint Arkansas Gas	Docket No. 21-004-U	Return on Equity
California Public Utilities Commission				
San Gabriel Valley Water Company	05/23	San Gabriel Valley Water Company	Docket No. A23-05-001	Return on Equity
Colorado Public Utilities Commission				
Atmos Energy Corporation	08/22	Atmos Energy Corporation	Docket No. 22AL-0348G	Rate of Return
Summit Utilities, Inc.	04/18	Colorado Natural Gas Company	Docket No. 18AL-0305G	Rate of Return
Atmos Energy Corporation	06/17	Atmos Energy Corporation	Docket No. 17AL-0429G	Rate of Return
Commission of the Canada Energy Regulator				
Trans-Northern Pipelines Inc.	11/22	Trans-Northern Pipelines Inc.	Docket No. C-22197	Cost of Capital
Delaware Public Service Commission				
Artesian Water Company, Inc.	04/23	Artesian Water Company, Inc.	Docket No. 23-0601	Rate of Return
Delmarva Power & Light Co.	12/22	Delmarva Power & Light Co.	Docket No. 22-0897 (Electric)	Return on Equity
Delmarva Power & Light Co.	01/22	Delmarva Power & Light Co.	Docket No. 22-002 (Gas)	Return on Equity
Delmarva Power & Light Co.	11/20	Delmarva Power & Light Co.	Docket No. 20-0149 (Electric)	Return on Equity
Delmarva Power & Light Co.	10/20	Delmarva Power & Light Co.	Docket No. 20-0150 (Gas)	Return on Equity
Tidewater Utilities, Inc.	11/13	Tidewater Utilities, Inc.	Docket No. 13-466	Capital Structure

Sponsor	Date	Case/Applicant	Docket No.	Subject
Public Service Commission of the District of Columbia				
Washington Gas Light Company	04/22	Washington Gas Light Company	Formal Case No. 1169	Rate of Return
Washington Gas Light Company	09/20	Washington Gas Light Company	Formal Case No. 1162	Rate of Return
Federal Energy Regulatory Commission				
LS Power Grid California, LLC	10/20	LS Power Grid California, LLC	Docket No. ER21-195-000	Rate of Return
Florida Public Service Commission				
Peoples Gas System, Inc.	04/23	Peoples Gas System, Inc.	Docket No. 20230023-GU	Rate of Return
Tampa Electric Company	04/21	Tampa Electric Company	Docket No. 20210034-EI	Return on Equity
Peoples Gas System, Inc.	09/20	Peoples Gas System, Inc.	Docket No. 20200051-GU	Rate of Return
Utilities, Inc. of Florida	06/20	Utilities, Inc. of Florida	Docket No. 20200139-WS	Rate of Return
Hawaii Public Utilities Commission				
Launiupoko Irrigation Company, Inc.	12/20	Launiupoko Irrigation Company, Inc.	Docket No. 2020-0217 / Transferred to 2020-0089	Capital Structure
Lanai Water Company, Inc.	12/19	Lanai Water Company, Inc.	Docket No. 2019-0386	Cost of Service / Rate Design
Manele Water Resources, LLC	08/19	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				
Ameren Illinois Company d/b/a Ameren Illinois	01/23	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 23-0082 (Electric)	Return on Equity
Ameren Illinois Company d/b/a Ameren Illinois	01/23	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 23-0067 (Gas)	Return on Equity
Utility Services of Illinois, Inc.	02/21	Utility Services of Illinois, Inc.	Docket No. 21-0198	Rate of Return
Ameren Illinois Company d/b/a Ameren Illinois	07/20	Ameren Illinois Company d/b/a Ameren Illinois	Docket No. 20-0308	Return on Equity
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 Corporation	07/19	Atmos Energy Corporation	19-ATMG-525-RTS	Rate of Return
Kentucky Public Service Commission				
Bluegrass Water Utility Operating Company	02/23	Bluegrass Water Utility Operating Company	2022-00432	Return on Equity

Sponsor	Date	Case/Applicant	Docket No.	Subject
Atmos Energy Corporation	07/22	Atmos Energy Corporation	2022-00222	PRP Rider Rate
Water Service Corporation of KY	06/22	Water Service Corporation of KY	2022-00147	Rate of Return
Atmos Energy Corporation	07/21	Atmos Energy Corporation	2021-00304	PRP Rider Rate
Atmos Energy Corporation	06/21	Atmos Energy Corporation	2021-00214	Rate of Return
Duke Energy Kentucky, Inc.	06/21	Duke Energy Kentucky, Inc.	2021-00190	Return on Equity
Bluegrass Water Utility Operating Company	10/20	Bluegrass Water Utility Operating Company	2020-00290	Return on Equity
Louisiana Public Service Commission				
Utilities, Inc. of Louisiana	05/21	Utilities, Inc. of Louisiana	Docket No. U-36003	Rate of Return
Southwestern Electric Power Company	12/20	Southwestern Electric Power Company	Docket No. U-35441	Return on Equity
Atmos Energy	04/20	Atmos Energy	Docket No. U-35535	Rate of Return
Louisiana Water Service, Inc.	06/13	Louisiana Water Service, Inc.	Docket No. U-32848	Rate of Return
Maine Public Utilities Commission				
Northern Utilities, Inc. d/b/a Unutil	05/23	Northern Utilities, Inc. d/b/a Unutil	Docket No. 2023-00051	Return on Equity
Summit Natural Gas of Maine, Inc.	03/22	Summit Natural Gas of Maine, Inc.	Docket No. 2022-00025	Rate of Return
The Maine Water Company	09/21	The Maine Water Company	Docket No. 2021-00053	Rate of Return
Maryland Public Service Commission				
Washington Gas Light Company	05/23	Washington Gas Light Company	Case No. 9704	Rate of Return
FirstEnergy Corporation	03/23	Potomac Edison Company	Case No. 9695	Rate of Return
Washington Gas Light Company	08/20	Washington Gas Light Company	Case No. 9651	Rate of Return
FirstEnergy Corporation	08/18	Potomac Edison Company	Case No. 9490	Rate of Return
Massachusetts Department of Public Utilities				
Unutil Corporation	12/19	Fitchburg Gas & Electric Co. (Elec.)	D.P.U. 19-130	Rate of Return
Unutil 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	D.P.U. 15-75	Rate of Return
Minnesota Public Utilities Commission				
Northern States Power Company	11/01	Northern States Power Company	Docket No. G002/GR-21-678	Return on Equity
Northern States Power Company	10/21	Northern States Power Company	Docket No. E002/GR-21-630	Return on Equity
Northern States Power Company	11/20	Northern States Power Company	Docket No. E002/GR-20-723	Return on Equity
Mississippi Public Service Commission				
Great River Utility Operating Co.	07/22	Great River Utility Operating Co.	Docket No. 2022-UN-86	Rate of Return
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				
Confluence Rivers Utility Operating Company, Inc.	01/23	Confluence Rivers Utility Operating Company, Inc.	Case No. WR-2023-0006/SR-2023-0007	Rate of Return
Spire Missouri, Inc.	12/20	Spire Missouri, Inc.	Case No. GR-2021-0108	Return on Equity
Indian Hills Utility Operating Company, Inc.	10/17	Indian Hills Utility Operating Company, Inc.	Case No. SR-2017-0259	Rate of Return

Sponsor	Date	Case/Applicant	Docket No.	Subject
Raccoon Creek Utility Operating Company, Inc.	09/16	Raccoon Creek Utility Operating Company, Inc.	Case No. SR-2016-0202	Rate of Return
Public Utilities Commission of Nevada				
Southwest Gas Corporation	09/23	Southwest Gas Corporation	Docket No. 23-09012	Return on Equity
Southwest Gas Corporation	09/21	Southwest Gas Corporation	Docket No. 21-09001	Return on Equity
Southwest Gas Corporation	08/20	Southwest Gas Corporation	Docket No. 20-02023	Return on Equity
New Hampshire Public Utilities Commission				
Aquarion Water Company of New Hampshire, Inc.	12/20	Aquarion Water Company of New Hampshire, Inc.	Docket No. DW 20-184	Rate of Return
New Jersey Board of Public Utilities				
Middlesex Water Company	05/23	Middlesex Water Company	Docket No. WR23050292	Rate of Return
FirstEnergy Corporation	03/23	Jersey Central Power & Light Co.	Docket No. ER23030144	Rate of Return
Atlantic City Electric Company	02/23	Atlantic City Electric Company	Docket No. ER20120746	Return on Equity
Middlesex Water Company	05/21	Middlesex Water Company	Docket No. WR21050813	Rate of Return
Atlantic City Electric Company	12/20	Atlantic City Electric Company	Docket No. ER20120746	Return on Equity
FirstEnergy Corporation	02/20	Jersey Central Power & Light Co.	Docket No. ER20020146	Rate of Return
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
New Mexico Public Regulation Commission				
Southwestern Public Service Co.	11/22	Southwestern Public Service Co.	Case No. 22-00286-UT	Return on Equity
Southwestern Public Service Co.	01/21	Southwestern Public Service Co.	Case No. 20-00238-UT	Return on Equity
North Carolina Utilities Commission				
Carolina Water Service, Inc.	07/22	Carolina Water Service, Inc.	Docket No. W-354 Sub 400	Rate of Return
Aqua North Carolina, Inc.	06/22	Aqua North Carolina, Inc.	Docket No. W-218 Sub 573	Rate of Return
Carolina Water Service, Inc.	07/21	Carolina Water Service, Inc.	Docket No. W-354 Sub 384	Rate of Return
Piedmont Natural Gas Co., Inc.	03/21	Piedmont Natural Gas Co., Inc.	Docket No. G-9, Sub 781	Return on Equity
Duke Energy Carolinas, LLC	07/20	Duke Energy Carolinas, LLC	Docket No. E-7, Sub 1214	Return on Equity
Duke Energy Progress, LLC	07/20	Duke Energy Progress, LLC	Docket No. E-2, Sub 1219	Return on Equity
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
North Dakota Public Service Commission				
Northern States Power Company	09/21	Northern States Power Company	Case No. PU-21-381	Rate of Return
Northern States Power Company	11/20	Northern States Power Company	Case No. PU-20-441	Rate of Return
Public Utilities Commission of Ohio				
Aqua Ohio, Inc.	11/22	Aqua Ohio, Inc.	Case No. 22-1094-WW-AIR	Rate of Return
Duke Energy Ohio, Inc.	10/21	Duke Energy Ohio, Inc.	Case No. 21-887-EL-AIR	Return on Equity

Sponsor	Date	Case/Applicant	Docket No.	Subject
Aqua Ohio, Inc.	07/21	Aqua Ohio, Inc.	Case No. 21-0595-WW-AIR	Rate of Return
Aqua Ohio, Inc.	05/16	Aqua Ohio, Inc.	Case No. 16-0907-WW-AIR	Rate of Return
Pennsylvania Public Utility Commission				
Columbia Water Company	05/23	Columbia Water Company	Docket No. R-2023-3040258	Rate of Return
Borough of Ambler	06/22	Borough of Ambler – Bureau of Water	Docket No. R-2022-3031704	Rate of Return
Citizens' Electric Company of Lewisburg	05/22	C&T Enterprises	Docket No. R-2022-3032369	Rate of Return
Valley Energy Company	05/22	C&T Enterprises	Docket No. R-2022-3032300	Rate of Return
Community Utilities of Pennsylvania, Inc.	04/21	Community Utilities of Pennsylvania, Inc.	Docket No. R-2021-3025207	Rate of Return
Vicinity Energy Philadelphia, Inc.	04/21	Vicinity Energy Philadelphia, Inc.	Docket No. R-2021-3024060	Rate of Return
Delaware County Regional Water Control Authority	02/20	Delaware County Regional Water Control Authority	Docket No. A-2019-3015173	Valuation
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
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
South Dakota Public Service Commission				
Northern States Power Company	06/22	Northern States Power Company	Docket No. EL22-017	Rate of Return
Tennessee Public Utility Commission				
Piedmont Natural Gas Company	07/20	Piedmont Natural Gas Company	Docket No. 20-00086	Return on Equity
Public Utility Commission of Texas				
Southwestern Public Service Co.	02/23	Southwestern Public Service Co.	Docket No. 54634	Return on Equity

Sponsor	Date	Case/Applicant	Docket No.	Subject
CSWR – Texas Utility Operating Company, LLC	02/23	CSWR – Texas Utility Operating Company, LLC	Docket No. 54565	Rate of Return
Oncor Electric Delivery Co. LLC	05/22	Oncor Electric Delivery Co. LLC	Docket No. 53601	Return on Equity
Southwestern Public Service Co.	02/21	Southwestern Public Service Co.	Docket No. 51802	Return on Equity
Southwestern Electric Power Co.	10/20	Southwestern Electric Power Co.	Docket No. 51415	Rate of Return
Texas Railroad Commission				
Atmos Pipeline – Texas, a Division of Atmos Energy Corporation	05/23	Atmos Pipeline – Texas, a Division of Atmos Energy Corporation	Docket No. OS-23-00013758	Return on Equity
Virginia State Corporation Commission				
Washington Gas Light Company	06/22	Washington Gas Light Company	PUR-2022-00054	Return on Equity
Virginia Natural Gas, Inc.	04/21	Virginia Natural Gas, Inc.	PUR-2020-00095	Return on Equity
Massanutten Public Service Corporation	12/20	Massanutten Public Service Corporation	PUE-2020-00039	Return on Equity
Aqua Virginia, Inc.	07/20	Aqua Virginia, Inc.	PUR-2020-00106	Rate of Return
WGL Holdings, Inc.	07/18	Washington Gas Light Company	PUR-2018-00080	Rate of Return
Atmos Energy Corporation	05/18	Atmos Energy Corporation	PUR-2018-00014	Rate of Return
Aqua Virginia, Inc.	07/17	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
Public Service Commission of West Virginia				
FirstEnergy Corporation	05/23	Monongahela Power Company and The Potomac Edison Company	Case No. 23-0460-E-42T	Return on Equity
FirstEnergy Corporation	12/21	Monongahela Power Company and The Potomac Edison Company	Case No. 21-0857-E-CN (ELG)	Return on Equity
FirstEnergy Corporation	11/21	Monongahela Power Company and The Potomac Edison Company	Case No. 21-0813-E-P (Solar)	Return on Equity

Valuation Engagements

Sponsor	Date	Assets Valued	Description
Artesian Water Resources	12/2022	Water Operations	Authored Valuation Report for internal purposes
Confidential	11/2022	Electric Transmission Operations	Authored Valuation Report for internal purposes
Aqua Pennsylvania, Inc.	09/2022	Wastewater Operations	Authored Valuation Report, which will be a part of an Act 12 Filing
Towamencin Township	09/2022	Wastewater Operations	Authored valuation report for inclusion in a fair market value filing
Borough of Shenandoah	08/2022	Water Operations	Authored valuation report for inclusion in a fair market value filing
Southwest Water Company	08/2022	Water Operations	Authored valuation report for inclusion in a fair market value filing
Confidential	02/2022	Electric Distribution System	Co-authored valuation report for Internal purposes

Sponsor	Date	Assets Valued	Description
Confidential	10/2021	Water Operations	Co-authored valuation report for Internal purposes
Confidential	10/2021	Water & Wastewater Operations	Co-authored valuation report for Internal purposes
City of York, PA	06/2021	Wastewater Operations	Co-authored Valuation Report, which will be a part of an Act 12 Filing
Aqua New Jersey, Inc.	05/2021	Confidential Water and Wastewater Operations in NJ	Authored Valuation Report for internal purposes
Aqua New Jersey, Inc.	05/2021	Confidential Water and Wastewater Operations in NJ	Authored Valuation Report for internal purposes
Aqua Ohio, Inc.	05/2021	Confidential Water Operations in OH	Authored Valuation Report for internal purposes
Aqua Pennsylvania, Inc.	04/2021	Confidential Wastewater Operations in PA	Authored Valuation Report for internal purposes
Aqua New Jersey, Inc.	04/2021	Confidential Wastewater Operations in NJ	Authored Valuation Report for internal purposes
Aqua Pennsylvania, Inc.	02/2021	Confidential Wastewater Operations in PA	Authored Valuation Report for internal purposes
Artesian Water Company, Inc.	01/2021	Wastewater Operations for Delaware City, DE	Authored valuation report for internal purposes
EPCOR Distribution and Transmission, Inc., Alberta Canada	12/2020	Fiber Optic Cable Assets	Fiber optic cable available for lease for Internal purposes
EPCOR Distribution and Transmission, Inc., Alberta Canada	12/2020	Duct Bank Assets	Duct banks available for lease for Internal purposes
Borough of Lewistown, PA	08/2020	Water Operations	Authored valuation report for internal purposes
Artesian Water Company, Inc.	06/2020	Wastewater Operations for Town of Frankford, DE	Authored valuation report for internal purposes
Foster Township, PA	04/2020	Water Operations	Authored valuation report for internal purposes
City of Erie, PA	04/2020	Water Operations	Authored valuation report for internal purposes
Delaware County Regional Water Quality Control Authority	02/2020	Wastewater Operations	Authored Valuation Report, which is part of an Act 12 Filing
Aqua North Carolina, Inc.	02/2020	Confidential Water Operations in NC	Authored Valuation Report for internal purposes
Aqua New Jersey, Inc.	02/2020	Confidential Water Operations in NJ	Authored Valuation Report for internal purposes
Aqua Ohio, Inc.	11/2019	Confidential Wastewater Operations in OH	Authored Valuation Report for internal purposes
Steelton Water Authority	06/2018	Water Operations	Authored Valuation Report, which is part of an Act 12 Filing
Sara Golvinveaux McGinnes Trust	04/2018	Electric Operations of Block Island Power Company	Authored Valuation Report for Superior Court Trial
Mahoning Township, PA	09/2017	Water and Sewer Assets	Authored Valuation Report, which is part of an Act 12 Filing



Attachment A: Professional Qualifications of
Dylan W. D'Ascendis, CRRA, CVA
Partner

Sponsor	Date	Assets Valued	Description
Atmos Energy Corporation	09/2016	Intrastate Natural Gas Pipeline	Authored Valuation for internal purposes.
Springfield Township, PA	08/2014	Water and Sewer Assets	Co-Authored Valuation Report, which was part of House Bill 1379 Filing (similar to PA Act 12)
Aqua Illinois, Inc.	07/2014	Village of Glenview, IL (North Maine Utilities) Sewer Assets	Co-Authored Valuation report for internal purposes
Erie City Water Authority, Erie, PA	12/2013	Water Assets	Sponsored Valuation Testimony in Arbitration Hearing
City of Allentown, PA	12/2012	Water and Sewer Assets	Assisted in the generation of Valuation Report