COMMONWEALTH OF PENNSYLVANIA

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March 31, 2025

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

Re: Application of Aqua Pennsylvania Wastewater, Inc. pursuant to Sections 507, 508, 1102, and 1329 of the Public Utility Code for Approval of its Acquisition of the Wastewater System Assets of the City of Beaver Falls; Docket No. A-2022-3033138

Dear Secretary Chiavetta:

In accordance with the Administrative Law Judge's March 28, 2025 Order, attached for filing and admission into the evidentiary record in the above-referenced docket is the Office of Consumer Advocate's Testimony and Exhibits, both Confidential and Public versions.

Copies will be provided as indicated on the Certificate of Service

Respectfully submitted,

/s/ Harrison W. Breitman
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Enclosures

cc: Administrative Law Judge F. Joseph Brady (Via Email: fbrady@pa.gov)
Pamela McNeal, Legal Assistant (Via Email: pmcneal@pa.gov)
Certificate of Service

CERTIFICATE OF SERVICE

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 City of Beaver Falls	:	Docket No. A-2022-3033138

I hereby certify that I have this day served a true copy of the following documents, the Office of Consumer Advocate's Admission of Testimony and Exhibits into the Record upon parties of record in this proceeding in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant), in the manner and upon the persons listed below. This document was filed electronically on the Commission's electronic filing system.

Dated this 31st day of March 2025.

***Received Confidential Version**

SERVICE BY E-MAIL ONLY

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Dated: March 31, 2025

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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 Approval of its Acquisition of the Wastewater System Assets of the City of Beaver Falls	:	Docket No. A-2022-3033138

LIST OF TESTIMONY AND EXHIBITS TO BE ADMITTED INTO THE EVIDENTIARY RECORD BY THE OFFICE OF CONSUMER ADVOCATE

The Office of Consumer Advocate (OCA) intends to submit the following evidence into the evidentiary record in the above-captioned proceeding.

OCA Direct Testimony

OCA Statement 1: Direct Testimony of Nicholas A. DeMarco (**Highly Confidential Version**) with Verification, including:

- Exhibit NAD-1
- Exhibit NAD-2
- Exhibit NAD-3
- Exhibit NAD-4
- Exhibit NAD-5

Direct Testimony of Nicholas A. DeMarco (Public Version) with Verification, including:

- Exhibit NAD-1
- Exhibit NAD-2
- Exhibit NAD-3
- Exhibit NAD-4
- Exhibit NAD-5

(note: redactions made to pages 5, and 6)

OCA Statement 2: Corrected Direct Testimony of David J. Garrett (**Confidential Version**) with Verification, including:

- Appendix A: Discounted Cash Flow Model Theory
- Appendix B: Capital Asset Pricing Model Theory
- Exhibit DJG-1
- Exhibit DJG-2
- Exhibit DJG-3
- Exhibit DJG-4
- Exhibit DJG-5
- Exhibit DJG-6

- Exhibit DJG-7
- Exhibit DJG-8
- Exhibit DJG-9
- Exhibit DJG-10
- Exhibit DJG-11
- Exhibit DJG-12

Corrected Direct Testimony of David J. Garrett (Public Version) with Verification, including:

- Appendix A: Discounted Cash Flow Model Theory
- Appendix B: Capital Asset Pricing Model Theory
- Exhibit DJG-1
- Exhibit DJG-2
- Exhibit DJG-3
- Exhibit DJG-4
- Exhibit DJG-5
- Exhibit DJG-6
- Exhibit DJG-7
- Exhibit DJG-8
- Exhibit DJG-9
- Exhibit DJG-10
- Exhibit DJG-11
- Exhibit DJG-12

(note: redactions made to pages 16, 17, 36, and 38)

OCA Surrebuttal Testimony

OCA Statement 1SR: Surrebuttal Testimony of Nicholas A. DeMarco with Verification, including:

- Exhibit NAD-SR-1
- Exhibit NAD-SR-2
- Exhibit NAD-SR-3

OCA Statement 2SR: Surrebuttal Testimony of David J. Garrett with Verification

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application of Aqua Pennsylvania Wastewater, Inc. Pursuant to Sections 507, 508, 1102 and 1329 of the Public Utility Code for Approval of its Acquisition of the Wastewater System Assets of the City of Beaver Falls	:	Docket No. A-2022-3033138

Direct Testimony
of
Nicholas A. DeMarco

On Behalf of
the Pennsylvania Office of Consumer Advocate

Date Served: February 14, 2025

Table of Contents

I. Introduction

Q. Please state your name, business address and occupation.

A. My name is Nicholas A. DeMarco. My business address is 555 Walnut Street, Forum Place, 5th Floor, Harrisburg, Pennsylvania 17101. I am currently employed as a Regulatory Analyst by the Pennsylvania Office of Consumer Advocate (OCA).

Q. Please describe your educational background and qualifications to provide testimony in this case.

A. I have a Master's degree in Political Science from Lehigh University and a Bachelor of Arts in Political Science, with a concentration in Constitutional Law from Bloomsburg University of Pennsylvania. I also attended Michigan State University's Institute of Public Utilities online rate school program. I have attached my CV as Exhibit NAD-1.

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

A. I am testifying on behalf of the OCA.

Q. Do you have any exhibits that your will be presenting with your testimony?

A. Yes. Attached as follows: NAD-1 Qualification, NAD-2 low-income rate calculations, NAD-3 annual revenue deficiency, NAD-4 OCA-II-3 Response with attachment, and NAD-5 customer complaints.

II. Purpose of Direct Testimony

Q. What is the purpose of your Direct Testimony in this proceeding?

A. The purpose of my Direct Testimony is to provide my recommendations regarding the Amended Application (Application) and supporting documents submitted by Aqua

Pennsylvania Wastewater, Inc. (Aqua or Company) for the acquisition of the assets, properties and rights related to the wastewater collection and treatment system (Assets) of the City of Beaver Falls (Beaver Falls or City). I provide an analysis of whether the acquisition, if approved by the Pennsylvania Public Utility Commission (Commission), would provide substantial affirmative public benefits. Ultimately, I conclude that there is insufficient evidence of an affirmative public benefit that would result from this transaction and, as such, the Commission should deny the application. Alternatively, if the Commission considers approving the Application, it should only do so by imposing the requirements that I outline below in addition to approving the adjustments recommended by OCA witness David Garrett.

Q. Does the OCA recommend adjustments to the UVE appraisals?

A. Yes. The OCA has reviewed the Utility Valuation Engineer (UVE) valuations. OCA witness, David Garrett places the fair market value of the system at $19.6 million. This is roughly $21.6 million less than the current rate base fair market value price of $41.25 million. Mr. Garrett will further address his analysis and recommendations in OCA Statement 2. I will address the impact of this adjustment later in my testimony.

III. Summary of Conclusions and Recommendations

Q. What is required for approval of an application for a certificate of public convenience?

A. To acquire a municipal wastewater system, a public utility must file an application asking for a Certificate of Public Convenience (Certificate), which will only be granted if the Commission determines that the acquisition is necessary or proper for the service,

accommodation, convenience, or safety of the public, or, as the Courts have interpreted this standard, that the transaction "will affirmatively promote the service accommodation, convenience, or safety of the public in some substantial way".[1,2] I understand the impact on rates is to be considered.[3] Additionally, I have been advised by counsel that if the claimed benefits of the sale are not substantially different than those already being provided by the current system operator and the known harms do not outweigh the existing benefits, the transaction does not meet the legal standard.[4] In other words, there must be net public benefits as a result of the transaction.

Q. Please summarize your conclusions and recommendations.

A. The overall acquisition does not produce net public benefits and should be denied. Based on my review, it is my opinion that the known benefits of the acquisition, such as the offering of low-income programs, do not outweigh the known rate harms associated with the increased costs from this transaction. In my opinion, the Applicants' alleged benefits of the sale relating to the claimed need for capital improvements and additional actions to improve environmental compliance are not substantially different from the service already being provided by the City or the service that the City is capable of continuing to provide in the future. Thus, as to these claimed service attributes, the acquisition will maintain the status-quo. My testimony will show that the City is not out of compliance with necessary environmental regulations and that there are other avenues available to the

[1] 66 Pa. C.S. § 1103(a).
[2] *City of York v. Pennsylvania Public Utility Commission*, 209 A.2d 825, 828 (Pa. 1973).
[3] *Application of Aqua Pennsylvania Wastewater, Inc.*, Docket No. A-2021-3024267, Order Entered January 13, 2022, p 8 (quoting *McCloskey v. Pennsylvania Public Utility Commission*, 195 A.3d 1055, 1066-1067 (Pa. Cmwlth. 2018), *appeal denied*, 207 A.3d 290 (Pa. 2019)) (emphasis added).
[4] *Cicero v. Pa. PUC,* 300 A.3d 1106, 1119 (Pa. Cmwlth. Ct. 2023) *(Cicero*), *petitions for allowance of appeal docketed*, 47 MAP 2024, 48 MAP 2024, 49 MAP 2024 (June 14, 2024).

City which will allow it to continue to operate and maintain the system without the need to sell to Aqua. Moreover, I show that Aqua's bill payment options do not offer any tangible advantages over the City's current billing system, but to the extent there are any advantages, they are outweighed by the significant costs that ratepayers will bear based on the proposed ratemaking rate base. The rate harms include a purchase price that is 820% over the net book value of $5,032,210 and an annual revenue deficiency of $4,288,000, which will unduly increase rates for both Aqua water and wastewater customers. Based on my review, the rate harms outweigh the benefits of offering low-income customer programs to the City's customers.

However, if the Commission determines that the public benefits to this transaction outweigh the known and quantifiable harm associated with the rate increase that will be needed to fund the revenue deficiency, I believe there are conditions that the Commission should impose as a part of approving the transaction, as set forth below in Section VIII of my testimony below.

IV. Service and Facilities

A. Capital Improvements and Environmental Compliance

Q. Does the Beaver Falls system have any environmental compliance issues?

A. Aqua witness, Mark J. Bubel, Sr., discussed compliance issues and challenges with the system in his direct testimony. He indicated there "were no reported sanitary sewer overflows (SSOs) in 2020 or 2021 as reported in the respective Chapter 94 Reports."[5] Mr. Bubel also addressed Notices of Violation (NOV) that were issued to the City by the Pennsylvania Department of Environmental Protection (DEP) in July 2021, November

[5] Aqua Statement No. 2, p. 8, ln. 18-19.

2018 and August 2017. The July 2021 NOV was "related to total suspended solids ("TSS") violation and from the sampler refrigerator which was not keeping the sample at six degrees Celsius."[6] The November 2018 and August 2017 NOVs were "related to effluent limitation exceedances of its NPDES permit and had noted exceedances in an August 2019 inspection report."[7]

Q. Does Beaver Falls have a Corrective Action Plan (CAP) with DEP?

A. Mr. Bubel indicated that "The City is currently under a CAP on file with DEP" and that "The CAP does not require physical upgrades to the system but does require updating the existing sewer collection system mapping, administering the Tap Control Plan (Connection Management Plan), and continuing to? prevent discharges."[8]

Q. Is the Beaver Falls system currently in compliance with Pennsylvania Department of Environmental Protection (PA DEP) requirements?

A. Yes. According to Aqua witness Zachary Martin, the Beaver Falls system is compliant with PA DEP requirements.[9]

Q. Is the Beaver Falls system currently in compliance with United States Environmental Protection Agency (EPA) requirements?

A. **[Begin Highly Confidential]** [redacted]

[6] Aqua Statement No. 2, p. 10, ln. 9-11.
[7] Aqua Statement No. 2, p. 10, ln. 14-16.
[8] Aqua Statement No. 2, p. 11, ln. 14-18.
[9] Aqua Supp. St. No. 3 pg. 18, ln. 10-11.

[redacted] **[End Highly Confidential].**

Q What do you conclude based on these responses?

A I conclude that Beaver Falls is not currently out of compliance with any state environmental standards and is effectively managing its Corrective Action Plan with DEP. **[Begin Highly Confidential]** [redacted] **[End Highly Confidential]**

Q. Are there any anticipated capital improvements?

A. In his direct testimony, Mr. Bubel stated, "Aqua looked at upgrades to the treatment plant, and gravity collection system based on facility conditions observed, facility age, and safety. Aqua estimates that it will invest approximately $10.2 million over the next 10 years."[11]

Q. Are these capital improvements mandated or required?

A. The only capital improvement that would be necessary **[Begin Highly Confidential]** [redacted] **[End Highly Confidential]** While there would, of course, be routine and ongoing improvements to maintain and improve the system, nothing in the record indicates that anything more than a single system improvement is needed to meet compliance.

Q. Are any of the improvements and upgrades mentioned above urgent?

[10] Aqua Supp. St. No. 3 pg. 20-21, ln. 14-2.
[11] Aqua Statement No. 2, p. 8, ln. 6-8.

A. Mr. Bubel was asked "Do you foresee any other projects that would be required in the immediate future?"[12], in which he replied, "Replacement and upgrade of facilities will continue beyond Aqua's 10-year capital plan based on facility age and expected facility life span."[13] It is not apparent that any improvements and upgrades are urgent. Additionally, Mr. Bubel notes that there is system capacity to meet current and future demands.[14]

Q. Is Beaver Falls financially fit to complete the improvements and upgrades?

A. According to the City, no. City Manager, Charles R. Jones, Jr., stated "The City does not have a long-term capital plan for the Acquired Assets as a result of the City's financial condition."[15] He also stated, "The City has historically experienced financial difficulties, particularly during periods of economic recession, and is vulnerable to future economic downturns."[16]

Additionally, Beaver Falls CFO Sandra Wilkins[17], attested to the difficulty that the City would have operating the system without raising rates due to its current financial state.

Q. **At any time within the 10-year period ending December 31, 2023, has the City been unable to replace wastewater utility infrastructure or make needed upgrades?**

A. City Manager Jones states, "We need to replace the oxidation tower pump, fix the cracks in the digester, and the secondary tanks are deteriorating. We have not done any of this

[12] Aqua Statement No. 2, p. 8, ln. 21.
[13] Aqua Statement No. 2, p. 8, ln. 22-23.
[14] Aqua Statement Supp. No. 2 pg. 13, ln 14-18.
[15] Aqua Statement No. 4, p. 5, ln. 7-9.
[16] Aqua Statement No. 4, p. 7, ln. 22-23.
[17] Aqua Statement No. 8, p. 4, ln. 7-10.

work as we do not have the funds to do so. This is why we are selling the System to Aqua."[18]

Q. Do you have any comments?

A. Yes. If the City has concerns receiving a viable loan through traditional means, the City can apply for PENNVEST grants or low interest loans which are available to help maintain and or upgrade the system as needed. When asked "if the City had applied for a PENNVEST grant or low-interest loan for any projects necessary for the maintenance or to upgrade its sewer system in the last five years?" City Manager Charles Jones replied:

> "No. Please see the response to OCA-II-4. We started the process to sell the system in 2020. We expected the sale to be approved and closed in 2022. We did not explore grants of loans because we anticipated that the City would not be operating the system for long."

When asked "Has the City completed any projects necessary to upgrade or maintain the sewer system since the negotiation of the sale of the system to Aqua?" City Manager Mr. Jones, answered, "We have completed one project since the negotiation of the sale of the system and that was in the chlorination room. We replaced some pipes, two mixers and the chlorinator."[19]

The City has shown: (1) that it can complete projects with the funding that exits without grants and loans; and (2) that it has not attempted to apply for available PENNVEST grants and loans in the last five years due to the expectation of the sale.

Q. Is there any indication on the record that, if the City continued to own the system,

[18] OCA-III-15.
[19] OCA-VII-4.

Beaver Falls' rates would increase to the same extent they would under Aqua ownership?

A. Mr. Jones indicated in his direct testimony that "On November 8, 2022, the City adopted a rate ordinance confirming rates for residential and commercial customers and for the Joint Sewer Users. As was the case with the City's prior ordinance, this ordinance provides for late fees and an automatic 3% increase on an annual basis in order to account for inflation and cost increases."[20] Although Mr. Jones does not explicitly state what rates would be if there was no acquisition, we can assume the City's annual 3% increase would be significantly lower than Aqua's estimated 165% increase. Response to OCA-II-2 Attachment 1[21] shows that rates could increases.[22]

Table 1: Condensed OCA-II-2 Attachment 1

	2024	2025	2026	2027-2032	2033	2034
Dollar increase at 4,000 gal/month usage	$41	$55	$60	$60	$63	$63
Precent Increase		35%	10%	0%	5%	0%

Q. Is Beaver Falls technically fit to complete the improvements and upgrades?

A. There is no indication that Beaver Falls is not technically fit to complete any necessary

[20] Aqua Statement No. 4, p. 10, ln. 15-18.
[21] OCA-II-3 Attachment 1.
[22] NAD 2.

improvements or upgrades. According to Company witness Bubel, the City is currently under a Corrective Action Plan (CAP) with PA DEP. He states that the CAP does not require physical upgrades to the system.[23]

Q. Does the System have any outstanding non-compliance issues with the United States Environmental Protection Agency (EPA)?

A. According to Company witness Bubel, WWTP has no issues of non-compliance with the United States Environmental Protection Agency.[24]

Q. What criteria does the Commission use to determine whether or not a water or wastewater system is troubled?

A. The Commission uses criteria from Section 1327 and Section 529 of the Public Utility Code.

Q. Do you consider the seller's system to be troubled using the criteria from Section 1327/Section 529/PUC policy statement criteria?

A. No, I do not consider the system to be troubled. As stated above, the Beaver Falls System currently serves approximately 3,192 customers in its service area. As the system ages, it is going to need standard improvements. Needing standard improvements does not constitute a system being troubled. Section 1327(a)(3) of the Public Utility Code states "the public utility, municipal corporation or person from which the property was acquired was not, at the time of acquisition, furnishing and maintaining adequate, efficient, safe and reasonable service and facilities…." While the Beaver Falls system

[23] Aqua Supp. Statement 2. pg. 11 ln. 12-14.
[24] Aqua Supp. Statement 2. pg. 13 ln. 5-7.

may have previous compliance issues, it seems to be complying with the CAP, and it appears Beaver Falls is providing adequate, efficient, safe and reasonable service to its customers.

B. Low-Income Programs

Q. Did any witness address Beaver Falls low-income customers?

A. Yes. Witness Jones, in his supplemental direct testimony addressed Aqua's low-income program. According to his analysis of the population of Beaver Falls and the median household income of the city, the majority of 2 to 4 person households could benefit from Aqua's low-income program.[25]

[25] Aqua Supp. No. 4, p. 4-5, ln. 13-5.

Q. Do you have any comments?

A. Yes. Mr. Jones is correct that Aqua's low-income program will help some of Beaver Fall's low-income customers. The table below shows the difference in rates between customers paying the non-discounted rate for both the City and Aqua and customers paying the discounted rate under Aqua.

Table Two: Rates with and without discount at 4,000 gallons a month[26]

Utility	Rate no discount	0-100% FPL	101-150% FPL	151-200% FPL
Aqua wastewater rates	$95.47	$59.78	$52.32	$71.37
Bever Falls Current	$41.00	$41.00	$41.00	$41.00
Beaver Falls Projected 2025	$55.00	$55.00	$55.00	$55.00
Beaver Falls Projected 2026-2032	$60.00	$60.00	$60.00	$60.00
Beaver Falls Projected 2033-34	$63.00	$63.00	$63.00	$63.00

This table shows that under Aqua's current rate at 4,000 gallons a month low-income customer within the 101-151% of the Federal Poverty Level (FPL) will see savings of $2.68 per month at Aqua's current rates. No other low-income rate class will

[26] NAD 2 – low-income rates. All projected rate values were obtained from an interrogatory response to OCA-II-3, attachment 1, which was prepared by the financial firm PFM and does not take into account Aqua's recently granted rate increase.

see savings under the transaction. As of yet, Beaver Falls has not raised its rates in 2025. If the City were to raise its rates in line with PFM's projections, the 0-100% FPL class will see some savings over time under Aqua's current rates. This table also shows that customers who fall within 151-200% of FPL or would receive no discount from Aqua and would be paying significantly higher rates under Aqua ownership.

In his supplemental testimony, Mr. Jones uses 2022 U.S. Census data to breakdown the household income and household make-up of Beaver Falls:

> In 2022 the median household income was $39,194. For a household of 4 persons at $39,194 they would be at the 130.65% of the federal poverty income guidelines ("FPIG"), and thus could qualify for Aqua's low income program." Similarly, households of 2 and 3 persons at the median household income would be at 198.75% and 157.66% of FPIG, respectively, and could qualify for Aqua's low income program. There are approximately 292 4-person families, 433 3-person families, and 696 2-person families in Beaver Falls which represents the vast majority of the population of Beaver Falls.[27]

His data shows that a significant portion of the City's population would qualify for Aqua's low-income program, but many would not actually see the rate benefits over continued City ownership. This is because Aqua's rates are already higher than any planned city rate increases over the next 9 years. In other words, many low-income customers will see higher wastewater rates than what they currently pay to Beaver Falls, even after they're determined to be eligible for Aqua's low-income discount program.

[27] Aqua Supp. No. 4, p. 4-5, ln. 18-5.

V. Rate Impact

Q. Please describe the general nature of Aqua's application.

A. Aqua seeks approval to acquire the Assets of the Beaver Falls' system for a purchase price of $41,250,000.[28]

Q. How many customers does the Beaver Falls wastewater system serve?

A. Beaver Falls provides service to 3,197 customers in the City, which includes 2,879 residential, 276 commercial, seven (7) industrial, 17 public, seven (7) Contributing Municipalities, and one (1) bulk pumping and hauling customer. The City also provides transmission and treatment service for seven Contributing Municipalities.[29]

Q. Does Aqua have any other pending Section 1329 acquisitions?

A. Yes. In addition to Beaver Falls, Aqua has pending 1329 acquisitions of (1) the DELCORA wastewater system which has been stayed; and (2) the Greenville Sewer Authority, which is expected to close in first quarter of 2025.[30] In addition, Aqua has submitted an application to purchase the Greenville water system.[31] According to an Essential Utilities press release, Aqua plans to purchase the Greenville water system for $18 million and plans to invest approximately $10 million into the system over 10 years.[32] Aqua's purchase of the East Whiteland System is under appeal.

[28] Section XI, ¶ 55 of the APA.
[29] Section V, ¶ 30 of the Application.
[30] Response to OCA-III-3.
[31] Docket No. A-2024-3049015.
[32] https://www.essential.co/news-releases/news-release-details/essential-utilities-aqua-pennsylvania-agrees-purchase-0

Q. What is the pending revenue deficiency for these systems?

A. The annual revenue deficiency for DELCORA is $4,553,000 and the annual revenue deficiency for Greenville Sewer Authority will be $2,223,000. These amounts, in addition to the proposed amount of $4,288,000 for Beaver Falls, equals approximately $11,064,000 in total annual revenue deficiency for Aqua's pending Section 1329 acquisitions. This total annual revenue deficiency amount does not include the impact of the planned capital investment into the systems. The increase in the annual revenue deficiency of each purchase increases rates for both Aqua water and wastewater customers.

Q. What is the net book value of the Beaver Falls system Assets that are being acquired by Aqua?

A. Aqua provided the Engineering Assessment submitted by Gannet Fleming as Exhibit D to the Application. According to the Application[33], and as shown in the Engineering Report, the original cost of the system is $12,898,487. With the calculated accrued depreciation reserve of $7,866,277, the net book value of the Beaver Falls' wastewater assets is $5,032,210as of 2021.[34]

Q. What is net book value?

A. Net book value is the value of an asset when depreciation is subtracted from its cost. [35] By way of example, if I were to purchase a car for $10,000 and drive the car enough so that it depreciates by $1,000 due to wear and tear, the net book value of the car would be

[33] Section III, ¶ 19.
[34] Net book value under Section 1329 does not reflect an offset for contributed plant or capital as is done in ratemaking. 66 Pa. C.S. § 1329(d)(5).
[35] https://dictionary.cambridge.org/us/dictionary/english/net-book-value

$9,000.[36] In the utility context, the net book value is calculated by subtracting the accumulated depreciation of an asset from the asset's original cost, which is how it would appear in a company's books.[37]

Q. Why does the net book value matter?

A. Net book value matters because it shows the book value of an asset after depreciation is subtracted due to use of the asset. In this case the asset is the Beaver Falls wastewater system and the net book value shows how much Aqua is over paying for this asset. To return to my car example above, if I have a car that has a net book value of $9,000 that originally cost me $10,000 to purchase, and a buyer pays me $82,800 for the car, the buyer would be overpaying 820% over the net book value of the asset.[38]

Q. By how much does the purchase price exceed the net book value?

A. Aqua agreed to pay $41,250,000 for the Beaver Falls system, which is 820% over the net book value of $5,032,210.[39]

Q. How will the acquisition impact Aqua's revenues?

A. Aqua witness Packer calculates that for Year 1 (2023), the proposed transaction will create an annual revenue deficiency of $4,288,000.[40] This means, that the revenue collected from Beaver Falls customers at the rates currently in effect is insufficient by $4.3 million each year to cover the cost of operating the system at Aqua's now-current cost of capital. This amount will only increase after Aqua's pending rate case increase

[36] $10,000-$1,000=$9,000
[37] https://thelawdictionary.org/net-book-value/
[38] $9,000 + ($9,000*8.20)= $82,800
[39] $41,250,000/$5,032,210*100 = 819.7%
[40] Aqua Statement 1, Appendix A, p.1.

goes into effect[41] which will occur prior to closing. This revenue deficiency could lead to Aqua seeking a higher cost of recovery in its next rate base case. A higher cost recovery that it otherwise would not need to seek if this transaction did not create such a large revenue deficiency. Much if not all of the risk and that cost recovery will be the responsibility of the ratepayers due to Section 1329 and Act 11. At a utility's request and following Commission review, Act 11 allows for combined water and wastewater utilities, such as Aqua, to shift the cost of each wastewater service to combined water and wastewater customers both classes of customers.[42] Simply put, Aqua's water customers can be responsible for some of the cost of wastewater service related to the Beaver Falls system, even when they do not receive wastewater service from that system utility and vice versa.

If the Commission were to accept the OCA adjustments to the fair market value as rate base, using Aqua witness Packer's calculations, Aqua's annual revenue deficiency would be $1.5 million.[43]

Q. Has the Public Utility Commission offered an opinion or guidance regarding how to determine a reasonable price at which a company could purchase a water or wastewater system?

A. Yes, at the public meeting held February 1, 2024, the Commission recognized the public and political interest pertaining to the Valuation of Acquired Municipal Water & Wastewater Systems – Act 12 of 2016, specifically the use of Section 1329. The

[41] See Docket Nos. R-2024-3047822, R-2024-3047824.
[42] 66 Pa. C.S. § 1311 (c).
[43] NAD-3.

Commission issued a Tentative Supplemental Implementation Order or "TSIO", which among other things pertaining to Act 12 and Section 1329, addressed a "guidepost" which the Commission could use to determine the reasonableness of the purchase price of a 1329 transaction.[44]

Q. What is the Reasonable Review Ratio or RRR?

A. The Commission states in the TSIO that:

> "The crux of the RRR is to determine the ratio of the fair market value (FMV) to depreciated original cost (DOC) of a barometer group of similarly situated investor-owned water utility companies (IOUs)."[45]

Q. How is the RRR calculated?

A. The Final Supplemental Implementation Order (FSIO) states the following:

> "To evaluate the FMV, we will utilize the EV of the investor-owned utilities (IOUs) as a relevant proxy. As noted in the 2024 TSIO, the EV is a comprehensive valuation of the IOUs and is readily available to the public for each of these IOUs given their publicly traded status. To determine the DOC of these IOUs, we will utilize the Net PP&E included on each of the company's balance sheets. We reiterate that Net PP&E is an appropriate proxy for DOC since it represents the total value of the physical assets of the company less depreciation. The RRR is the ratio of these two numbers, with EV being the numerator and Net PP&E being the denominator, such that Reasonableness Review Ratio = Enterprise Value / Net Property, Plant & Equipment."[46]

Q. What is the OCA's opinion of the RRR as adopted in the FSIO?

A. The OCA supports the intent to provide guideposts to assist in determining the prudency of applications. The OCA asserts, however, that the RRR should not be a test of

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[44] *Valuation of Acquired Municipal Water & Wastewater Systems – Act 12 of 2016 Implementation*, Docket No. M-2016-2543193 (*Tentative Supplemental Implementation Order* entered Feb. 1, 2024) (*2024 TSIO*), *2024 TSIO* at 6.
[45] *Act 12 of 2016 Implementation*, Docket No. M-2016-2543193 *2024 TSIO* at 6.
[46] *Valuation of Acquired Municipal Water & Wastewater Systems – Act 12 of 2016 Implementation*, Docket No. M-2016-2543193 (*Final Supplemental Implementation Order* entered June 13, 2024) (*2024 FSIO*), *2024 FSIO* at103.

presumptive reasonableness or a determination that the application is in the public interest, but rather one factor among many. The OCA also asserts that the RRR should not override *City of York*, *McCloskey*[47,48] and *Cicero*[49,50], which clearly require the Commission to consider the rate impact of the transaction as part of the overall consideration of whether there are substantial affirmative public benefits from the proposed transaction. Additionally, the OCA prefers a fixed value guidepost of 1.25x because the use of the RRR raises variability and timing concerns.[51] In the FSIO, the Commission agreed with the OCA's comments, "that the RRR is not a test of presumptive reasonableness or a determination that an acquisition is in the public interest, but rather one factor among many."[52]

Q. What is the Market Value Ratio (MVR)?

A. The MVR is a ratio for the transaction that can be compared to RRR. To calculate the MVR, the rate base addition is divided by the DOC of the system.

Q. What would the "MVR" value be at the current purchase price?

A. At the current purchase price, the MVR value would be 8.20.[53]

Q. What would the purchase price be using the RRR in this transaction?

A. Using the 1.68 RRR provided by the Commission[54] and the information provided by

[47] *Application of Aqua Pennsylvania Wastewater, Inc.*, Docket No. A-2021-3024267, Order Entered January 13, 2022, p 8 (quoting *McCloskey v. Pennsylvania Public Utility Commission*, 195 A.3d 1055, 1066-1067 (Pa. Cmwlth. 2018), *appeal denied*, 207 A.3d 290 (Pa. 2019))
[48] *Act 12 of 2016 Implementation*, Docket No. M-2016-2543193 *2024 FSIO* at 117.
[49] *Cicero, 300 A.3d at 1119.*
[50] *Act 12 of 2016 Implementation*, Docket No. M-2016-2543193 *2024 FSIO* at 117.
[51] OCA Comments at 17-18.
[52] *Act 12 of 2016 Implementation*, Docket No. M-2016-2543193 *2024 FSIO* pg. 106.
[53] $41,250,000/$5,032,210 = 8.197
[54] Commission Report on the Reasonableness Review Ratio for the Year Ended 12.31.2023 to Approximate Market Value in Section 1329 Proceedings, Docket No. M-2024-3050303 (Report on the Reasonable Review Ratio filed

Company witness Packer,[55] the chart below shows what the purchase price would be if the RRR would have been used in this transaction:

Original Cost	$12,898,487
Accrued Despeciation Reserve	$7,866,277
Depreciated Original Cost	$5,032,210
DOC x 1.68 allowed RRR	$8,454,113

Q. Is the RRR binding?

A. No. According to the Commission's FISO, the RRR is neither meant to be binding or to replace FMV.[56]

Q. Do you have any additional comments regarding the RRR in this case?

A. While the RRR may not be a binding standard, its purpose is to help judge the reasonableness of the proposed ratemaking rate base of an acquisition. Comparing the RRR value of $8,454,113 to the $41,250,000 purchase price that Aqua agreed to pay, shows that the Company would be purchasing the system for nearly 400% over the RRR value.[57] Additionally, the FSIO does not rule out the ability for the Commission to take the RRR into consideration when exercising its power to determine if the sale is in the

July 25, 2024) (Report on RRR), Report on RRR.
[55] Aqua Statement 1, p. 21, ln. 18-20.
[56] *Act 12 of 2016 Implementation*, Docket No. M-2016-2543193 *2024 FSIO* pg. 106.
[57] ((41250000 - 8454113) / 8454113) * 100 = 387.93%

public interest.[58]

If the Commission were to accept the OCA's adjustments to ratemaking rate base, the MVR value would be 3.9[59], the system would be sold at 132%[60] over RRR and be valued at 390% over the netbook value. [61]

Q. What is the cost per connection[62] for the Beaver Falls system?

A. The cost per connection is $12,972.[63]

Q. What is the cost per connection after OCA's adjustments?

A. The cost per connection after OCA's adjustments is $6,172.[64]

Q. What is the cost per Equivalent Dwelling Unit (EDU)[65]?

A. The cost per EDU is $5,688.[66]

Q. What is the cost per EDU after OCA's adjustments?

A. The cost per EDU after OCA's adjustments is $2,706.[67]

[58] *Act 12 of 2016 Implementation*, Docket No. M-2016-2543193 *2024 FSIO* pg. 33
[59] 19,628,354/5,032,210 = 3.9
[60] ((19,628,354 - 8454113) / 8454113) * 100 = 132.17%
[61] (19,628,354/5,032,210)*100 = 390%
[62] A customer connection is the physical connection of a customer to the sewer system - https://www.aquawater.com/customers/wastewater-connection
[63] OCA-I-11 supp.
[64] ($19,628,354/3,180)= $6,172.43
[65] **Equivalent Dwelling Unit** or "EDU": The EDU is a measure based upon the estimated average daily wastewater flow for the type of business, as calculated by the Pennsylvania Department of Environmental Protection regulation at 25 Pa. Code § 73.17 divided by the typical estimated average daily wastewater flow from a current single-family unit. In the Company's sole discretion, the Company may assign more than one (1) EDU for a residential Property. *See*, Tariff Sewer-PA P.U.C. No. 3, Original Page 25.
[66] OCA-I-11 supp.
[67] ($19,628,354/7,246)= $2,706.61

Q. What are Beaver Falls' current rates?

A. The City currently charges a quarterly base fee of $43.64 ($14.54 monthly) and a consumption charge of $8.71 per 1,000 gallons which would not be charged until a customer used an excess of 3,000 gallons. The Contributing Municipalities is $3.66 per 1,000 gallons, and Dalton Service Company, LLC are billed $4.68 per 1,000 gallons per month based on water usage. Currently, the City bills residential, commercial, and bulk on a quarterly basis, while other commercial and industrial customers are billed on a monthly basis. After Closing, Aqua will implement Beaver Falls' sanitary wastewater rates in effect at the time of closing and will continue to bill Beaver Falls customers on a quarterly and monthly basis.[68]

Q. What is the proposed rate impact for Beaver Falls customers?

In Mr. Packer's supplemental direct served on March 28, 2024, he states that the current average bill of a residential customer in Beaver Falls is $100.13 per quarter. He calculates that the average bill of a residential customer could increase to $265.96 per quarter, a 165.61% rate increase, under Aqua ownership. This assumes that one hundred percent of the revenue requirement deficiency is borne by the acquired customers of Beaver Falls. The change was due to a rate increase in Beaver Falls since the filing of his initial testimony.[69]

Based on the recently approved base rate case, an Aqua's customer wastewater bill or rate zone 1 is projected to increase by $5.36 or 6.6%.[70] Which is not accounted for in the

[68] Section VI, ¶ 33-34 of the Amended Application.
[69] Aqua Supp. 1 pg. 2, ln. 10-15.
[70] https://www.puc.pa.gov/press-release/2025/puc-approves-significantly-lower-than-requested-rate-changes-for-aqua-pa-water-and-wastewater-services-02072025#:~:text=The%20water%20bill%20for%20a,originally%20proposed%20by%20Aqua%20PA.

165% increase that was estimated. Customers can expect these new rates to go into effect as soon as February 22, 2025.[71]

Q. **What is the estimated bill impact for Beaver Falls customers with OCA's adjustments?**

A. Beaver Falls customers would see a roughly 60%[72] bill increase based on an average usage of 9,490 gal/quarter, the average residential bill at Closing would increase to $160.20[73] a quarter and does not take into account the most recent 6.6% increase to existing Aqua customers.

Q. What is the proposed rate impact for existing Aqua customers?

A. As of August 21, 2024, Aqua noticed its existing customers, based on an average usage of 4,000 gal/month, the current average bill for an Aqua wastewater customer could increase by $5.09 or 6.03% a month and the average current bill for an Aqua water customer could increase by $0.58 or 0.75% a month.[74] This rate increase is possible if existing Aqua wastewater customers assume 50% of the cost and existing Aqua water customers assume 20% of the Cost of Service due to the ability for wastewater costs to be shifted to water customers under Act 11. After a utility's request and Commission review, Act 11 allows for combined water and wastewater utilities to shift the cost of each service to each segment of customers.[75] As I stated earlier in my testimony, water

[71] *Pa. PUC v. Aqua Pennsylvania, Inc., Pa. PUC v. Aqua Pennsylvania Wastewater, Inc.*, docket nos. R-2024-3047822, R-2024-3047824 (Settlement Order entered Feb. 7, 2025) (Settlement Order at pg. 173).
[72] NAD-3.
[73] $100.13*60%= $160.20
[74] Aqua August 2024 notice to customers - https://www.puc.pa.gov/pcdocs/1845847.pdf
[75] 66 Pa. Code § 1311 (c) .

customers can be held responsible for some of the cost of wastewater service, even when they do not receive wastewater service from that utility and vice versa.

Q. Do you have any comment about using the 9,490 gallons of water per quarter usage level to calculate the rate impact of the revenue requirement shortfall created by the ratemaking rate base?

A. Yes. I am using the same usage level so that all of the bill impact numbers can be easily compared. However, some existing customers and Beaver Falls customers who use much higher levels of water every month would see a much higher rate impact than what I am discussing in this testimony.

VI. Concerns Raised by Customers

Q. Do you have a comment regarding any concerns raised by customers at the public input hearings?

A. The public input hearing will not take place until after the submission of this testimony. Any testimony regarding the public input hearings will be addressed in surrebuttal testimony.

Q. Please provide a summary of the concerns raised by consumers in the informal complaints.

A. The overall theme of the complaints were in protest or rejection of the sale, the continued price hikes caused by 1329 acquisitions, and rate increases. Individuals, businesses, and religious institutions from Beaver Falls and across Aqua's territories are alarmed by the constant rate hikes. There are concerns around affordability and confusion as to where the proceeds of the sale will go and who will benefit.

Q. Do you have any other customer complaints that you would like to address?

A. Yes. Attached to my testimony as exhibit NAD-5 are the informal complaints retrieved from the Commission by the OCA. I would like to address customer concerns outlined in these 16 complaints.

VII. Analysis of Affirmative Public Benefits

Q. Do you have a conclusion about the benefits and harms of this transaction?

A. Yes. Based on my review, as discussed extensively above, it is my opinion that the known benefits of the acquisition and the offering of low-income programs do not outweigh the known rate harms associated with the increased costs as a result of this transaction. The rate harms include a purchase price that is 820% over the net book value of $5,032,210 and an annual revenue deficiency of $4,288,000, which will unduly increase rates for both Aqua water and wastewater customers. In my opinion, the Applicants' alleged benefits of the sale relating to the claimed need for capital improvements and additional actions to improve environmental compliance are not substantially different from the service already being provided by the City or the service that the City is capable of continuing to provide in the future. Thus, as to these claimed service attributes, the acquisition will maintain the status-quo. My testimony above shows that the City is not out of compliance with necessary environmental regulations and that there are other avenues available to the City which will allow it to continue to operate and maintain the system without the need to sell to Aqua.

Q. Do any witnesses claim that Beaver Falls customers will benefit from the acquisition?

A. Yes. Mr. Packer stated, "The Company is projecting less operating and maintenance costs under the Company's ownership that will likely be realized through reductions in costs for wastewater maintenance, as well as efficiencies in administrative and general costs, such as insurance, auditing and legal, among others."[76] He also stated, "Specifically, referencing Beaver Falls 2021 Financial Statements, Total Operating and Maintenance Expenses for the System (*i.e.*, the Joint Sewer Users Fund and the City Sewer Users Fund) were approximately $2.03 Million, whereas the Company is projecting annual expenses of approximately $1.46 Million, or an approximate 29% reduction."[77]

Q. Do you have any comments?

A. Yes. Mr. Packer estimated that operating expenses for the system might be approximately $570,000 per year lower for Aqua than for Beaver Falls. His estimated savings should be put into perspective. If there is a decrease in operating expenses, Mr. Packer estimates that the overall increase in annual costs under Aqua ownership will generate an $4,288,000 annual revenue deficiency, that is inclusive of these $570,000 in savings, and increased rates for all Aqua customers, including the acquired Beaver Falls customers.

Q. Do any witnesses claim that the City of Beaver Falls will benefit from the acquisition?

A. Dr. Kenya Johns[78], Mayor of the City of Beaver Falls and Sandra Wilkens[79], the Chief

[76] Aqua Statement 1, p. 15, ln. 14-17.
[77] Aqua Statement 1 p. 15, ln. 17-21.
[78] Aqua Statement 7.
[79] Aqua Statement 8.

Financial Officer of Beaver Falls both submitted testimony suggesting their perceived beneficial impacts of the successful sale of the system at its current purchase price.

Q. Did Ms. Wilkins provide any data to support her claim of affirmative public benefit?

A. Yes, she attached Appendix A of Aqua Statement 8, which proports to show how the money from the transaction will be used to benefit the City of Beaver Falls.

Q. Do you have any comments on Appendix A of Aqua Statement 8?

A. Yes. While the OCA does not weigh in on how a municipality spends its money post-acquisition, it is important to note that these calculations only consider the citizens of Beaver Falls and not all of Aqua's ratepayers.

Q. Did Mayor Johns discuss the rate impact of the transaction on the current city residents?

A. In her testimony Mayor Johns states that "While I am aware of the rate increases that will result if the sale is approved and I share the deep concerns many have about the financial burden of our citizens, the Commission and the Statutory Advocates should balance that concern…"[80]

Q. Do you have any comments regarding the Mayor's concern regarding Statutory Advocates and the Commission primarily focuses on "one data point" rate impact?

A. Yes. In her testimony, the Mayor asked that the Statutory Advocates and the Commission focus on more than the "one data point" of rate percentage increase.[81]. My testimony

[80] Aqua Statement No. 7, pg. 5-6.
[81] Aqua Statement No. 7, pg. 5 ln. 6-16.

addresses the transaction from the collective impact on every customer that must pay a utility's rate and also the impact to the public at large. As a statutory advocate, the OCA's duty is to advocate for the interest of consumers in front of the Public Utility Commission and to advocate that Commission approval/denial of utility applications is made in accordance with law. Here, we are directly advocating for Aqua customers who will have to pay utility rates impacted by this acquisition.

Q. Do any witnesses claim that Aqua's existing customers will benefit from the acquisition?

A. Yes. Mr. Packer testified the acquisition will increase Aqua's customer base, which would result in "future" infrastructure investments across the state being shared at a lower incremental cost per customer for all of Aqua's customers.[82] Additionally, Mr. Packer stated, "the System has characteristics that demonstrate that economies of scale can be achieved as a result of this acquisition."[83] Mr. Packer also stated that "there is more flexibility and opportunity to deal with those impacts over a much larger customer base."[84]

Q. Do you have any comments?

A. Yes. Adding customers alone does not increase economies of scale. Mr. Packer states, in reference to Aqua's Acquisitions that "Aqua is providing wastewater utility service to more customers at a lower overall cost per customer."[85] There is no information to show that the proposed transaction would make any customers' rates more affordable in the

[82] Aqua Statement No. 1, p. 16, ln. 6-8.
[83] Aqua Statement No. 1, p. 18, ln. 15-16.
[84] Aqua Statement No. 1, p. 19, ln. 1-2.
[85] Aqua Statement No. 1, p. 17, ln. 4-5.

near term, and there has also been no showing that the transaction would make rates more affordable in the long-term due to economies of scale. Aqua has not provided a sufficient basis to show that its acquisition of the Beaver Falls assets will create actual economies of scale, such that existing or acquired customers will experience a benefit.

Q. Aqua witness, Zach Martin, testified on page 7 of his Direct Testimony that he believes that Aqua is technically fit to operate the System, do you agree?

A. Yes. However, Aqua's technical fitness as a public utility does not in itself produce substantial affirmative public benefits.

Q. **Mr. Bubel testified on page 5 of his Direct Testimony that four systems of Aqua's Western Division are in proximity to the City allowing for operational efficiencies. Please respond.**

A. The proximity to Aqua's existing systems is a positive aspect of the transaction. However, regionalization/consolidation at any cost is not a substantial affirmative public benefit. Beaver Falls currently operates a local office within the Beaver Falls system, so the customers will not experience an improvement from Aqua maintaining a local office. Also, to the best of my knowledge, at this time, there are no significant service or quality concerns about the wastewater service being received by customers. It appears that the change in ownership will not provide a perceptible change in service to customers.

Q. Do you believe Beaver Falls customers will be harmed by this transaction?

A. Yes. As I mentioned earlier in my testimony the rate increase as a result of this transaction is a harm to Beaver Falls customers. Furthermore, the annual revenue deficiency that will be recovered through rates is from this acquisition only.

Q. Please describe the Beaver Falls bill payment options.

A. Currently Beaver Falls customers can pay in person at the Municipal Authority's office without an additional fee. Customers can also use four separate drop-off locations, including the Authority's office and three branches of First National Bank without an additional fee.[86] Customers can also pay wastewater bills via phone, online using credit and debit cards, and by mail with a check. A 2.65% (minimum of $3.00) convenience fee is applied to all payments made via credit or debit cards.[87]

Q. Does Aqua's billing system offer any advantages over the Beaver Falls system?

A. No, Aqua does not offer any tangible advantages over Beaver Falls current billing system. However, to the extent here are any advantages to be had when comparing the Beaver Falls billing system over Aqua's billing system, such benefits are outweighed by the significant costs that ratepayers will bear based on the proposed ratemaking rate base.

Q. Is Beaver Falls currently in compliance with all state and federal regulations related to the physical and cyber security in place for its operations?

A. In response to OCA-III-33, respondent Charlese R. Jones, the City Manager of Beaver Falls, identified that Beaver Falls has not been informed by any local, state, or federal, regulatory authority that it must improve its physical and/or cyber security in order to maintain compliance with the law.

[86] OCA-II-10.
[87] OCA-II-11.

Q. Aqua witness Martin claims that Aqua will improve Beaver Falls cybersecurity measures.[88] Please respond.

A. Aqua's proposed improvements appear to be designed to make the Beaver Falls system consistent with Aqua's processes. Those proposed improvements do not necessarily confer a benefit where the current operator is not aware that there is anything wrong with the way Beaver Falls is currently operating its system. I refer here back to OCA-III-33, where witness Jones identified that Beaver Falls has not been informed by any local, state, or federal, regulatory authority that it must improve its physical and/or cyber security in order to maintain compliance with the law.

VIII. Necessary Conditions for Approval

A. Low-Income Programs

Q. Do you have a recommendation?

A. Yes. Unless Beaver Falls customers know about and enroll in Aqua's low-income programs, the existence of Aqua's low-income programs will not provide any benefit. If the Commission approves the transaction, Aqua should provide a letter to the acquired customers that provides information regarding its low-income programs, including a description of the available programs, eligibility and requirements, and Aqua's contact information. The letter should be sent within 30 days after closing so that eligible customers can benefit from the programs as soon as possible and, importantly, before rates are increased. Also, Aqua should include the same information regarding low-income programs in bills sent to Beaver Falls customers within 90 days after closing.

[88] Aqua Statement 3, pg. 5, ln. 5-22.

Aqua should report the number of eligible customers from the former Beaver Falls service area who are enrolled in Aqua's CAP. The report should be provided to the Commission and to the parties every six months until the conclusion of Aqua's next base rate case.

It is important to track this metric because at the moment Aqua provides sewer service to 594[89] confirmed low-income customers. However, only 111[90] actively participate in Aqua's low-income program. Showing the need for effective outreach and education if these programs are to be effective affirmative public benefits.

Q. Do you have any recommendations regarding a hardship fund?

A. While I do not think there has been an evidentiary showing that there is an affirmative public benefit to this transaction, if the Commission were to approve the transaction, against the recommendation of the OCA, it should be conditioned on the requirement that Aqua make an annual contribution of $100,000[91] to the hardship fund for five years following closing. These contributions should not be recovered in rates and all unspent funds at the end of the program year should be rolled over and added to the budget for the hardship grant program in the following year(s). This will provide a concrete and actual benefit to Aqua's existing and acquired customers that will provide a small offset to the rate increases that will result from approval of this acquisition.

[89] OCA-X-1b.
[90] OCA-X-2b.
[91] The OCA calculated this number by rounding down from 0.25% of the $41,250,000 million purchase price. (41,250,000 x 0.0025) = 103,125, rounded down to 100,000.

B. Transaction and Closing Costs

Q. In addition to the purchase price of $41,250,000, what other expenses will Aqua record for ratemaking purposes with respect to its Section 1329 Application?

A. Aqua witness William C. Packer stated that "The UVE fees for Aqua's appraisals received as of the date of the Application totaled $37,055.00. The Company's UVE fees will be included in the transaction and closing costs of this Proposed Transaction as stated below."[92] Mr. Packer also stated that "Based off the scope of work, the methods used as accepted industry practice, and that the UVE's fees were less than 5% of the fair market value benchmark noted in the Final Implementation Order and Final Supplemental Implementation Order, I believe the fees are reasonable."[93] Aqua will incur transaction and closing costs of approximately $714,980, which Aqua will claim in its rate base in the base rate case following closing if the proposed acquisition is approved by the Commission and not subject to appeal.[94]

Q. Do you have any recommendations regarding Aqua's claim for transaction and closing costs and capital improvements?

A. Yes. Under Section 1329(d)(iv), Aqua is required to estimate its transaction and closing costs, but the actual costs cannot be known until closing. While I recommend denial of this acquisition because of a lack of overall affirmative public benefit, if the Commission approves the acquisition, subject to the conditions I lay out in this testimony, Aqua will be permitted, in its next base rate case, to claim the actual costs. To help the review of those costs, Aqua should be required to separately identify all of its closing costs by cost

[92] Aqua Statement 1, p. 21, ln. 18-20.
[93] Aqua Statement 1, p. 22, ln. 2-5.
[94] Section XI, ¶ 56 of the APA.

category, including any outside legal fees when it makes a claim for recovery in its next base rate case. Also, Aqua should not be permitted to claim any transaction and closing costs incurred by Beaver Falls in ratemaking rate base. Section 1329 does not allow transaction and closing costs incurred by the *selling* utility to be included in the acquiring utility's ratemaking rate base. Additionally, Aqua should track and quantify the cost of capital improvements into two categories: (1) necessary capital improvements – defined as bringing the system into: (i) conformity with PUC standards; and (ii) environmental compliance – capital improvements; and (2) the costs associated with integrating the system into Company-wide standards.

C. Cost of Service Study (COSS)

Q. Should a separate cost of service study be required for the acquired Beaver Falls system when Aqua files its next base rate?

A. Yes. In accordance with Section 1329, the rate base valuation for Beaver Falls is different than for acquisitions approved under the traditional regulatory framework, where assets are valued for ratemaking purposes at original cost net of accumulated depreciation and net of contributions. At the time of filing its next base rate case, Aqua should submit a wastewater cost-of-service study that removes all costs and revenues associated with the operation of the Bever Falls system and will also provide a separate cost-of-service study (COSS) for the Beaver Falls system. A COSS would provide the necessary information needed to establish rates that reflect the costs of the acquired system. Additionally, Aqua should submit a COSS that removes all costs and revenues associated with the operation of the Beaver Falls system.

D. Distribution System Improvement Charge (DSIC)

Q. Is Aqua requesting the implementation of a DSIC for Beaver Falls customers at closing?

A. No. Mr. Packer stated "Aqua intends to amend its Long-Term Infrastructure Improvement Plan ("LTIIP") to include Beaver Falls in the LTIIP and file the amended LTIIP with the PUC. The Company will include a request in that filing to initiate the DSIC for Beaver Falls customers as permitted by Section 1329."[95]

Q. Do you have a concern about Aqua's proposal?

A. Yes. Although Section 1329(d)(4) provides that Beaver Falls rates will not increase until new base rates are approved in Aqua's next base rate case post-closing, the statute does allow Aqua to collect a DSIC during this time. Though Aqua does not commit to ***when*** it will file an amended LTIIP, having the acquired customers pay a DSIC is one small way in which Aqua's existing customers can receive a short-term benefit from the acquisition – by spreading the costs recovered through the DSIC over a larger customer base.

Q. What is your recommendation?

A. Aqua's amended LTIIP including the Beaver Falls system should be filed within 90 days of closing. Additionally, the proposed projects reflected in the amended LTIIP should be in addition to, and not re-prioritize, any capital improvements that Aqua has already committed to undertake for existing customers. Also, Aqua should not include Beaver Falls system-related investments in its DSIC until Aqua collects a DSIC from Beaver Falls customers. The last two requirements protect Aqua's existing customers by helping

[95] Aqua Statement 1, p. 11, ln. 12-15.

to ensure the acquisition does not mean that (1) projects in their service areas will not be carried out as planned and (2) they will not pay for projects in the Beaver Falls service area through their DSIC rates until Beaver Falls customers are also paying DSIC rates.

E. Customer Notices of Rate Impact from Transaction

Q. Do you have any recommendations regarding the notice provided to customers?

A. Yes. Moving forward, Aqua's notices should also include rate impacts at more than just average usage. The OCA recommends that the notice provided to customers that estimates the rate impact the acquisition will have on their bills should reflect a usage range rather than what the Company deems is the average. The range should show a customer using 5,000 gallons per month (perhaps a 2-person household) would see a different bill impact. A customer using 10,000 gallons per month (perhaps a 4-person household) would see a different impact. There is no information in the rate case notices that would permit a customer with different usage levels to calculate the impact on their bill.[96]

If customers were noticed with Aqua's currents rates at these usage level ranges, they would see that a wastewater customer that uses 5,000 gal/month could expect to pay $110.65 a month and up to $171.59 a month using 10,000 gal/month.[97]

Q. Why did you choose 5,000 and 10,000 gallons per month for additional usage levels?

A. I used those amounts as an estimate that falls at or near the middle of a range of usage for 2 and 4-person households and a range of daily usage of 50-100 gallons per day (gpd). This range is based on information contained in Penn State Extension: Estimating Water

[96] Aqua Exhibit I2, p. 1.
[97] Response OCA-VI-1.

Needs. Although this paper is based on designing water systems, using 50 gallons per day per person (gppd) as the minimum and 100 gppd for a 30 day month would equal 3,000-6,000 gallons per month for a 2-person household and 6,000-12,000 gallons per day for a 4-person household. By choosing a level close to the middle of each range, it is a reasonable approach to show the impact of the proposed rate increases on customers at different usage levels.[98] If customers are not clearly and transparently shown the rate impact of the acquisition on their usage level, it will be unreasonably difficult for customers to surmise the potential impact of the acquisition on their vital utility bills. I recommend that, going forward, investor-owned utilities acquiring municipal systems under Section 1329 should be required to notice their customers at 5,000 and 10,000 gal/month usage levels.

F. Easements

Q. Did Aqua indicate whether Beaver Falls has identified all real estate, including leases, easement rights, and access to public rights-of-ways that must be transferred to Aqua?

A. Aqua is not currently aware of any needed leases, easements or access to public rights-of-way that will not be transferred at closing. The City of Beaver Falls is presently able to convey/assign certain recorded express easements to Aqua as well as easements over City-owned properties and public rights-of-way.[99] Beaver Falls has granted Aqua "an easement over any of its property and a license to access the Municipality System in order to install, access, operate or maintain (a) the Flow meters installed in the

[98] https://extension.psu.edu/water-system-planning-estimating-water-needs
[99] Updated Standard Data Response 9.

Municipality System, and (b) any Sampling Equipment that Aqua elects to install pursuant to Section 10."[100]

Q. Why is having the land rights to all parts of the system important?

A. Having the land rights to all parts of the system is important and critical in the event maintenance is required, or an emergency occurs. This allows the operating utility to provide the necessary service in a timely manner without risking the health or safety of its customers or the system.

Q Do you have any other recommendations?

A. Yes. Aqua should not be permitted to include the Beaver Falls assets into its rate base until it acquires all outstanding easements. Absent this condition, ratepayers would be in the position of paying for assets, including a return on such assets, that Aqua does not actually own and this result is not in the public interest.

Q. Please summarize your recommendations for conditions on approval of the Application.

A. If the Commission determines to approve the application, these following recommended conditions should be adopted because they are reasonable and appropriate.

- Aqua shall separately identify all of its closing costs by category, including any outside legal fees when it makes a claim for recovery in its next base rate case, and will not be permitted to claim any transaction and closing costs incurred by Beaver Falls.

- Aqua shall include rate impacts at a usage level range of 5,000 gallons and 10,000 gallons used a month in its customer notices moving forward.

[100] Exhibit F14, section 11.

- Aqua shall track and quantify the cost of capital improvements into two categories: (1) those necessary capital improvements – defined as bringing the system into: (i) conformity with PUC standards; and (ii) environmental compliance – capital improvements; and (2) the costs the costs associated with integrating the system into Company-wide standards.

- Aqua shall include the monthly or quarterly estimated volumetric charge, as well as the DSIC impact under Aqua ownership in its customer notices moving forward.

- Closing of the transaction shall not be permitted to occur until Aqua has (1) identified all missing easements including public rights-of-way and other property rights and (2) taken any and all necessary actions to obtain any missing easements and other property rights so they can be conveyed at closing.

- Aqua shall not be permitted to recover any rates in any costs for obtaining and conveying the missing easements and other property rights.

- Aqua shall not be permitted to include the Beaver Falls assets into its rate base until it acquires all outstanding easements.

- Aqua shall mail a welcome letter to the acquired customers within 30 days after the closing that provides information about its low-income programs, including a description of the available programs, eligibility and requirements, and Aqua's contact information. Aqua will provide the same information in a bill insert that is sent within the first 90 days after closing.

- Aqua shall make an annual contribution of $100,000 to the hardship fund annually, for five years following the closing. These contributions should not be recovered in rates and all unspent funds at the end of the program year should be rolled over and added to the budget for the hardship grant program in the following year(s). This will provide a concrete and actual benefit to Aqua's existing and acquired customers that will provide a small offset to the rate increases that will result from approval of this acquisition.

- At the time of filing its next base rate case, Aqua will submit a cost of service study that removes all costs and revenues associated with the operation of the Beaver Falls system and will also provide a separate cost of service study for the Beaver Falls system.

- Aqua's shall file an amended LTIIP including the Beaver Falls customers within 90 days of closing. The proposed projects reflected in the amended LTIIP should be in addition to, and not re-prioritize, any capital improvements that Aqua has already committed to undertake for existing customers. Aqua should not include System-related investments in its DSIC until Aqua collects a DSIC from System customers.

IX. Conclusion

Q. Does this conclude your Direct Testimony?

A. Yes. However, I reserve the right to modify if necessary.

Exhibit NAD-1

Qualification of Nicholas A. DeMarco

Qualifications of

Nicholas A. DeMarco

Education:

2021 Master's of Political Science, Lehigh University

2016 B.A. Political Science with concentration in Constitutional Law, Bloomsburg University of Pennsylvania

2016 B.A. Eastern European Languages and Cultures, Russian, Bloomsburg University of Pennsylvania

Relevant Positions:

January 2023 Regulatory Analyst, Pennsylvania Office of Consumer Advocate

Role Description:

I am currently employed by the Pennsylvania Office of Attorney General, Office of Consumer Advocate (OCA) as a Regulatory Analyst. In this position, my responsibilities include reviewing utility company filings with the Pennsylvania Public Utility Commission (Commission) and analyzing the financial, economic, rate of return, and policy issues that are relevant to the filings. Additionally, I am tasked with preparing recommendations for the OCA's involvement in utility filings with the PA PUC, writing testimony and presenting oral testimony on behalf of the OCA. As part of my role, I also assist in the policy matters regarding low-income issues and PJM.

Submitted Testimony:

PAWC's proposed acquisition of the Brentwood Borough wastewater system, at

Docket No. A-2021-3024058

Pennsylvania Public Utility Commission, Office of Consumer Advocate, v. Community Utilities of Pennsylvania, Inc.

Docket Nos. R-2023-3042804 (water), R-2023-3042805 (wastewater), C-2023-3044737 (water), C-2023-3044738 (wastewater)

Pennsylvania Public Utility Commission, Office of Consumer Advocate, v. Veolia Water Pennsylvania, INC

Docket Nos. R-2024-3045192 (Water), R-2024-3045193 (Wastewater)

Pennsylvania Public Utility Commission, Office of Consumer Advocate, v. Duquesne Light Co

Docket No. R-2024-3046523

Pennsylvania Public Utility Commission, Office of Consumer Advocate, v. Columbia Gas of Pennsylvania Inc.

Docket Nos. R-2024-3046519, C-2024-3047905, C-2024-3047675, C-2024-3048339

Pennsylvania Public Utility Commission, Office of Consumer Advocate, v. PECO Energy Company – Electric Division

Docket No. R-2024-3046931

Pennsylvania Public Utility Commission, Office of Consumer Advocate, v. PECO Energy Company – Gas Division

Docket No. R-2024-3046932

Pennsylvania Public Utility Commission Bureau of Investigation & Enforcement Petition to Request the Commission Open Section 529 Investigation into the Acquisition of Rock Spring Water Company

Docket No. P-2024-3051313

Relevant Training:

IPU Michigan State University, IPU Accounting and Ratemaking Course 2023

Exhibit NAD-2

Low-Income Rate Calculations

	Usage rate 4,000 gallons a month			
Utility	Rate no discount	0-100% FPL	101-150% FPL	151-200% FPL
Aqua wastewater rates	$ 95.47	$ 59.78	$ 52.32	$71.37
Bever Falls Current	$ 41.00	$ 41.00	$ 41.00	$ 41.00
Beaver Falls Projected 2025	$ 55.00	$ 55.00	$ 55.00	$ 55.00
Beaver Falls Projected 2026-2032	$ 60.00	$ 60.00	$ 60.00	$ 60.00
Beaver Falls Projected 2033-34	$ 63.00	$ 63.00	$ 63.00	$ 63.00

Aqua Customer charge	$	48.20
consumption charge per 1,000 gallons		$11.82
Gallons a month - 4000		4
thousands of gallons a month discounted		2
thousands gallons a month not discounted		2

Aqua low-income discount	0-100% FPL	101-150% FPL	151-200%
customer charge	75%	65%	50%
first 2,000 consumption charge	100%	50%	0%
customer charge discount	$ 36.15	$ 31.33	$ 24.10
customer charge after discount	$ 12.05	$ 16.87	$ 24.10
first two thousand gallons discount rate	$ -	$11.82	$23.63
second two thousand gallons regular rate	$23.63	$23.63	$23.63
total usage rate	$ 23.63	$35.45	$47.27
total bill	$ 59.78	$ 52.32	$71.37

Sources

Aqua wastewater tariff rate zone 1

OCA-II-3 Attachment 1

Aqua Cap site - https://www.aquawater.com/customers/customer-assistance-programs/customer-assistance-program-cap#:~:text=CAP%20is%20a%20discount%20program,water%20and%2For%20wastewater%20customers.

* Aqua's most recent base rate case increase was not taken into account

Exhibit NAD-3

Annual Revenue Deficiency

OCA Adjustments to Aqua Exhibit U, Appendix A
City of Beaver Falls - Wastewater

City of Beaver Falls - Wastewater		**2025**	
		Year 1	**Notes**
Revenue	$	2,534,808	
O&M		1,462,000	
Depreciation		638,987	****3.09% Composite Depreciation Rate*
Taxes Other		74,383	
Income Taxes	$	(2,688)	******21% Federal & 8.99% State*
Operating Income	**$**	**362,127**	
Rate Base at Fair Market Value	$	19,628,354	
Capital Investments *(Year 1)*	$	1,050,834	
Rate Base *(Including Capital Investments less depreciation year 1)*	$	20,040,201	
Interest Expense ^		369,141	
^ *Includes Interest Expense syncronized with rate base*			
Required Operating Income ***(Rate Base x Rate of Return)***	**$**	**1,450,309**	
Operating Income Deficiency	**$**	**1,088,183**	
Gross Revenue Conversion Factor		1.408541	
Revenue Deficiency (Excess) $	**$**	**1,533,000**	
Revenue Deficiency (Excess) %		**60.48%**	
Increase applied to Acquired (Authority) customers 80% Cost of Service	**$**	**719,438**	
Increase %		**28.38%**	
Increase applied to Acquired (Authority) customers 100%	**$**	**1,533,000**	
Increase %		**60.48%**	
Increase applied to Acquired (Authority) customers 50%	**$**	**766,500**	
Increase %		**30.24%**	
Increase applied to Existing (Company Wastewater) customers 50%	**$**	**766,500**	
Increase %		**1.10%**	
Increase applied to Existing (Company Water) customers 20% - Cost of Service	**$**	**813,562**	
Increase %		**0.14%**	

Exhibit NAD-4

OCA-II-3 Response with Attachment

Respondent: Charles R. Jones, Jr.
Date: 12/23/2024

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2022-3033138

OFFICE OF CONSUMER ADVOCATE

SET II INTERROGATORIES

OCA-II-3 Please provide any and all calculations/ worksheets showing that if the Beaver Falls wastewater system is not sold, it would need to increase customer rates. Please provide in native format.

RESPONSE

Please see OCA-II-3 Attachment 1 prepared by PFM Financial Advisors, LLC.

	Current		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Net Operating Surplus (Deficit) After Capital & Debt			158,243	27,902	1,098,834	867,689	1,014,453	513,649	527,822	343,787	150,533	295,502
As % of Total Expenses			*5.19%*	*0.88%*	*33.63%*	*25.65%*	*28.96%*	*14.16%*	*14.05%*	*8.84%*	*3.74%*	*7.08%*
Fund Balance Buildup			-	-	-	867,689	1,882,142	2,395,791	2,923,613	3,267,400	3,417,933	3,713,435
Average Monthly Bill												
In City - Keep System (Estimated - 4,000 Gal Month)	$41		$55	$60	$60	$60	$60	$60	$60	$60	$63	$63
% Change			35%	10%	0%	0%	0%	0%	0%	0%	5%	0%
			158,243	27,902	1,098,834	867,689	1,014,453	513,649	527,822	343,787	150,533	295,502
	2022 Audit		2025	2026	2027	2028	2029	2030	2031	2032	2033	2033
Operating Revenues												
Sewage Charges	3,148,123		4,249,966	4,674,963	4,674,963	4,674,963	4,674,963	4,674,963	4,674,963	4,674,963	4,908,711	4,908,711
% Increase			35.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.00%	0.00%
Tap-In Fees	4,500	2.50%	4,613	4,728	4,846	4,967	5,091	5,219	5,349	5,483	5,620	5,760
Misc. Revenues	2,449	2.50%	2,510	2,573	2,637	2,703	2,771	2,840	2,911	2,984	3,058	3,135
Subtotal - Operating Revenues	3,155,072		4,257,089	4,682,263	4,682,446	4,682,633	4,682,825	4,683,021	4,683,223	4,683,429	4,917,389	4,917,606
Operating Expenses												
Contractual Services	712,562	3.00%	733,939	755,957	778,636	801,995	826,055	850,836	876,361	902,652	929,732	957,624
Wages & Benefits	813,193	4.00%	845,721	879,550	914,732	951,321	989,374	1,028,949	1,070,107	1,112,911	1,157,427	1,203,724
Administrative	330,000	4.00%	343,200	356,928	371,205	386,053	401,495	417,555	434,257	451,628	469,693	488,481
Office	5,573	3.00%	5,740	5,912	6,090	6,272	6,461	6,654	6,854	7,060	7,272	7,490
Repair & Maintenance	287,892	3.00%	296,529	305,425	314,587	324,025	333,746	343,758	354,071	364,693	375,634	386,903
Billing Expense	20,226	3.00%	20,833	21,458	22,101	22,765	23,447	24,151	24,875	25,622	26,390	27,182
Depreciation	248,097			-	-	-	-	-	-	-	-	-
Engineering	59,844	3.00%	61,639	63,488	65,393	67,355	69,376	71,457	73,601	75,809	78,083	80,425
Utilities	166,412	5.00%	174,733	183,469	192,643	202,275	212,389	223,008	234,158	245,866	258,160	271,068
Chemicals/Chlorine	42,934	5.00%	45,081	47,335	49,701	52,187	54,796	57,536	60,412	63,433	66,605	69,935
Sludge/Grit removal	108,355	3.00%	111,606	114,954	118,402	121,955	125,613	129,382	133,263	137,261	141,379	145,620
Janitorial Services	1,394	3.00%	1,436	1,479	1,523	1,569	1,616	1,665	1,714	1,766	1,819	1,873
Gas & Oil	4,278	5.00%	4,492	4,716	4,952	5,200	5,460	5,733	6,020	6,321	6,637	6,968
Equipment	3,766	3.00%	3,879	3,995	4,115	4,239	4,366	4,497	4,632	4,771	4,914	5,061
Operating Supplies	344	3.00%	354	365	376	387	399	411	423	436	449	462
Uniforms	2,995	3.00%	3,085	3,177	3,273	3,371	3,472	3,576	3,683	3,794	3,908	4,025
Permits & Testing	21,823	3.00%	22,478	23,152	23,847	24,562	25,299	26,058	26,840	27,645	28,474	29,328
Certification & Training	858	3.00%	884	910	938	966	995	1,024	1,055	1,087	1,119	1,153
Small Tools	3,821	3.00%	3,936	4,054	4,175	4,301	4,430	4,562	4,699	4,840	4,986	5,135
Insurance	30,273	3.00%	31,181	32,117	33,080	34,073	35,095	36,148	37,232	38,349	39,499	40,684
Misc. Expenses	1,213	3.00%	1,249	1,287	1,325	1,365	1,406	1,448	1,492	1,537	1,583	1,630
Property Damage	26,232	3.00%	27,019	27,830	28,664	29,524	30,410	31,322	32,262	33,230	34,227	35,254
Line Rental Expense	100,000	3.00%	103,000	106,090	109,273	112,551	115,927	119,405	122,987	126,677	130,477	134,392
Sewer-Line Reimbursement	200,000	3.00%	206,000	212,180	218,545	225,102	231,855	238,810	245,975	253,354	260,955	268,783
Subtotal - Operating Expenses	3,192,085		3,048,012	3,155,828	3,267,578	3,383,410	3,503,480	3,627,946	3,756,975	3,890,739	4,029,419	4,173,201
Net Operating Surplus (Deficit)	**(37,013)**		**1,209,077**	**1,526,436**	**1,414,868**	**1,299,223**	**1,179,345**	**1,055,076**	**926,248**	**792,690**	**887,970**	**744,405**
Capital												
Pay-Go Capital Expenses			1,050,834	1,498,534	316,034	431,534	-	376,534	233,534	-	288,534	-
Debt Serivce			-	-	-	-	164,892	164,892	164,892	448,903	448,903	448,903
Subtotal - Capital	-		1,050,834	1,498,534	316,034	431,534	164,892	541,426	398,426	448,903	737,437	448,903
Net Operating Surplus (Deficit) After Capital & Debt	**(37,013)**		**158,243**	**27,902**	**1,098,834**	**867,689**	**1,014,453**	**513,649**	**527,822**	**343,787**	**150,533**	**295,502**

GOAL	
Total Aqua Capital	10,236,644
Pay Go	4,195,538
Remaining To Be Financed	6,041,106

Financing 1	2,219,034
Rate	4.25%
Term	20
Financing 2	3,822,068
Rate	4.25%
Term	20

Aqua Capital Plan	1,050,834	1,498,534	316,034	431,534	2,219,034	376,534	233,534	2,626,034	288,534	1,196,034

Financing 1 New Debt Service	164,892	164,892	164,892	164,892	164,892	164,892
Financing 2 New Debt Service				284,011	284,011	284,011

Exhibit NAD-5

Customer Complaints

A-2022-3033138

To whom it may concern

Im written about This Beaver Falls proposel on The out come of the Water Co. I dont understand how B.F. thinks This is a good Idea, raising The water bill by 165% when They sell the water Dept. The part About using The money on The city parks is A lie + a big joke. They only have 1 park + A ball Field. The swimming pool has been shut down for About 10 yrs. All That B.F. wants is To screw up The city more Than They Already have with Their back in parking + destroying of main street. The selling of The water dept will benifit nobody except The people buying it. I don't Think Any one shoud Aprove This or juistafay it.

Please put A stop To This Thought of A Joke Against all of us.

694813

CITY OF BEAVER FALLS

715 FIFTEENTH STREET
BEAVER FALLS, PA 15010

Dear City Sewer Customers,

We are reaching out to share some important news regarding the future of our sewer system. In September 2021, after careful consideration and a thorough evaluation process, the previous City Council made the decision to approve the sale of our sewer system to Aqua Pennsylvania Wastewater, Inc. for a purchase price of $41.25 million. Since then, we have been diligently working towards regulatory approval and the finalization of this transaction.

This decision was driven by several compelling factors. Firstly, the sale promises significant funding that will benefit our community in numerous ways. By entrusting the operation of the sewer system to Aqua, we can redirect our focus to other vital aspects of city governance while leveraging the expertise of a specialized utility operator. Moreover, transferring ownership helps mitigate future liabilities associated with system maintenance and management, relieving the city of potential financial burdens down the line.

Another pivotal aspect is the restriction on how funds generated by the sewer system can be utilized, limiting our ability to address diverse municipal needs. The sale unlocks these resources, empowering us to pursue initiatives that directly enrich the lives of our residents.

One such initiative is the launch of Beaver Falls Revive, a comprehensive plan aimed at rejuvenating our community and fostering a brighter future for all. This plan encompasses various uses for the proceeds including blight removal, an infrastructure replacement plan, downtown streetscape and business development, recreation and playground projects, exploring a further potential tax decrease, paying down debt, and establishing a rainy-day trust fund.

Importantly, this transition will not result in any job losses for our dedicated employees. Additionally, Aqua's commitment to capital investment ensures that our sewer system will receive the attention and improvements it requires, with over $10 million earmarked for enhancements in the foreseeable future.

While the City sets its own rates, Aqua's rates must be reviewed and approved by the Pennsylvania Public Utility Commission, which requires that increases be reasonable and just.

Your rates are not increasing in this application proceeding. Aqua is required to implement the existing rates of the sewer system and can only change base rates after closing and when the Beaver Falls system is included in a base rate case filing. However, as part of this application, the PUC requires notice showing the full cost impact of the revenue deficiency related to the transaction, which is disclosed in the attached letter. It is important to remember that this rate may or may not represent the actual rate charged depending on a variety of factors including the ability of Aqua to spread Beaver Fall's costs across its customer base.

The decision to sell the sewer system was made after a thorough evaluation of risks and benefits, with the primary goal of serving the best interests of our residents and the city as a whole.
Thank you for your understanding and continued support.

Sincerely,
The City of Beaver Falls

M2-01

NOTICE OF PROPOSED ACQUISITION AND RATE BASE ADDITION
Docket No. A-2022-3033138

Dear Customer:

On June 27, 2024, the Pennsylvania Public Utility Commission (PUC) conditionally accepted for filing the application of Aqua Pennsylvania Wastewater, Inc. (Aqua) for approval to acquire the City of Beaver Falls (Beaver Falls) wastewater system assets. We look forward to serving the Beaver Falls community in the future. Beaver Falls serves approximately 3,200 customers in Beaver County, Pennsylvania. Aqua's application also requests that the PUC authorize an addition of up to $41.25 million to Aqua's rate base pursuant to 66 Pa. C.S. § 1329. A utility's rate base is the value of property used by the utility to provide service to its customers and is one of several components used to establish a utility's customer rates.

Aqua is not requesting a rate increase in this acquisition proceeding and it is not included in Aqua's current base rate case application pending before the PUC. Accordingly, this acquisition will not immediately, but may in the future, affect water and/or wastewater bills of Aqua customers, including the new Beaver Falls wastewater customers. Your rates may only change at the conclusion of an Aqua rate case in which Aqua includes the Beaver Falls system and requests and receives PUC approval to increase its rates. At that time, based on a preliminary analysis of the potential rate impacts, Aqua estimates that the rates of the average customer could increase. The amount of the increase will be determined in Aqua's next base rate case and will be dependent on how the PUC chooses to apportion the increase among Aqua's acquired and existing customers. The tables below present non-binding estimated incremental rate effect of the proposed rate base addition on Beaver Falls' wastewater customers, which include estimates with and without cost sharing. Aqua has sought cost sharing in later rate filings for acquired systems and therefore we are providing both scenarios in this notice:

Beaver Falls Customers rates assuming costs are shared with other Aqua customers

Rate Class	Average Quarterly Usage	Estimated Quarterly Increase	Estimated Percentage Increase
Residential	9,490	$112.64	112.49%
Commercial	39,870	$410.35	112.49%
Industrial (Monthly)	96,710	$322.43	112.49%
Public	69,260	$689.35	112.49%
Bulk Other (Dalton)	440,530	$7,499.42	112.49%

Beaver Falls Customers rates assuming no costs are shared with other Aqua customers

Rate Class	Average Quarterly Usage	Estimated Quarterly Increase	Estimated Percentage Increase
Residential	9,490	$165.83	165.61%
Commercial	39,870	$604.13	165.61%
Industrial	96,710	$474.70	165.61%
Public	69,260	$1,028.14	165.61%
Bulk Other (Dalton)	440,530	$11,040.94	165.61%

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. The PUC has allowed some form of cost sharing with existing customers based upon prior cases.

PUC ROLE

The state agency which approves acquisitions and rates for regulated public utilities is the PUC. The PUC will review and investigate the proposed acquisition and requested $41.25 million in additional rate base. After examining the evidence, the PUC may approve, modify or deny the acquisition and may approve or modify the $41.25 million addition to rate base. The PUC will issue a decision on the application on or around March 2025.

ACTIONS YOU CAN TAKE

You can support or challenge Aqua's request by:

1) Sending a letter to the PUC. You can tell the PUC why you support or object to Aqua's acquisition of Beaver Falls' wastewater system in your letter. This information can be helpful when the PUC investigates the application. Send your letter to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265.

2) Attending or presenting testimony at a PUC Public Input Hearing. You can attend or be a witness at a PUC public input hearing. The PUC holds public input hearings if it opens an investigation into Aqua's transaction and there is enough interest in the case. At these hearings, you can present your views in person to the PUC judge and to company representatives. Testimony under oath becomes part of the application case record. The PUC holds these hearings in the service area of the company. For more information, call the PUC at 1.800.692.7380.

3) Filing a protest or a petition to intervene. If you want to be a party to the case, you must file a protest or a petition to intervene. You then have an opportunity to take part in all the hearings about the proposed acquisition. You can receive copies of all materials distributed by the other parties. Protests and petitions to intervene must be filed in accordance with 52 Pa. Code (relating to public utilities) on or before November 4, 2024. Filings must be made with the Secretary of the Pennsylvania Public Utility Commission at P.O. Box 3265, Harrisburg, PA 17105-3265, with a copy served on Aqua's counsel at Post & Schell, P.C., Attn: Michael Hassell, 17 North Second Street, 12th Floor, Harrisburg, PA 17101.

The documents filed as part of this application are available for inspection and copying at the Office of the Secretary of the PUC between 8 a.m. and 4:30 p.m., Monday through Friday, on the PUC's website at www.puc.pa.gov and at Aqua's offices at 762 West Lancaster Avenue, Bryn Mawr, PA 19010. The PUC docket number is A-2022-3033138.

A-2022-3033138

Jeffrey A Sibner, DMD
352 Tall Meadow Lane
Yardley, PA 19067

PUC
PO Box 3265
Harrisburg, PA 17105-3265

Commissioners:

AQUA has a history of purchasing water systems, spending millions of dollars to enhance these systems and charging Aqua customers from far away hefty fees to pay for these enhancements (and always at a markup favoring Aqua).

My wife and I are retired and cannot afford to pay for remote water system acquisition. Unless Aqua agrees to charge *only* affected customers for updates and enhancements, I strongly urge the PUC to deny Aqua the opportunity to acquire Beaver Falls (or any other) water system.

Sincerely,

Jeffrey A Sibner, DMD

694492

Capuchin Sisters of Nazareth
Mother of God Convent
215 Wellwood Drive
Tunkhannock, PA 18657

A-2022-3033138

September 16, 2024

Pennsylvania Public Utility Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

To Whom It May Concern:

As customers of Aqua Pennsylvania Wastewater, Inc. (Aqua), we would like to submit an informal complaint against the aforementioned company in regards to its request for the acquisition of Beaver Falls' wastewater system (docket No. A-2022-3033138). We completely object to the proposed acquisition and the requested $41.25 million in additional rate base.

Our monthly water bill is already extremely high because of Aqua's pricey services, and, if the acquisition is granted by the PUC, Aqua has informed us that rates in the future will probably increase. There could be a 6.03% increase for wastewater customers and a .75% increase for water customers. Our rates in Wyoming County would increase for services in Beaver County that do not even pertain to us.

As a private company, Aqua charges its customers more than public services charge. So,

we ask the PUC to be very hesitant to accept requests made by Aqua, lest this company becomes more of a burden to its overly-charged customers. We are not alone in our concerns about Aqua. We have neighbors who also are shocked by the prices Aqua requires. We feel trapped in this system, considering that we have no other options for water services.

We are also concerned that Aqua will continue to grow as a monopoly in North-east Pennsylvania considering that it keeps requesting to acquire more and more water waste systems in these small towns. We hope that the PUC will do all it can to prevent one company from gaining control over such a basic necessity as water and charge its customers at shamefully high rates.

We believe in a Pennsylvania and an America where its citizens are protected from any tyranny or injustice and we trust that the PUC has this also at heart.

Sincerely,

The Capuchin Sisters of Nazareth

10-14-2024

A-2022-3033138

RCVD PUC SEC BUR
OCT 28 2024 AM 10:35

ORIGINAL

Dear PUC:

I object to Aqua's acquisition of Beaver Falls' wastewater system. I have a budget in these trying time. Inflation is high and it is hard to live everyday during these difficult times. Everything is going up such as food, gas, technology, etc and I do not need the Aqua bill to increase as well at this time. Please reconsider this acquisition and try to keep the rates low and stabilized for Aqua customers. Once again, I reiterate, I am a senior citizen on a fixed budget. Thank you.

Sincerely,

Franco Capriotti

695503

AQUA

NOTICE OF PROPOSED ACQUISITION AND RATE BASE ADDITION
Docket No. A-2022-3033138

Dear Customer:

On June 27, 2024, the Pennsylvania Public Utility Commission (PUC) conditionally accepted for filing the application of Aqua Pennsylvania Wastewater, Inc. (Aqua) for approval to acquire the City of Beaver Falls (Beaver Falls) wastewater system assets. Beaver Falls serves approximately 3,200 customers in Beaver County, Pennsylvania. Aqua's application also requests that the PUC authorize an addition of up to $41.25 million to Aqua's rate base pursuant to 66 Pa. C.S. § 1329. A utility's rate base is the value of property used by the utility to provide service to its customers and is one of several components used to establish a utility's customer rates.

Aqua periodically makes applications to the PUC for newly acquired systems which requires Aqua to send these types of notices. This notice is specific to the Beaver Falls acquisition.

Aqua is not requesting a rate increase in this acquisition proceeding and it is not included in Aqua's current base rate case application pending before the PUC. Accordingly, this acquisition will not immediately, but may in the future, affect water and/or wastewater bills of Aqua customers, including the new Beaver Falls wastewater customers. Your rates will not change as a result of this transaction until the conclusion of an Aqua rate case where Aqua includes the Beaver Falls system and requests and receives PUC approval to increase its rates. At that time, based on a preliminary analysis of the potential rate impacts, Aqua estimates that the rates of the average customer could increase. The amount of the increase will be determined in Aqua's next base rate case and will be dependent on how the PUC chooses to apportion the increase among Aqua's acquired and existing customers. The tables below present non-binding, estimated incremental rate effects of the proposed rate base addition on Aqua's existing water and wastewater customers:

Aqua Wastewater Customers

Rate Class	Average Usage	Estimated Monthly Increase	Estimated Percentage Increase
Residential	4,000 gal/month	$5.09	6.03%
Commercial/Public	8,330 gal/month	$8.09	6.03%
Industrial	1,500 gal/month	$2.76	6.03%

Aqua Water Customers

Rate Class	Average Usage	Estimated Monthly Increase	Estimated Percentage Increase
Residential	4,000 gal/month	$0.58	0.75%
Commercial/Public	33,380 gal/month	$3.30	0.75%
Industrial	200,150 gal/month	$16.01	0.75%

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.

PUC ROLE

The state agency which approves acquisitions and rates for regulated public utilities is the PUC. The PUC will review and investigate the proposed acquisition and requested $41.25 million in additional rate base. After examining the evidence, the PUC may approve, modify or deny the acquisition and may approve or modify the $41.25 million addition to rate base. The PUC will issue a decision on the application on or around March 2025.

ACTIONS YOU CAN TAKE

You can support or challenge Aqua's request by:

1) Sending a letter to the PUC. You can tell the PUC why you support or object to Aqua's acquisition of Beaver Falls' wastewater system in your letter. This information can be helpful when the PUC investigates the application. Send your letter to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265.

2) Attending or presenting testimony at a PUC Public Input Hearing. You can attend or be a witness at a PUC public input hearing. The PUC holds public input hearings if it opens an investigation into Aqua's transaction and there is enough interest in the case. At these hearings, you can present your views in person to the PUC judge and to company representatives. Testimony under oath becomes part of the application case record. The PUC holds these hearings in the service area of the company. For more information, call the PUC at 1.800.692.7380.

3) Filing a protest or a petition to intervene. If you want to be a party to the case, you must file a protest or a petition to intervene. You then have an opportunity to take part in all the hearings about the proposed acquisition. You can receive copies of all materials distributed by the other parties. Protests and petitions to intervene must be filed in accordance with 52 Pa. Code (relating to public utilities) on or before November 4, 2024. Filings must be made with the Secretary of the Pennsylvania Public Utility Commission at P.O. Box 3265, Harrisburg, PA 17105-3265, with a copy served on Aqua's counsel at Post & Schell, P.C., Attn: Michael Hassell, 17 North Second Street, 12th Floor, Harrisburg, PA 17101.

The documents filed as part of this application are available for inspection and copying at the Office of the Secretary of the PUC between 8 a.m. and 4:30 p.m., Monday through Friday, on the PUC's website at www.puc.pa.gov and at Aqua's offices at 762 West Lancaster Avenue, Bryn Mawr, PA 19010. The PUC docket number is A-2022-3033138.

ORIGINAL

COMMONWEALTH OF PENNSYLVANIA
PUBLIC UTILITY COMMISSION
HARRISBURG, PA 17105-3265

2020 CHESTER A
ABINGTON, PA
OCTOBER 28, 2024

RCVD PUC SEC BUR
NOV 7 2024 AM 11:03

RE: DOCKET # A-2022-3033138

DEAR PUBLIC UTILITY COMMISSIONERS,

I AM WRITING TO EXPRESS MY DISPLEASURE WITH AQUA'S APPLICATION TO PURCHASE THE CITY OF BEAVER FALLS WASTEWATER SYSTEM'S ASSETS & RESPECTFULLY REQUEST YOUR DENIAL OF THE SAME.

CONTIGUOUS TO THIS APPLICATION, WHEREIN AQUA EVALUATES SERVICE TO 3,200 CUSTOMERS AT $1.25 MILLION DOLLARS (OR A VALUATION OF $13,000 PER CUSTOMER), IT "ESTIMATES" INCREASING ALL AQUA SYSTEM CUSTOMERS (BOTH WASTEWATER AND REGULAR WATER ONLY) SERVICE RATES! AQUA'S "PRELIMINARY" INCREASE ESTIMATE RANGES FROM .75-6.03% OF EXISTING RATES!!

PERSONALLY, AS AN ELDERLY RETIREE THAT RELIES ON SOCIAL SECURITY & A SMALL PENSION AS MY SOLE SOURCE OF INCOME, ANY INCREASE TO AN ESSENTIAL, NON-COMPETITIVE NECESSITY IS DIFFICULT TO ABSORB. IT BECOMES EVEN MORE CRITICAL AS I DON'T RELY ON AQUA FOR MY HOUSEHOLD WASTEWATER SERVICES. I PAY SEWER.

696078

ORIGINAL

TAXES TO MY MUNICIPALITY FOR SAID SERVICES.

ONCE AGAIN, AQUA, A PUBLIC UTILITY THAT IS A FOR-PROFIT MONOPOLY, DESIRES TO COMPEL ITS CUSTOMERS TO PAY FOR ITS EXPANSION. IT SHOULD, LIKE ANY OTHER FOR-PROFIT BUSINESS, BUDGET FOR SERVICE SYSTEM EXPANSION + NOT FOIST THE COST ON ITS CUSTOMERS THAT HAVE NO OTHER OPTION TO OBTAIN ITS PRODUCT, A NATURAL RESOURCE.

AGAIN, I RESPECTFULLY REQUEST THE PUC TO ACT ON THE BEHALF OF PA'S CITIZENS. DEMAND A VERIFIED & ACCURATE VALUATION OF THE BEAVER FALLS WASTWATER SYSTEM. REQUIRE A DISTINCT DIVISION OF WASTEWATER & POTABLE WATER CUSTOMERS & ENSURE ONLY WASTEWATER CUSTOMERS ASSUME THAT SYSTEMS COST, INSTEAD OF ALL AQUA WATER CUSTOMERS.

YOUR CAREFUL ATTENTION TO, & CONSIDERATION OF THIS MATTER IS APPRECIATED BY YOUR FELLOW PENNSYLVANIANS.

VERY TRULY YOURS,

AQUA CUSTOMER

NOTICE OF PROPOSED ACQUISITION AND RATE BASE ADDITION
Docket No. A-2022-3033138

Dear Customer:

On June 27, 2024, the Pennsylvania Public Utility Commission (PUC) conditionally accepted for filing the application of Aqua Pennsylvania Wastewater, Inc. (Aqua) for approval to acquire the City of Beaver Falls (Beaver Falls) wastewater system assets. Beaver Falls serves approximately 3,200 customers in Beaver County, Pennsylvania. Aqua's application also requests that the PUC authorize an addition of up to $41.25 million to Aqua's rate base pursuant to 66 Pa. C.S. § 1329. A utility's rate base is the value of property used by the utility to provide service to its customers and is one of several components used to establish a utility's customer rates.

Aqua periodically makes applications to the PUC for newly acquired systems which requires Aqua to send these types of notices. This notice is specific to the Beaver Falls acquisition.

Aqua is not requesting a rate increase in this acquisition proceeding and it is not included in Aqua's current base rate case application pending before the PUC. Accordingly, this acquisition will not immediately, but may in the future, affect water and/or wastewater bills of Aqua customers, including the new Beaver Falls wastewater customers. Your rates will not change as a result of this transaction until the conclusion of an Aqua rate case where Aqua includes the Beaver Falls system and requests and receives PUC approval to increase its rates. At that time, based on a preliminary analysis of the potential rate impacts, Aqua estimates that the rates of the average customer could increase. The amount of the increase will be determined in Aqua's next base rate case and will be dependent on how the PUC chooses to apportion the increase among Aqua's acquired and existing customers. The tables below present non-binding, estimated incremental rate effects of the proposed rate base addition on Aqua's existing water and wastewater customers:

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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.

OBJECT TO AQUISATION OF BEAVER FALLS

303 ASTER CIRCLE KENNETT SQUARE PA 1934

PUC ROLE

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ACTIONS YOU CAN TAKE

You can support or challenge Aqua's request by:

1) Sending a letter to the PUC. You can tell the PUC why you support or object to Aqua's acquisition of Beaver Falls' wastewater system in your letter. This information can be helpful when the PUC investigates the application. Send your letter to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265.

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No Increase! We can't afford it.

AQUA

NOTICE OF PROPOSED ACQUISITION AND RATE BASE ADDITION
Docket No. A-2022-3033138

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694137

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A-2022-3033138

The First Baptist Church of Beaver Falls

Website: fbcbeaverfalls.com
Sunday School 9:30 a.m.
Worship Service 10:25 a.m.
Rev. James B. Inghram Pastor

fbc616@verizon.net
616 17th Street
Beaver Falls PA 15010
724-843-8930

January 14, 2025

Pennsylvania PUC
PO Box 3265
Harrisburg PA 17105-3265

Subject: City of Beaver Falls PA Wastewater System

On June 27, 2024, the Pennsylvania PUC conditionally accepted for filing the application of Aqua Pennsylvania Wastewater Inc. for approval to acquire the City of Beaver Falls wastewater system assets.

The First Baptist Church of Beaver Falls hereby objects to Aqua's acquisition of Beaver Falls' wastewater system based on the incomplete information presented.

- Does this acquisition include both water supply and sewage, or just sewage?
- Where, more specifically, will the proceeds be earmarked for?

Thank you for your consideration in this matter.

Very truly yours,

Maurice A. Cheney

Maurice A. Cheney
Trustee

Cc: City of Beaver Falls

69757

ORIGINAL

November 25, 2024

Pennsylvania Public Utility Commission

Post Office Box 3265

Harrisburg, PA 17105-3265

Re: Docket No. A-2022-3033138

Dear Commission,

I am writing as a concerned citizen regarding the purchase of the Beaver Falls City Sewage system to Aqua Pennsylvania Wastewater inc. (Aqua).

Exhibit I1 submitted to you on 2/21/2023 stated that the estimated rate increase for Aqua Wastewater customers would be 3.08% and for Aqua water customers the increase is estimated to be 0.24%.

In a letter sent by the City of Beaver Falls in the fall of 2024 estimated the rate increase for Beaver Falls customers would be 112.49 % if costs shared with other Aqua customers and 165.61% no costs are shared by aqua customers. What this tells me that the costs to residents of Beaver Falls will be double to triple the amounts they are paying now. This would be outrageous. According to the U.S. Census Bureau the employment rate in the city is 53% and the poverty rate is 26.8%. Many residents in the city could not afford the huge increase.

What has happened is the city is "borrowing " the money from its citizens via this sale and don't have to pay it back. The city can raise funds via a bond issue and make the payments required via a real estate tax. This is the method most municipalities use to finance the needs of the city. This method is transparent to all involved. The sale of the sewage system to Aqua is not so transparent.

Why is there such a discrepancy on the estimated rate increases between what Aqua has presented to you and what the city has presented ?

I have enclosed both the Aqua exhibit I1 and the letter from the City of Beaver Falls.

Thank you for the opportunity to state my opinion.

Sincerely,

Jerry T. Ford

3505 College Avenue

Beaver Falls, PA 15010

Email: ford3505@comcast.net

(Cell) 724-622-3748

696563

Beaver Falls Letter
Fall - 2024 Page 1

NOTICE OF PROPOSED ACQUISITION AND RATE BASE ADDITION
Docket No. A-2022-3033138

Dear Customer:

On June 27, 2024, the Pennsylvania Public Utility Commission (PUC) conditionally accepted for filing the application of Aqua Pennsylvania Wastewater, Inc. (Aqua) for approval to acquire the City of Beaver Falls (Beaver Falls) wastewater system assets. We look forward to serving the Beaver Falls community in the future. Beaver Falls serves approximately 3,200 customers in Beaver County, Pennsylvania. Aqua's application also requests that the PUC authorize an addition of up to $41.25 million to Aqua's rate base pursuant to 66 Pa. C.S. § 1329. A utility's rate base is the value of property used by the utility to provide service to its customers and is one of several components used to establish a utility's customer rates.

Aqua is not requesting a rate increase in this acquisition proceeding and it is not included in Aqua's current base rate case application pending before the PUC. Accordingly, this acquisition will not immediately, but may in the future, affect water and/or wastewater bills of Aqua customers, including the new Beaver Falls wastewater customers. Your rates may only change at the conclusion of an Aqua rate case in which Aqua includes the Beaver Falls system and requests and receives PUC approval to increase its rates. At that time, based on a preliminary analysis of the potential rate impacts, Aqua estimates that the rates of the average customer could increase. The amount of the increase will be determined in Aqua's next base rate case and will be dependent on how the PUC chooses to apportion the increase among Aqua's acquired and existing customers. The tables below present non-binding estimated incremental rate effect of the proposed rate base addition on Beaver Falls' wastewater customers, which include estimates with and without cost sharing. Aqua has sought cost sharing in later rate filings for acquired systems and therefore we are providing both scenarios in this notice:

Beaver Falls Customers rates assuming costs are shared with other Aqua customers

Rate Class	Average Quarterly Usage	Estimated Quarterly Increase	Estimated Percentage Increase
Residential	9,490	$112.64	112.49%
Commercial	39,870	$410.35	112.49%
Industrial (Monthly)	96,710	$322.43	112.49%
Public	69,260	$689.35	112.49%
Bulk Other (Dalton)	440,530	$7,499.42	112.49%

Beaver Falls Customers rates assuming no costs are shared with other Aqua customers

Rate Class	Average Quarterly Usage	Estimated Quarterly Increase	Estimated Percentage Increase
Residential	9,490	$165.83	165.61%
Commercial	39,870	$604.13	165.61%
Industrial	96,710	$474.70	165.61%
Public	69,260	$1,028.14	165.61%
Bulk Other (Dalton)	440,530	$11,040.94	165.61%

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. The PUC has allowed some form of cost sharing with existing customers based upon prior cases.

Beaver Falls Letter
Fall 2024 Page 2

PUC ROLE

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M2-02

Beaver Falls Letter
Fall 2024 Page 3

CITY OF BEAVER FALLS

715 FIFTEENTH STREET
BEAVER FALLS, PA 15010

Dear City Sewer Customers,

We are reaching out to share some important news regarding the future of our sewer system. In September 2021, after careful consideration and a thorough evaluation process, the previous City Council made the decision to approve the sale of our sewer system to Aqua Pennsylvania Wastewater, Inc. for a purchase price of $41.25 million. Since then, we have been diligently working towards regulatory approval and the finalization of this transaction.

This decision was driven by several compelling factors. Firstly, the sale promises significant funding that will benefit our community in numerous ways. By entrusting the operation of the sewer system to Aqua, we can redirect our focus to other vital aspects of city governance while leveraging the expertise of a specialized utility operator. Moreover, transferring ownership helps mitigate future liabilities associated with system maintenance and management, relieving the city of potential financial burdens down the line.

Another pivotal aspect is the restriction on how funds generated by the sewer system can be utilized, limiting our ability to address diverse municipal needs. The sale unlocks these resources, empowering us to pursue initiatives that directly enrich the lives of our residents.

One such initiative is the launch of Beaver Falls Revive, a comprehensive plan aimed at rejuvenating our community and fostering a brighter future for all. This plan encompasses various uses for the proceeds including blight removal, an infrastructure replacement plan, downtown streetscape and business development, recreation and playground projects, exploring a further potential tax decrease, paying down debt, and establishing a rainy-day trust fund.

Importantly, this transition will not result in any job losses for our dedicated employees. Additionally, Aqua's commitment to capital investment ensures that our sewer system will receive the attention and improvements it requires, with over $10 million earmarked for enhancements in the foreseeable future.

While the City sets its own rates, Aqua's rates must be reviewed and approved by the Pennsylvania Public Utility Commission, which requires that increases be reasonable and just.

Your rates are not increasing in this application proceeding. Aqua is required to implement the existing rates of the sewer system and can only change base rates after closing and when the Beaver Falls system is included in a base rate case filing. However, as part of this application, the PUC requires notice showing the full cost impact of the revenue deficiency related to the transaction, which is disclosed in the attached letter. It is important to remember that this rate may or may not represent the actual rate charged depending on a variety of factors including the ability of Aqua to spread Beaver Fall's costs across its customer base.

The decision to sell the sewer sy[illegible] risks and benefits, with the primary goal of serving the be[illegible]ole.
Thank you for your understand[illegible]

Sincerely,
The City of Beaver Falls

M2-01

EXHIBIT I1

AQUA

NOTICE OF PROPOSED ACQUISITION AND RATE BASE ADDITION
Docket No. A-2022-3033138

Dear Customer:

On [DATE], the Pennsylvania Public Utility Commission (PUC) conditionally accepted for filing the application of Aqua Pennsylvania Wastewater, Inc. (Aqua) for approval to acquire the City of Beaver Falls (Beaver Falls) wastewater system assets. Beaver Falls serves approximately 3,200 customers in Beaver County, Pennsylvania. Aqua's application also requests that the PUC authorize an addition of up to $41.25 million to Aqua's rate base pursuant to 66 Pa. C.S. § 1329. A utility's rate base is the value of property used by the utility to provide service to its customers and is one of several components used to establish a utility's customer rates.

Aqua periodically makes applications to the PUC for newly acquired systems which requires Aqua to send these types of notices. This notice is specific to the Beaver Falls acquisition.

Aqua is not requesting a rate increase in this acquisition proceeding. This acquisition will not immediately, but may in the future, affect water and/or wastewater bills of Aqua customers, including the new Beaver Falls wastewater customers. Aqua is not requesting a rate increase as part of the acquisition. Your rates will not change as a result of this transaction until the conclusion of an Aqua rate case where Aqua includes the Beaver Falls system and requests and receives PUC approval to increase its rates. At that time, based on a preliminary analysis of the potential rate impacts, Aqua estimates that the rates of the average customer could increase. The amount of the increase will be determined in Aqua's next base rate case and will be dependent on how the PUC chooses to apportion the increase among Aqua's acquired and existing customers. The tables below present non-binding, estimated incremental rate effects of the proposed rate base addition on Aqua's existing water and wastewater customers:

Aqua Wastewater Customers

Rate Class	Average Usage	Estimated Monthly Increase	Estimated Percentage Increase
Residential	4,000 gal/month	$2.60	3.08%
Commercial/Public	8,330 gal/month	$4.13	3.08%
Industrial	1,500 gal/month	$1.41	3.08%

Aqua Water Customers

Rate Class	Average Usage	Estimated Monthly Increase	Estimated Percentage Increase
Residential	4,000 gal/month	$0.19	0.24%
Commercial/Public	33,380 gal/month	$1.07	0.24%
Industrial	200,150 gal/month	$5.17	0.24%

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.

PUC ROLE

The state agency which approves acquisitions and rates for regulated public utilities is the PUC. The PUC will review and investigate the proposed acquisition and requested $41.25 million in additional rate base. After examining the evidence, the PUC may approve, modify or deny the acquisition and may approve or modify the $41.25 million addition to rate base. The PUC will issue a decision on the application on or around [DATE].

ACTIONS YOU CAN TAKE

You can support or challenge Aqua's request by:

1) Sending a letter to the PUC. You can tell the PUC why you support or object to Aqua's acquisition of Beaver Falls' wastewater system in your letter. This information can be helpful when the PUC investigates the application. Send your letter to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265.

2) Attending or presenting testimony at a PUC Public Input Hearing. You can attend or be a witness at a PUC public input hearing. The PUC holds public input hearings if it opens an investigation into Aqua's transaction and there is enough interest in the case. At these hearings, you can present your views in person to the PUC judge and to company representatives. Testimony under oath becomes part of the application case record. The PUC holds these hearings in the service area of the company. For more information, call the PUC at 1.800.692.7380.

3) Filing a protest or a petition to intervene. If you want to be a party to the case, you must file a protest or a petition to intervene. You then have an opportunity to take part in all the hearings about the proposed acquisition. You can receive copies of all materials distributed by the other parties. Protests and petitions to intervene must be filed in accordance with 52 Pa. Code (relating to public utilities) on or before [DATE]. Filings must be made with the Secretary of the Pennsylvania Public Utility Commission at P.O. Box 3265, Harrisburg, PA 17105-3265, with a copy served on Aqua's counsel at Post & Schell, P.C., Attn: Michael Hassell, 17 North Second Street, 12th Floor, Harrisburg, PA 17101.

The documents filed as part of this application are available for inspection and copying at the Office of the Secretary of the PUC between 8 a.m. and 4:30 p.m., Monday through Friday, on the PUC's website at www.puc.pa.gov and at Aqua's offices at 762 West Lancaster Avenue, Bryn Mawr, PA 19010. The PUC docket number is A-2022-3033138.

A-2022-3033138

Patricia E. Jonsen
2973 Eastburn Ave.
Broomall, PA 19008

November 8, 2024

Pennsylvania Public Utilities Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

Dear Sir or Madam,

Recently we received another notice from Aqua Pennsylvania to increase rates. Docket No. A-2022-3033138, for asset acquisition.

This is more than I am able to bear, as it is the third request this year for increase. It's just too much, and I must oppose it. Especially since they raised rates just 2 years ago by a whopping 20%. Also, their customer charge is very high as well.

We're middle class, my husband is a teacher, I'm retired. We live simply, and we already conserve water to keep our bill at an affordable amount. We use a rain barrel to water our yards and implement other water saving strategies.

Please help us out and do *not* grant this increase.

Thank you for taking time in reading this,

Patricia Jonsen

Patricia Jonsen

696344

607 Plum Run Drive
West Chester, PA 19382

DATE OF DEPOSIT

OCT – 4 2024

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

Copy sent Via Email to: RChiavetta@pa.gov

CERTIFIED MAIL: 7022 2410 0002 8250 6335

October 4, 2024

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
P. O. Box 3265
Harrisburg, PA 17105-3265

Re: Docket A-2022-3033138

Dear Secretary Rosemary Chiavetta,

Please accept this letter as my challenge to Aqua Pennsylvania, Inc's ("AQUA") request(s) to its application under the above referenced docket; wherein AQUA seeks that the PUC authorize an addition of up to $41.25 million to Aqua's rate base pursuant to 66 Pa. C.S. § 1329 ("Act 12"). I received the "NOTICE OF PROPOSED ACQUISITION AND RATE BASE ADDITION" ("Notice" – copy attached) related to this application recently and respectfully request that I receive notice of each public hearing so that I may testify.

I object to the approval of AQUA's application as it is not in the public interest of existing 456,018 water (emphasis added) and 62,161 wastewater customers of AQUA[1]. Secondly, the only subset of the public that benefit from the up to $41.25 million (in lieu of possibly a depreciated original cost ("DOC") of between $6 to $10 million[2]) in purchase price are the residents (to include the "3,200" customers referenced in the notice) of the City of Beaver Falls[3]. Third, Act 12 is voluntary and for that reason, AQUA, if concerned about their existing customers, should have declined to participate in the City's procurement process or submitted a bid based upon the historical approach by advancing a DOC purchase price even if it was not a conforming bid. Lastly, Act 12 is bad public policy and was never necessary as AQUA has been successful prior to 2016 in advancing its growth through acquisition strategy that included values based on DOC (or higher if it's Board(s) felt compelled to do so due to the possibility of goodwill exposure). If this application were approved, AQUA's existing customers should not be burdened with rates that would include that portion of the purchase price above DOC as well as other related costs (ex. interest expense, etc.) with this value.

I further object to the approval of AQUA's application as it seems that their indicative rates (for a residential customer using 4,000 gallons per month) outlined in their August 26, 2021, bid submittal seems

[1] Values obtained from AQUA's 2023 *Annual Reports* on file with the PUC
[2] The City's 2022 *Municipal Annual Audit and Financial Report* found on DCED's website suggests net "Fixed Assets" of $5,602,537, which may not include some assets (increasing this value); may also include contributed property (reducing this value); and it's recognized that AQUA may restate depreciation that may increase this value in establishing DOC
[3] To possibly include other municipalities who may receive a portion of the proceeds from the up to $41.25 million purchase price

696623

to first not account for the proposed rate increase by the City (suggesting that Yrs1-3 should be $49.35 and not $38.49). Secondly, these rates seem to be misleading and may create a false sense of security in the Seller and their customers. The following is a chart that includes these indicative rates from AQUA's bid:

	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	Yr10	Y3 to Y10 %
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	increase
Indicative Rates Page 10 of Proposal	$ 38.49	$ 38.49	$ 38.49	$ 58.18	$ 58.18	$ 58.18	$ 59.32	$ 59.32	$ 59.32	$ 60.35	56.79%
	% increase from prior year			51.16%	0.00%	0.00%	1.96%	0.00%	0.00%	1.74%	
Indicative Rates Page 11 of Proposal	$ 38.49	$ 38.49	$ 38.49	$ 83.12	$ 83.12	$ 83.12	$ 84.44	$ 84.44	$ 84.44	$ 85.92	123.23%
	% increase from prior year			115.95%	0.00%	0.00%	1.59%	0.00%	0.00%	1.75%	

The following table shows AQUA's existing wastewater rate zones and monthly bill[4] for a typical residential customer also using 4,000 gallons/month. It is simply hard to believe that the City's customer in Year 10 post financial close will pay less than a current AQUA wastewater customer today.

AQUA's Current Rates re 4k/month Residential		2024	Pg 10	Pg 11	Est '31	Pg 10	Pg 11	Y3 w/AQ	Y3 >Est'31
7 Systems in 10 Municipal Areas	Zone 1	$ 95.47	63.21%	90.00%	$121.46	49.69%	70.74%	148.0%	215.6%
3 Systems in 9 Municipal Areas	Zone 2	$106.27	56.79%	80.85%	$135.21	44.64%	63.55%	176.1%	251.3%
8 Systems in 10 Municipal Areas	Zone 3	$115.43	52.28%	74.44%	$146.85	41.10%	58.51%	199.9%	281.5%
6 Systems in 5 Municipal Areas	Zone 4	$136.84	44.10%	62.79%	$174.10	34.66%	49.35%	255.5%	352.3%
7 Systems in 7 Municipal Areas	Zone 5	$150.30	40.15%	57.17%	$191.22	31.56%	44.93%	290.5%	396.8%
Masthope	Zone 6	$ 70.59	Column titled "2024" reflects a monthly bill for a residential customer						
Limerick (Act 12)	Zone 7	$ 78.53	consuming 4,000 per month. The next two columns immediately to the						
East Bradford (Act 12)	Zone 8	$104.56	right of "2024" suggest the % Yr10 indicative rates are of AQUA's current						
Cheltenham (Act 12)	Zone 9	$ 61.82	2024 bill for the same customer. The column titled "Est'31" is an						
East Norriton (Act 12)	Zone 10	$ 66.47	estimated value of the monthly bill in 2031 and assumes 3.5% increase						
New Garden (Act 12)	Zone 11	$138.50	per year. The next two columns immediately to the right of "Est'31"						
Lower Makefield (Act 12) (FLAT)	Zone 12	$ 71.09	suggest the % Yr10 indicative rate is of "Est'31". The next column titled						
East Whiteland (Act 12)	Zone 13	$ 58.13	"Y3w/AQ" is the % increse if AQUA's rates were substituted for the City's						
North Heidelberg (529 Matter at DOC)	Zone 14	$ 67.18	at Close. Lastly, the column titled "Y3>Est'31" represents the % increase						
Deer Haven (528 Matter at DOC)		$ 46.60	that may likely occur if the transaction were to be approved by the PUC.						

With the above in mind, I believe that the PUC – as part of its investigation - should request and review AQUA's financial model to ensure that their indicative rate increases were also employed in their financial model(s) approved internally by both AQUA and its parent's Boards. The model(s) should be accompanied by the appropriate Board approvals so as to verify that the bid is consistent with that which was modeled and approved by AQUA's Boards. The financial model(s) should also show subsidies supporting this acquisition from both AQUA's existing 62,161 customers and a separate line showing the 66 Pa. C.S. § 1311(c) ("Act 11") subsidy from AQUA's 456,018 water customers. Hence, the financial model(s) should show three lines of customer revenue from: i) 3,200 City customers; ii) subsidy by AQUA's existing 62,161 wastewater customers; and iii) Act 11 subsidy by AQUA's existing 456,018 water customers.

Lastly, it is estimated that approximately 91% of AQUA's existing water customers obtain wastewater service from either their own septic system or homeowners association or municipal entity. However, all of AQUA's 456,018 customers have been unknowingly subsidizing AQUA's wastewater revenue requirement such that AQUA's 62,161 wastewater customers are not paying the true cost of service. This, as you know, is achieved by yet another bad public policy in Act 11 as noted herein. This too is something

[4] Rates obtained from AQUA's tariff available on its website on October 2, 2024

I object to as it is not only a deceptive practice, but something that should have never been considered by our legislature. The PUC should prohibit this practice and for clarity; when I receive (along with I'm sure the other 456,011 water customers) my monthly water bill there is nothing that informs me that I am aiding in helping others with their wastewater bills while I pay my own. To know this one needs to know where to look in terms of Dockets at the PUC. Simply sending out a Notice is not enough!

Thank you in advance for your time and consideration, and I look forward to participating in any upcoming hearings.

Keith E. Gabage
Water Customer of Aqua

Enc. As Noted

AQUA

NOTICE OF PROPOSED ACQUISITION AND RATE BASE ADDITION
Docket No. A-2022-3033138

Dear Customer:

On June 27, 2024, the Pennsylvania Public Utility Commission (PUC) conditionally accepted for filing the application of Aqua Pennsylvania Wastewater, Inc. (Aqua) for approval to acquire the City of Beaver Falls (Beaver Falls) wastewater system assets. Beaver Falls serves approximately 3,200 customers in Beaver County, Pennsylvania. Aqua's application also requests that the PUC authorize an addition of up to $41.25 million to Aqua's rate base pursuant to 66 Pa. C.S. § 1329. A utility's rate base is the value of property used by the utility to provide service to its customers and is one of several components used to establish a utility's customer rates.

Aqua periodically makes applications to the PUC for newly acquired systems which requires Aqua to send these types of notices. This notice is specific to the Beaver Falls acquisition.

Aqua is not requesting a rate increase in this acquisition proceeding and it is not included in Aqua's current base rate case application pending before the PUC. Accordingly, this acquisition will not immediately, but may in the future, affect water and/or wastewater bills of Aqua customers, including the new Beaver Falls wastewater customers. Your rates will not change as a result of this transaction until the conclusion of an Aqua rate case where Aqua includes the Beaver Falls system and requests and receives PUC approval to increase its rates. At that time, based on a preliminary analysis of the potential rate impacts, Aqua estimates that the rates of the average customer could increase. The amount of the increase will be determined in Aqua's next base rate case and will be dependent on how the PUC chooses to apportion the increase among Aqua's acquired and existing customers. The tables below present non-binding, estimated incremental rate effects of the proposed rate base addition on Aqua's existing water and wastewater customers:

Aqua Wastewater Customers

Rate Class	Average Usage	Estimated Monthly Increase	Estimated Percentage Increase
Residential	4,000 gal/month	$5.09	6.03%
Commercial/Public	8,330 gal/month	$8.09	6.03%
Industrial	1,500 gal/month	$2.76	6.03%

Aqua Water Customers

Rate Class	Average Usage	Estimated Monthly Increase	Estimated Percentage Increase
Residential	4,000 gal/month	$0.58	0.75%
Commercial/Public	33,380 gal/month	$3.30	0.75%
Industrial	200,150 gal/month	$16.01	0.75%

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.

PUC ROLE

The state agency which approves acquisitions and rates for regulated public utilities is the PUC. The PUC will review and investigate the proposed acquisition and requested $41.25 million in additional rate base. After examining the evidence, the PUC may approve, modify or deny the acquisition and may approve or modify the $41.25 million addition to rate base. The PUC will issue a decision on the application on or around March 2025.

ACTIONS YOU CAN TAKE

You can support or challenge Aqua's request by:

1) Sending a letter to the PUC. You can tell the PUC why you support or object to Aqua's acquisition of Beaver Falls' wastewater system in your letter. This information can be helpful when the PUC investigates the application. Send your letter to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265.

2) Attending or presenting testimony at a PUC Public Input Hearing. You can attend or be a witness at a PUC public input hearing. The PUC holds public input hearings if it opens an investigation into Aqua's transaction and there is enough interest in the case. At these hearings, you can present your views in person to the PUC judge and to company representatives. Testimony under oath becomes part of the application case record. The PUC holds these hearings in the service area of the company. For more information, call the PUC at 1.800.692.7380.

3) Filing a protest or a petition to intervene. If you want to be a party to the case, you must file a protest or a petition to intervene. You then have an opportunity to take part in all the hearings about the proposed acquisition. You can receive copies of all materials distributed by the other parties. Protests and petitions to intervene must be filed in accordance with 52 Pa. Code (relating to public utilities) on or before November 4, 2024. Filings must be made with the Secretary of the Pennsylvania Public Utility Commission at P.O. Box 3265, Harrisburg, PA 17105-3265, with a copy served on Aqua's counsel at Post & Schell, P.C., Attn: Michael Hassell, 17 North Second Street, 12th Floor, Harrisburg, PA 17101.

The documents filed as part of this application are available for inspection and copying at the Office of the Secretary of the PUC between 8 a.m. and 4:30 p.m., Monday through Friday, on the PUC's website at www.puc.pa.gov and at Aqua's offices at 762 West Lancaster Avenue, Bryn Mawr, PA 19010. The PUC docket number is A-2022-3033138.

A-2022-3033138

September 19, 2024

PA Public Utilities Commission

PO Box 3265

Harrisburg, PA 17105-3265

Dear Pennsylvania Public Utility Commission,

I am writing to object to the Aqua company acquisition of the Beaver Falls' wastewater system. Every time Aqua does this type of acquisition, it ultimately results in a significant increase in my wastewater and water bills. In effect, the Aqua company is building itself a "cash cow" at the customer's expense. How much of the $41.25 million rate base increase is going to the customers versus how much is going to pay raises for the higher up Administrators at Aqua as a reward for persuading you to repeatedly approve this kind of deal?? Why not stop them where they are now, so that consumers like us do not have to put up with constant increases in our water bill.

Sincerely,

Douglas R Cole, MD

Douglas R. Cole, MD

424 Glyn Wynne Road

Haverford, Pa 19041

694411

To file written Comments - complete this form. (please type or print legibly in ink).

Application Docket Number: A- 2022 3033138

Protestant Information

Provide your name, mailing address, county, and telephone numbers.

Name PAMELA FORSYTHE

Street/P.O. Box 661 SUSQUEHANNA RD. **Apt #** _____

City HUNTINGDON VALLEY **State** PA **Zip** 19006

County MONTGOMERY

Telephone Number(s) Where We Can Contact You During the Day:

(215) 947 5821 **(home)** (_____) _____ **(mobile)**

E-mail Address (optional): _____

Please state your comments about this Application. You may use additional paper and attach to this form.

PLEASE SEE ATTACHED COMMENT.

PAMELA FORSYTHE **(Print your name)**

Pamela J. Forsythe
(Original Signature)

9.20.24
(Date)

Pennsylvania Utility Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

Comments regarding PUC Docket A-2022-3033138

My most recent bill from Aqua Pennsylvania included notification of a proposed rate base addition related to the utility's acquisition of the Beaver Falls wastewater system assets. Essentially, Aqua estimates in the notification that if granted, this could increase the average monthly residential bill by 58 cents.

I typically glance at these notices – which seem to come with increasing frequency from every "public" utility – and move on. But it is grating that Aqua has expanded considerably over the years, a significant part of which has come at the expense of individual homeowners, who are buffeted by rate increases imposed by increasingly monopolistic providers of essential services, from clean water to health care.

I decided to look at my Aqua bills over the last six years. For 2018, my monthly water bills amounted to $369.05. For 2023, the corresponding figure was $467.93, an increase of $118.88, or 32%. Admittedly, I do not have the number of gallons used in those years, but I can say that my household's size – one person – and water usage have not changed over that time.

Costs rise, I understand, and there can be benefit in a larger water provider. That said, growth must be managed, particularly in situations in which consumers have no choice about their provider. I ask the PUC to consider the vulnerability of individual rate payers as it reviews Aqua's proposal.

Thank you,

Pamela J. Forsythe

A-2022-3033138

September 12, 2024

To whom this may concern (PUC)

My name is Misty Cromartie, I am writting this letter in regards to my AQUA Water Account
Address 2436 Roman Drive Hermitage PA 16148.
Account # 0023343600758618

AQUA informed me that there are several accounts on my address. ON July 1st my bill was only $280.00 thats it I live in a apartment complex. My toilet in the half bathroom was broke and the water was running didnt know until I spoke with AQUA Rep. Called maintence the problem was Fixed End of August.
I can not afford this bill Its Insane
This problem has to be Restored ASAP.
I enclosed a copy of Bill and actual usage. A compliant was filed End of August.
Any Questions please
call me at
(814) 807-3226

Thank You
Misty Cromartie

MENU

AQUA

Essential

Log In

Welcome back, MISTY CROMARTIE

Account # 0023343600758618 | Address 2436 ROMAR DR, HERMITAGE, PA, 16148-2837

Account Balance

Total Balance

$4,453.25

Make Payment

Payment Due : **Oct 01, 2024**

View Current Bill

Past Due Balance :
$2,299.15

Total Amount Due :
$4,453.25

Current Charges :
$2,154.10

Lookup Account

Log In

A UA Essential

Service To:
MISTY CROMARTIE
2436 ROMAR DR
HERMITAGE, PA 16148-2837

Account Number
002334360 0758618
SHENANGO
1157850 PWSID # PA6430054

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489

Toll Free: **877.987.2782**
Fax: **866.780.8292**
Aquawater.com

Questions about your water service? Contact us before the due date.

Bill Date	Total Amount Due	Current Charges Due Date
September 09, 2024	**$ 4,453.25**	**October 01, 2024**

Meter Data

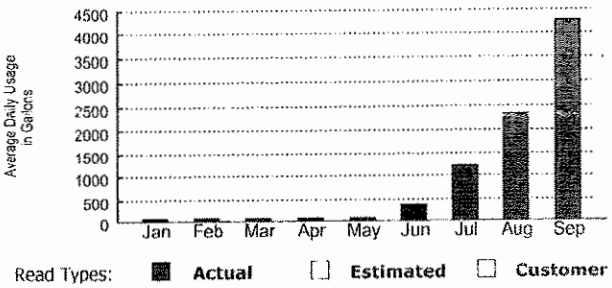
Meter	Size	Billing Period	Days	Read Type	Meter Readings	Usage	Units
22056699	5/8	09/05/24	31	Actual	290600	133,100	Gallons
		08/05/24		Actual	157500		

Average Daily Usage = 4,293 Gallons — Total Days: 31 — Total Usage: 133,100 Gallons

Billing Detail

Amount Owed from Last Bill	$ 2,299.15	
Total Payments Received	0.00	
Remaining Balance	**2,299.15**	
Customer Charge	20.51	
2,000 gallons @ $0.01305 per gallon	26.10	
Next 131,100 gallons @ $0.015451 per gallon	2,025.63	
Total Water Charges	2,072.24	
Distribution System Improvement Charge (Water)	88.28	
State Tax Adjustment Surcharge - Water	6.42	Credit
Amount Due	**$ 4,453.25**	

Water Usage History



Message Center (see reverse side for other information)

- Effective July 1, 2024, the allowable water DSIC is 4.26%. The PA Public Utility Commission permits a maximum water DSIC of 7.50%.
- HIGH BILL ALERT - Your usage appears higher than usual. For information on high usage and leaks, visit the Water Tips section on www.aquawater.com.
- Effective January 1, 2024, the allowable water State Tax Adjustment Surcharge (STAS) is -0.31%.
- Would you like to quickly and easily learn important information about your water? Please let us know how you want to be contacted via our new automated notification system by clicking on the WaterSmart Alerts button at www.aquawater.com.

RETURN THIS PORTION WITH YOUR PAYMENT

A UA Essential

MAKE CHECK PAYABLE TO:
Aqua PA

Account Number
002334360-0758618

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue • Bryn Mawr, PA 19010-3489

DUE DATE
10/01/2024

TOTAL AMOUNT DUE
$4,453.25

Please do not remit payment to the above address

Cyc=15S4 1up=5285527 EC: HIG Seq=79445

Amount Enclosed $

MISTY CROMARTIE
2436 ROMAR DR
HERMITAGE PA 16148-2837

AQUA PENNSYLVANIA
PO BOX 70279
PHILADELPHIA PA 19176-0279

00233436007586180000004453253

Questions About Your Bill?

Toll Free: 877.987.2782 Fax: 866.780.8292 Aquawater.com

If you have a billing question or complaint, call or write to us before the due date on your bill. When writing, please use a separate piece of paper and include your name, address and account number. Notes written on the bill may delay processing of your payment. Our customer service address is listed on the front of the bill. You may also contact us for a rate schedule which is an explanation of how to verify that your bill is correct or for an explanation of our charges. Please notify our office immediately upon change of occupancy, ownership or mailing address, as the customer is responsible for all charges until we are notified.

If your bill is based on zero usage, there may be a problem with your meter reading equipment. If there is a problem with your meter reading equipment, you will be responsible for the water usage or leakage not reported on this bill. Please call customer service if you have any questions or to have your meter reading equipment serviced.

Please visit Aquawater.com for Rules and Regulations governing your service, including topics like your responsibility for the customer service line, curb box and meter box/vault.

Explanation Of Terms

Actual (A) Read: Meter reading obtained by a company employee or one of our automatic meter reading systems.
Customer Charge: This charge covers the cost of having water service available, including operations, maintenance, meter reading, and other necessary services that are not covered under the consumption charge. It is billed whether or not you use any water.
Customer Read: Meter reading obtained from our customer.
Distribution System Improvement Charge (DSIC): The DSIC is a percentage charge that is applied to the bill. The charge covers costs associated with replacing aging distribution system facilities, such as water mains, service lines, meters, valves, fire hydrants, etc.
Employee Identification: All company employees carry an identification card showing their picture and employee number.
Estimated (E) Bill: When we are unable to read your meter, we base the bill on your past water use. If you receive an estimated bill, you may have a new bill by reading the meter and calling customer service with that reading. Note: revised bills will not be issued after the due date of the estimated bill.
Late Charge: A penalty of 1.25 percent on unpaid balances, not to exceed 18 percent yearly.
Meter Reading: We attempt to read the water meter every billing period. We either have our meter reader visit your property or obtain the reading through one of our automatic meter reading systems.
Minimum Charge: This charge includes a water allowance, plus the cost of having water service available, including operations, maintenance, meter reading, and other necessary services that are not covered under the consumption charge. It is billed whether or not you use any water.
Payment Methods: You can pay your bill by any of the following methods:

- **By mail:** Place your check or money order in the enclosed pre-addressed envelope. Put a stamp on the envelope and mail it to Aqua Pennsylvania: PO Box 70279, Philadelphia, PA 19176-0279. **Do not send cash.**
- **By phone:** Customers with bank accounts or credit cards may pay their bills over the phone for a fee by calling this toll free number: 866.269.2906. Customers with bank accounts may also pay through their bank. Call customer service or your bank for details.
- **In Person:** Pay in person (with cash or check) at convenient Western Union locations throughout Aqua Pennsylvania's service territory. Payments are credited to your account the same day or the next business day if you make payments on a weekend or holiday. Please call us or visit Aquawater.com to find the Western Union location closest to you.

Aqua E-billing: Switch to paperless billing today. Enjoy the convenience of viewing and paying your bill online. Visit us at Aquawater.com to sign up today!
Payment Terms: You should pay your bill on or before the due date.
Return Check Charge: If for any reason your check is returned to us from the bank, we will add a service charge to your account.
State Tax Adjustment Surcharge (STAS): This is a charge for certain tax changes, which the Pennsylvania Public Utility Commission allows the company to recover.

Ways to Pay Your Bill

Save time and cut clutter with paperless billing!

Enroll today in eBilling. 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 aquawater.com for more details.

AQUA

Mail Payments

You can mail payments to this address:

Aqua
P.O. Box 70279
Philadelphia, PA 19176-0279

(Scan with smartphone)

Speedpay, an ACI Worldwide Company

By Phone: using a credit card (American Express, Visa, Mastercard, or Discover) or by check by calling Speedpay toll free at 866.269.2906.

Online: At https://internet.speedpay.com/aqua. Please note: Speedpay charges a $1.95 processing fee for each transaction.

By Text: Customers now have the option to Pay by Text. Opt in via the Speedpay website to receive bill reminder text messages and the option to pay your bill using your mobile device.
Visit - www.speedpay.com/aqua.

AQUA

NOTICE OF PROPOSED ACQUISITION AND RATE BASE ADDITION

Docket No. A-2022-3033138

Dear Customer:

On June 27, 2024, the Pennsylvania Public Utility Commission (PUC) conditionally accepted for filing the application of Aqua Pennsylvania Wastewater, Inc. (Aqua) for approval to acquire the City of Beaver Falls (Beaver Falls) wastewater system assets. Beaver Falls serves approximately 3,200 customers in Beaver County, Pennsylvania. Aqua's application also requests that the PUC authorize an addition of up to $41.25 million to Aqua's rate base pursuant to 66 Pa. C.S. § 1329. A utility's rate base is the value of property used by the utility to provide service to its customers and is one of several components used to establish a utility's customer rates.

Aqua periodically makes applications to the PUC for newly acquired systems which requires Aqua to send these types of notices. This notice is specific to the Beaver Falls acquisition.

Aqua is not requesting a rate increase in this acquisition proceeding and it is not included in Aqua's current base rate case application pending before the PUC. Accordingly, this acquisition will not immediately, but may in the future, affect water and/or wastewater bills of Aqua customers, including the new Beaver Falls wastewater customers. Your rates will not change as a result of this transaction until the conclusion of an Aqua rate case where Aqua includes the Beaver Falls system and requests and receives PUC approval to increase its rates. At that time, based on a preliminary analysis of the potential rate impacts, Aqua estimates that the rates of the average customer could increase. The amount of the increase will be determined in Aqua's next base rate case and will be dependent on how the PUC chooses to apportion the increase among Aqua's acquired and existing customers. The tables below present non-binding, estimated incremental rate effects of the proposed rate base addition on Aqua's existing water and wastewater customers:

Aqua Wastewater Customers

Rate Class	Average Usage	Estimated Monthly Increase	Estimated Percentage Increase
Residential	4,000 gal/month	$5.09	6.03%
Commercial/Public	8,330 gal/month	$8.09	6.03%
Industrial	1,500 gal/month	$2.76	6.03%

Aqua Water Customers

Rate Class	Average Usage	Estimated Monthly Increase	Estimated Percentage Increase
Residential	4,000 gal/month	$0.58	0.75%
Commercial/Public	33,380 gal/month	$3.30	0.75%
Industrial	200,150 gal/month	$16.01	0.75%

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.

PUC ROLE

The state agency which approves acquisitions and rates for regulated public utilities is the PUC. The PUC will review and investigate the proposed acquisition and requested $41.25 million in additional rate base. After examining the evidence, the PUC may approve, modify or deny the acquisition and may approve or modify the $41.25 million addition to rate base. The PUC will issue a decision on the application on or around March 2025.

ACTIONS YOU CAN TAKE

You can support or challenge Aqua's request by:

1) Sending a letter to the PUC. You can tell the PUC why you support or object to Aqua's acquisition of Beaver Falls' wastewater system in your letter. This information can be helpful when the PUC investigates the application. Send your letter to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265.

2) Attending or presenting testimony at a PUC Public Input Hearing. You can attend or be a witness at a PUC public input hearing. The PUC holds public input hearings if it opens an investigation into Aqua's transaction and there is enough interest in the case. At these hearings, you can present your views in person to the PUC judge and to company representatives. Testimony under oath becomes part of the application case record. The PUC holds these hearings in the service area of the company. For more information, call the PUC at 1.800.692.7380.

3) Filing a protest or a petition to intervene. If you want to be a party to the case, you must file a protest or a petition to intervene. You then have an opportunity to take part in all the hearings about the proposed acquisition. You can receive copies of all materials distributed by the other parties. Protests and petitions to intervene must be filed in accordance with 52 Pa. Code (relating to public utilities) on or before November 4, 2024. Filings must be made with the Secretary of the Pennsylvania Public Utility Commission at P.O. Box 3265, Harrisburg, PA 17105-3265, with a copy served on Aqua's counsel at Post & Schell, P.C., Attn: Michael Hassell, 17 North Second Street, 12th Floor, Harrisburg, PA 17101.

The documents filed as part of this application are available for inspection and copying at the Office of the Secretary of the PUC between 8 a.m. and 4:30 p.m., Monday through Friday, on the PUC's website at www.puc.pa.gov and at Aqua's offices at 762 West Lancaster Avenue, Bryn Mawr, PA 19010. The PUC docket number is A-2022-3033138.

September 30, 2024

Pennsylvania Public Utility Commission ("PUC")

P.O. Box 3265

Harrisburg, PA 17105-3265

Re: Acquisition of Beaver Falls, PA wastewater system assets, Docket No. A-2022-3033138

Dear Members of the PUC:

In response to the notice sent by Aqua referring to the above referenced acquisition, this letter serves as an objection to such acquisition until a number of issues raised by this acquisition are satisfactorily addressed to the PUC and to the rate payers of Pennsylvania.

First of all, the notice is inadequate in that the notice does not address water system assets at all even though Aqua's notice provides a table showing an increase to water rates. A revised notice should be required to address all of the details of this transaction.

Second, this transaction should be independently evaluated by the PUC to insure that the City of Beaver Falls is getting a reasonable and fair value for the assets being sold along with confirming that any promises about the rates for the rate payers of Beaver Falls are being kept.

Third, this transaction should be included with the rest of Aqua's recent transactions along with pending transactions (such as DELCORA and Chester Water) to evaluate the total impact of these additions on the Aqua system and its water and sewer rates across the Commonwealth.

I note that customer charges for sewer are in my opinion unjustifiably so much higher than for water and thus they should be reduced across the Commonwealth. This action would help rate payers immensely.

Please feel free to contact me (please see contact information below) if necessary and thank you for your prompt attention to this matter.

Sincerely,

Richard J. Ciamacca
301 East Jefferson Street
Media, PA 19063
(610) 761-1244
rciamacca@gmail.com

694566

Sept. 29, 2024

Pennsylvania Public Utilities Commission
Harrisburg,Pa 17105

To whom It may concern,
As a ratepayer in Southeastern Pennsylvania I object to the purchase of the Beaver Falls wastewater system. This purchase is one that Aqua PA cannot afford without unilaterally raising rates for ALL customers, and the rates they are proposing to raise are excessive in this current economy.

It is the role of the PUC to consider the impact of a $41.25 million purchase on ALL ratepayers who do not benefit either directly, or indirectly from this acquisition, where Aqua will increase its value as a utility. In effect, we the existing ratepayers will be forced to pay for a wastewater system that will not benefit the majority of Aqua Pa ratepayers.

Aqua PA is already projecting a $5/09 increase for wastewater customers, which is more than 6% for its residential customers, for an average 4,000 gallon a month usage BEFORE it has acquired this wastewater system, and there is no guarantee the projection won't go higher.

Additionally the 6% projected wastewater increase for residential customers is a higher burden than the proposed 6% increase on commercial/public and industrial customers, whose rates would increase an average of $8.09 and $2.76 AT LEAST.

A commensurate projected rate increase for WATER customers would be $16.01 monthly for industrial customers, which is a cost likely to be passed on to consumers in the price of goods.

The PUC, which is the regulatory agency is supposed to act in the best increase of the citizens of Pennsylvania, not the for-profit utility commission. It is my believe that allowing this $41-plus million dollar purchase would not be in the best interest of ALL EXISTING Aqua PA customers.

Much like politicians tell Americans if you can't afford it, you don't buy it, if Aqua PA cannot afford to purchase the Beaver Falls system without heavily impacting the bills for its current customers, it should not be allowed to do so.

I also would respectfully suggest the PUC create an email option for those customers of Aqua PA who would prefer to let the agency know its feelings about this proposed acquisition

Respectfully,

Joann L. Ciavaglia
5711 Keenan Court
Bensalem, Pa 19020

ORIGINAL

A-2022-3031138

27 September 2024

Pennsylvania Public Utility Commission
Post Office Box 3265
Harrisburg, PA 17105-3265

RE: Proposed Aqua Acquisition and Rate Base Addition (Docket No. A-2022-3031138)

Dear Sirs:

I am writing to oppose the referenced requests by Aqua Pennsylvania, Inc. (Aqua) to add the City of Beaver Falls (Beaver Falls) **wastewater system** assets to its rate base. Aqua provides **monopoly water** services in my township (East Goshen). As such, I have no choice in my source of a **regulated, water utility**.

First, a serious question, why am I (and other **water** customers in Chester County) being ordered by Aqua to pay an additional $7/year, so that they and their owners (shareholders) can increase their earnings (see attached Aqua notice)? Also, why is the PUC in Aqua's pocket (see copy of attached PUC notice and mailing envelope, a useless notice)?

If Aqua wants to purchase **wastewater** assets in Beaver County that have no impact on my Chester County **water** system (300 miles to the west that discharges to a totally different drainage basin), thus expanding the corporation, they should not impact existing customers' **water** rates. Essential Utilities, Inc. (Aqua's parent) shareholders (I am one) should be the ones to fund purchases that will expand the corporation's assets and profits. Corporate expansion into a different utility (**wastewater**) should not impact my regulated, monopoly **water** utility rates, with no concurrent improvements to my regulated, monopoly water service. What improvements will I see in my water service for this proposed increased rate? – **None!**

Corporate expansion should be existing customer rate neutral (or result in reduced rates), as additional assets should allow for lower administrative/overhead rates (additional assets to spread administrative, overhead, etc. charges onto). Paying too much for an asset also means other assets have to provide more of a return to make up for the lower return on an overpriced asset. Why does monopoly Aqua need more revenue from its existing customers to expand?

It seems that all Aqua wants to do (and is good at) is purchase systems and ask for rate increases.

Thank you for your time and attention to this matter.

Sincerely,

Walter Wujcik

Walter Wujcik
622 Meadow Drive
West Chester, PA 19380

694695

AQUA

NOTICE OF PROPOSED ACQUISITION AND RATE BASE ADDITION
Docket No. A-2022-3033138

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On June 27, 2024, the Pennsylvania Public Utility Commission (PUC) conditionally accepted for filing the application of Aqua Pennsylvania Wastewater, Inc. (Aqua) for approval to acquire the City of Beaver Falls (Beaver Falls) wastewater system assets. Beaver Falls serves approximately 3,200 customers in Beaver County, Pennsylvania. Aqua's application also requests that the PUC authorize an addition of up to $41.25 million to Aqua's rate base pursuant to 66 Pa. C.S. § 1329. A utility's rate base is the value of property used by the utility to provide service to its customers and is one of several components used to establish a utility's customer rates.

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Industrial	1,500 gal/month	$2.76	6.03%

Aqua Water Customers low!

Rate Class	Average Usage	Estimated Monthly Increase	Estimated Percentage Increase
Residential	4,000 gal/month	$0.58	0.75%
Commercial/Public	33,380 gal/month	$3.30	0.75%
Industrial	200,150 gal/month	$16.01	0.75%

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.

PA Public Utility Commission
Administrative Law Judge
400 North Street
Harrisburg, PA 17120

Return Service Requested

WALTER WUJCIK
622 MEADOW DRIVE
WEST CHESTER, PA 19380

3 CMGBNSB 19380

PAPUC

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
OFFICE OF ADMINISTRATIVE LAW JUDGE
400 NORTH STREET, HARRISBURG, PA 17120
August 15, 2024

IN REPLY PLEASE REFER TO OUR FILE

In Re: A-2023-3041695

(SEE ATTACHED LIST)

Application of Aqua Pennsylvania Wastewater, Inc. for approval of the acquisition of Greenville Sanitary Authority situated within the Borough of Greenville, Hempfield Township, and West Salem Township, Mercer County, Pennsylvania

Application

Hearing Cancellation Notice

This is to inform you of the following cancellation:

Type: Call-In Telephonic Evidentiary Hearings

Date: Friday, August 16, 2024

Time: 9:00 A.M.

Presiding: Deputy Chief Administrative Law Judge Mark A. Hoyer
Administrative Law Judge Alphonso Arnold III
Phone: 717.787.1399 Fax: 717.213.6812

A-2022 3033138

Aqua
Pennsylvania Public Utility Commission
PO Box 3265
Harrisburg, PA 17105-3265

ORIGINAL

Chris A. Perkins
187 Treasure Lake
DuBois, PA 15801

September 19, 2024

To Aqua

A-2022-3033138

I am writing to challenge Aqua's request for a rate increase (docket no. ~~A-202203033138~~), and I am against aqua acquiring another wastewater system and its assets. I have enclosed documents that show that just 3 years ago I was paying a significantly LOWER price for the exact same crappy water I am getting today at an enormously price gouged amount.
In august 2021 8,000 cost me $43.44 (0.00543 per gallon) and now the price is $77.31 for 8,400 gallons ($0.009204); this is a **78% increase** in charges in just 3 years. The sewer charges also have had a significant increase $81.40 (2021), now $147.46 (2024) – which is an **81% INCREASE**!!! I'm not sure how much more I need to explain. This is a RIDICULOUS PRICE INCREASE that shouldn't be supported or allowed. On top of that, nearly every home in Treasure Lake has additionally purchased or is in the works to purchase an entire home water filter system because the water quality is so poor; not to mention the said filters need to be replaced more frequently, BECAUSE OF THE AQUA water, than those homes that have the same systems on homes outside of treasure lake which don't have AQUA water service. Can someone please reach out to me and explain this to me? I have personally begun purchasing water from Culligan to drink and use for cooking because I have young children in my home, and I worry about how clean and properly conditioned our AQUA water is. This is sad and you people should be ashamed.
My cell phone is 814.603.2812. I'll be anxiously awaiting a call and explanation.

Regards,

Chris Perkins

Chris Perkins

694371

AQUA. | An Essential Utilities Company

Service To:
CHRIS A. FAZEKAS & GARRICK A
DUBOIS, PA 15801

Account Number
[redacted]
TREASURE LAKE WATER
1157857 PWSID # PA6170048

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489

Toll Free: **877.987.2782**
Fax: **866.780.8292**
Aquawater.com

Questions about your water/sewer service? Contact us before the due date.

Bill Date	Total Amount Due	Current Charges Due Date
September 10, 2024	**$ 251.54**	**October 02, 2024**

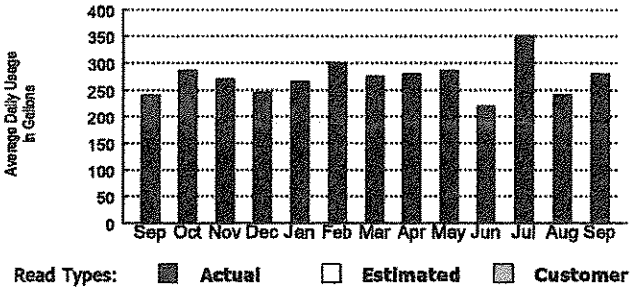
Meter Data

	Meter	Size	Billing Period	Days	Read Type	Meter Readings	Usage	Units
	13067269	5/8	09/06/24	30	Actual	785700	8,400	Gallons
			08/07/24		Actual	777300		
Average Daily Usage = 280 Gallons			Total Days:	30		Total Usage:	8,400	Gallons

Billing Detail

Amount Owed from Last Bill	$ 223.49	
Total Payments Received	223.49	
Remaining Balance	**0.00**	
Customer Charge Water	20.51	
8,400 gallons @ $0.009204 per gallon	77.31	
Current Water Charges	97.82	
Customer Charge Sewer	48.20	
8,400 gallons @ $0.011817 per gallon	99.26	
Current Sewer Charges	147.46	
Distribution System Improvement Charge (Water)	4.17	
State Tax Adjustment Surcharge - Water	0.30	Credit
Distribution System Improvement Charge (Sewer)	2.52	
State Tax Adjustment Surcharge - Sewer	0.13	Credit
Amount Due	**$ 251.54**	

Water Usage History



Message Center (see reverse side for other information)

- Effective July 1, 2024, the allowable wastewater DSIC is 1.71%. The PA Public Utility Commission permits a maximum wastewater DSIC of 5.00%.
- Effective January 1, 2024, the allowable wastewater State Tax Adjustment Surcharge (STAS) is -0.09%.
- Effective July 1, 2024, the allowable water DSIC is 4.26%. The PA Public Utility Commission permits a maximum water DSIC of 7.50%.
- Effective January 1, 2024, the allowable water State Tax Adjustment Surcharge (STAS) is -0.31%.

RETURN THIS PORTION WITH YOUR PAYMENT

1 of 2

AQUA. | An Essential Utilities Company

Account Number

MAKE CHECK PAYABLE TO:
Aqua PA

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue • Bryn Mawr, PA 19010-3489

DUE DATE **10/02/2024**

TOTAL AMOUNT DUE **$251.54**

Please do not remit payment to the above address

Cyc=15TD 1up=5290188 Seq=2426

Amount Enclosed $

AUTOSCH 5-DIGIT 15801 C 9 P 2 2426 1 AV 0.540

CHRIS A. FAZEKAS & GARRICK A PERKINS
187 TREASURE LK
DUBOIS PA 15801-9004

AQUA PENNSYLVANIA
PO BOX 70279
PHILADELPHIA PA 19176-0279

002426

00203517813474030000000251547

D1-4

AQUA. An Essential Utilities Company

Service To:
CHRIS A. FAZEKAS & GARRICK A
DUBOIS, PA 15801

Account Number
3
TREASURE LAKE WATER
1157857 PWSID # PA6170048

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489

Toll Free: **877.987.2782**
Fax: **866.780.8292**
AquaAmerica.com

Questions about your water/sewer service? Contact us before the due date.

Bill Date	Total Amount Due	Current Charges Due Date
August 09, 2021	**$ 148.11**	**August 31, 2021**

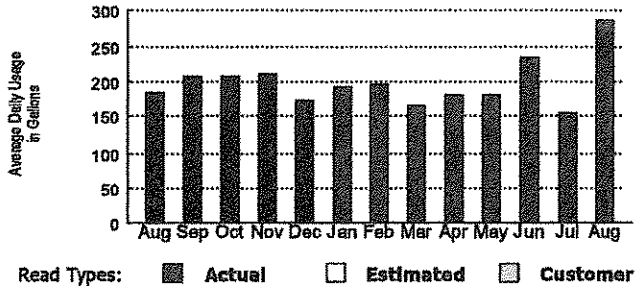
Meter Data

Meter	Size	Billing Period	Days	Read Type	Meter Readings	Usage	Units
13067269	5/8	08/05/21	28	Actual	516500	8,000	Gallons
		07/08/21		Actual	508500		
Average Daily Usage = 285 Gallons		Total Days:	28		Total Usage:	8,000	Gallons

Billing Detail

Amount Owed from Last Bill	$ 115.25
Total Payments Received	115.25
Remaining Balance	**0.00**
Customer Charge Water	18.00
8,000 gallons @ $0.00543 per gallon	43.44
Current Water Charges	61.44
Customer Charge Sewer	31.00
8,000 gallons @ $0.0063 per gallon	50.40
Current Sewer Charges	81.40
Distribution System Improvement Charge (Water)	2.83
Distribution System Improvement Charge (Sewer)	2.44
Amount Due	**$ 148.11**

Water Usage History



Message Center (see reverse side for other information)

- Effective July 1, 2021, the allowable water DSIC is 4.60%. The PA Public Utility Commission permits a maximum water DSIC of 7.50%.
- Effective July 1, 2021, the allowable wastewater DSIC is 3.00%. The PA Public Utility Commission permits a maximum wastewater DSIC of 5%.
- Would you like to quickly and easily learn important information about your water? Please let us know how you want to be contacted via our new automated notification system by clicking on the WaterSmart Alerts button at www.aquaamerica.com.

RETURN THIS PORTION WITH YOUR PAYMENT

AQUA. An Essential Utilities Company

MAKE CHECK PAYABLE TO:
Aqua PA

Account Number

Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue • Bryn Mawr, PA 19010-3489

DUE DATE	TOTAL AMOUNT DUE
08/31/2021	**$148.11**

Please do not remit payment to the above address

Cyc=15TD 1up=3209877 Seq=17810

8-18-21

Amount Enclosed $ 148.11

AUTOSCH 5-DIGIT 15801 C 42 P 3 17810 1 AV 0.395

CHRIS A. FAZEKAS & GARRICK A PERKINS
187 TREASURE LK
DUBOIS PA 15801-9004

AQUA PENNSYLVANIA
PO BOX 70279
PHILADELPHIA PA 19176-0279

00203517813474030000000148116

1 of 1

018210

D:1-2

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 Approval of its Acquisition of the Wastewater System Assets of the City of Beaver Falls	:	Docket No. A-2022-3033138

VERIFICATION

I, Nicholas A. DeMarco, hereby state that the facts above set forth in my Direct Testimony, OCA Statement 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).

DATED: February 14, 2025

Signature: /s/Nicholas A. DeMarco
Nicholas A. DeMarco

Address: 555 Walnut Street
Fifth Floor, Forum Place
Harrisburg, PA 17101

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application of Aqua Pennsylvania Wastewater, Inc. pursuant to Sections 1102 and 1329 of the Public Utility Code for:	:	Docket No. A-2022-3033138
(1) approval of the acquisition of Aqua of the wastewater system assets of the City of Beaver Falls situated within City of Beaver Falls Eastvale Borough, and West Mayfield Borough, Beaver County, Pennsylvania;	:	
(2) approval of the right of Aqua to begin to offer, render, furnish and supply wastewater service to the public in the City of Beaver Falls, Beaver County, Pennsylvania; and	:	
(3) an order approving the acquisition that includes the ratemaking rate base of the City of Beaver Falls wastewater system assets pursuant to Section 1329(c)(2) of the Public Utility Code.	:	
Request for Approval of Contracts, including Assignments of Contracts, between Aqua and the City of Beaver Falls, Pursuant to Section 507 of the Public Utility Code	:	
Request for Approval to Modify Agreements with Municipal Corporations to be assigned by Aqua Upon Closing of the Acquisition by Aqua of the Wastewater System Assets of Beaver Falls, to the extent such modifications are necessary, Pursuant to Section 508 of the Public Utility Code	:	

CORRECTED DIRECT TESTIMONY
OF
DAVID J. GARRETT

ON BEHALF OF
THE PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

Date Served: February 14, 2025
Corrected Version Served: March 7, 2025

TABLE OF CONTENTS

LIST OF EXHIBITS

I. INTRODUCTION

Q. State your name and occupation.

A. My name is David J. Garrett. I am a consultant specializing in public utility regulation. I am the managing member of Resolve Utility Consulting, PLLC.

Q. Summarize your educational background and professional experience.

A. I received a B.B.A. with a major in Finance, an M.B.A. and a Juris Doctor from the University of Oklahoma. I worked in private legal practice for several years before accepting a position as assistant general counsel at the Oklahoma Corporation Commission in 2011. At the Oklahoma Commission, I worked in the Office of General Counsel in regulatory proceedings. In 2012, I began working for the Public Utility Division as a regulatory analyst providing testimony in regulatory proceedings. After leaving the Oklahoma Commission, I formed Resolve Utility Consulting, PLLC, where I have represented various consumer groups, state agencies, and municipalities in utility regulatory proceedings, primarily in the areas of cost of capital and depreciation. I am a Certified Depreciation Professional with the Society of Depreciation Professionals. I am also a Certified Rate of Return Analyst with the Society of Utility and Regulatory Financial Analysts. A more complete description of my qualifications and regulatory experience is included in my curriculum vitae.[1]

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

A. I am testifying on behalf of the Pennsylvania Office of Consumer Advocate ("OCA").

[1] OCA Exhibit DJG-1.

Q. Describe the scope and organization of your testimony.

A. My testimony addresses the application filed by Aqua Pennsylvania Wastewater, Inc. ("Aqua" or the "Company") for the acquisition of the wastewater system assets of the City of Beaver Falls ("Beaver Falls" or the "City"). My testimony responds to the fair market value ("FMV") approaches addressed in the testimony of Harold Walker, III of Gannett Fleming, who sponsors the FMV appraisal commissioned by the City, and the testimony of Dylan W. D'Ascendis, of ScottMadden, who sponsors the appraisal commissioned by Aqua.

II. EXECUTIVE SUMMARY

A. Overview

Q. Please summarize Aqua's application in this proceeding.

A. In its application, Aqua proposes to acquire the City's wastewater assets under Sections 507, 1102, 1329 and 2102 of the Public Utility Code (the "Code"). According to Section 1329(c)(2) of the Code, the ratemaking rate base is the lesser of the negotiated purchase price or the average of two FMV appraisals. The FMV estimated by Gannett Fleming and ScottMadden is $44.3 million and $40.2 million, respectively, which equate to an average valuation of $42.2 million.[2] The purchase price negotiated by Aqua and the City is $41,250,000. This is also the amount of proposed rate base in the application.[3]

[2] Application, p. 18, ¶ 56.

[3] *Id*.

Q. Please summarize the FMV appraisals commissioned by the Company and the City.

A. Gannett Fleming and ScottMadden provided appraisals using the cost, income, and market approaches, as set forth in Section 1329(a)(3) of the Code. The following table outlines the results of Gannett Fleming's appraisal.[4]

Figure 1:
Gannett Fleming Appraisal Results

Approach	Base Value	Weight	Weighted Value
Market	$ 50,664,671	37.5%	$ 18,999,252
Cost	32,994,154	25.0%	8,248,539
Income	45,450,675	37.5%	17,044,003
Total		100.0%	$ 44,291,793

As shown in the table, the weighted average FMV estimated by Gannett Fleming is $44.3 million. The table below shows the results of ScottMadden's appraisal.[5]

Figure 2:
ScottMadden Appraisal Results

Approach	Base Value	Weight	Weighted Value
Market	$ 46,817,319	45.0%	$ 21,067,794
Cost	11,446,928	10.0%	1,144,693
Income	39,970,803	45.0%	17,986,861
Total		100.0%	$ 40,199,348

[4] Beaver Falls Statement No. 6, Direct Testimony of Harold Walker, III, p. 13, lines 18-19; Mr. Walker rounded the total to $44,292,000.

[5] Aqua Statement No. 5, Direct Testimony of Dylan W. D'Ascendis, p. 13, Table 2.

The weighted average FMV estimated by ScottMadden is $40.2 million. As discussed further in my testimony, the estimates provided by both UVEs under all three approaches are influenced by several unreasonable and upwardly biased assumptions.

Q. Please summarize your adjustments to the FMV appraisals.

A. The table below outlines my proposed adjusted valuations to Gannett Fleming's appraisal under all three approaches.[6]

Figure 3:
Adjustments to Gannett Fleming Appraisal

Approach	OCA Adjustment	Adjusted Value	OCA Weight	OCA Weighted Value
Market	$ (26,581,148)	$ 24,083,523	33.3%	$ 8,027,841
Cost	(21,547,226)	11,446,928	33.3%	3,815,643
Income	(22,096,063)	23,354,612	33.3%	7,784,871
Total				$ 19,628,354

Applying reasonable adjustments to Gannett Fleming's appraisal results in a weighted average FMV of $19.6 million. The table below outlines my adjustments to ScottMadden's appraisal.[7]

[6] OCA Exhibit DJG-2.

[7] *Id*.

Figure 4:
Adjustments to ScottMadden Appraisal

Approach	OCA Adjustment	Adjusted Value	OCA Weight	OCA Weighted Value
Market	$ (22,733,796)	$ 24,083,523	33.3%	$ 8,027,841
Cost	-	11,446,928	33.3%	3,815,643
Income	(16,616,191)	23,354,612	33.3%	7,784,871
Total				$ 19,628,354

In this case, I accepted the results of Mr. D'Ascendis's cost approach valuation. Applying reasonable adjustments to ScottMadden' appraisal results in a weighted average FMV of $19.6 million. As shown in these tables, I applied equal weightings to all three approaches. The detailed technical aspects of my adjustments to these appraisals are discussed below.

B. Recommendation

Q. Please summarize your recommendation to the Commission.

A. As stated above, according to Section 1329(c)(2) of the Code, the ratemaking rate base is the lesser of the negotiated purchase price and the average of the two FMV appraisals. In this case, both UVEs' FMV estimates were higher than the purchase price of $41.3 million. However, when reasonable adjustments are applied to the appraisals, and those adjusted results are averaged, the indicated FMV estimate is $19.6 million, which is less than the negotiated purchase price. The results are summarized in the table below.[8]

[8] *See* OCA Exhibit DJG-2.

Figure 5:
OCA's Recommended Rate Base

	Appraiser Results	OCA Adjusted
Gannett Fleming	$ 44,292,000	$ 19,628,354
AUS Consultants	40,199,348	19,628,354
Average	$ 42,245,674	$ 19,628,354
Purchase Price	$ 41,250,000	$ 41,250,000
Proposed Ratebase	**$ 41,250,000**	**$ 19,628,354**

If the transaction is approved, I recommend the Commission authorize a ratemaking rate base in the amount of $19,628,354 pursuant to Section 1329(c)(2) of the Code.

III. MARKET APPROACH

Q. What is the market approach?

A. The Market Approach involves comparing an asset with similar assets that have been sold or are for sale in the relevant marketplace by making adjustments to prices based on marketplace conditions and the properties' characteristics of value.[9]

Q. Please summarize the UVEs' valuations under the market approach.

A. Gannett Fleming estimates a market approach valuation of $50.7 million[10] and ScottMadden estimates a market approach valuation of $46.8 million.[11] The details of these estimates as well as my proposed adjustments are discussed further below.

[9] https://www.appraisers.org/docs/default-source/5---standards/bv-standards-feb-2022.pdf?sfvrsn=5c9e5ac0_3

[10] Beaver Falls Statement No. 6, Direct Testimony of Harold Walker, III, p. 13, lines 18-19.

[11] Aqua Statement No. 5, Direct Testimony of Dylan W. D'Ascendis, p. 13, Table 2.

Q. Please describe Gannett Fleming's market approach valuation.

A. In his appraisal, Mr. Walker used the market multiples method and selected transactions method.

Q. Please describe Mr. Walker's "selected transactions" and "market multiples" methods used in his market approach valuation.

A. In Mr. Walker's selected transactions method, he estimates the valuation of the City system using ratios based on financial and demographic statistics from other acquired systems under Section 1329 proceedings. Mr. Walker's selected transactions method indicates a valuation of $33.3 million.[12] Under his Market Multiples method, Mr. Walker indicates a valuation of $39.3 million.[13] I will address each of these methods below.

Q. Do you believe the results of Mr. Walker's selected transactions method indicate a reasonable valuation?

A. No. Mr. Walker makes several assumptions and applies unequal weightings to his results that appear to be upwardly biased and ultimately increase his final indicated values. For example, using the demographic statistics (customers and population) under the selected transactions method indicates a higher value than using the capital statistics (capital, PP&E, etc.). Without a rational explanation, Mr. Walker simply applies a 75% weighting to the higher demographic statistics, and only a 25% weighting to the capital statistics.[14] Mr. Walker's application of these weightings is arbitrary and lacks any meaningful support, as further discussed below.

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[12] Aqua Exhibit R, Gannett Fleming Fair Market Value Appraisal, Exhibit 20.

[13] *See* Aqua Exhibit R, Gannett Fleming Fair Market Value Appraisal, Exhibit 17, p. 1.

[14] *See* Aqua Exhibit R, Gannett Fleming Fair Market Value Appraisal, Exhibit 17, p. 1 (footnote).

Q. Please illustrate the results of the selected transaction method without making any selective or unequal or biased weightings or assumptions.

A. In his exhibits, Mr. Walker provides the key metrics for 20 different "comparable transactions" involving the sales of water and wastewater systems in Pennsylvania.[15] He also provides the same metrics for Beaver Falls. These metrics include: investor supplied capital, gross PP&E, net PP&E, customers, and population. If all of these transactions are considered, and an equal weighting is applied to each transaction without any upwardly biased decisions or assumptions, the indicated valuation using Mr. Walker's own transactions and metrics is significantly less than his ultimate proposed valuation under the market approach. The figure below presents the 20 transactions selected by Mr. Walker and the key metrics he provided related to each transaction.[16]

[15] *Id*. at Exhibit 18, pp. 2-3.

[16] *See* OCA Exhibit DJG-3.

Figure 6:
Selected Transactions and Metrics (000's)

System Name	Purchase Price	Investor Capital	Gross PP&E	Net PP&E	Cust.	Pop.
Municipal Authority of the City of Mckeesport	$156,000	$83,903	$91,436	$73,814	13	46
New Garden Township/Authority's WW System's Assets	29,500	23,001	25,988	17,967	2	12
Limerick Township Wastewater System's Assets	75,100	43,502	60,847	36,114	5	19
Steelton Borough (Water) Authority	22,500	-	-	-	2	6
Exeter Township Wastewater System Assets	96,000	-	-	-	9	28
Kane Borough Authority Wastewater System	17,560	10,809	20,266	8,898	2	5
Borough of Royersford Wastewater System Assets	13,000	4,703	6,883	4,546	2	5
York City Sewer Authority Wastewater System Assets	235,000	100,493	120,655	78,592	14	81
Sadsbury Township Wastewater Utility	9,250	-	-	-	1	4
East Bradford Township Wastewater System Assets	5,000	1,299	-	-	1	10
Township of Mahoning Water System Assets	4,735	-	-	-	1	4
Township of Mahoning Sewer System Assets	4,765	-	-	-	1	4
Cheltenham Township Wastewater System Assets	50,250	-	-	-	10	38
East Norriton Township Wastewater System Assets	21,000	4,055	-	-	5	14
Valley Township Water System Assets	7,325	-	-	-	2	7
Valley Township Wastewater System Assets	13,950	-	-	-	3	7
Upper Pottsgrove Township Wastewater System Assets	13,750	-	15,295	11,549	1	6
Lower Makefield Township Wastewater System Assets	53,000	16,525	-	17,592	11	33
Willistown Township Wastewater Systems Assets	17,500	9,867	8,674	4,888	2	11
East Whiteland Township Wastewater System Assets	54,930	42,513	48,673	34,144	4	15

Under the selected transactions method, we are essentially trying to estimate the appropriate purchase price for Beaver Falls by equating the capital and demographics metrics for the comparable transactions to those of Beaver Falls. For example, the mathematical relationship between the investor capital and purchase price of the McKeesport transaction could be described as a ratio of 1.9 (or 156,000 / 83903). Using that ratio and the investor supplied capital for Beaver Falls of $8.1 million indicates a purchase price of $15.1 million. In other words, the mathematical relationship between capital and purchase price for McKeesport indicates a fair purchase price of $15.1 million for Beaver Falls. Under the selected transactions method, we can perform the same

calculation for all of the comparable companies using all five capital and demographic metrics. The results of these calculations are summarized in the following figure:[17]

Figure 7:
Selected Transaction Indicated Valuations (000's)

System Name	Investor Capital	Gross PP&E	Net PP&E	Cust.	Pop.
Municipal Authority of the City of Mckeesport	$ 15,148	$22,006	$16,592	$39,781	$52,304
New Garden Township/Authority's WW System's Assets	10,449	14,641	12,890	53,530	38,031
Limerick Township Wastewater System's Assets	14,065	15,920	16,326	45,190	62,244
Steelton Borough (Water) Authority				29,663	59,095
Exeter Township Wastewater System Assets				34,825	54,174
Kane Borough Authority Wastewater System	13,235	11,176	15,494	28,345	58,899
Borough of Royersford Wastewater System Assets	22,520	24,361	22,452	26,546	39,298
York City Sewer Authority Wastewater System Assets	19,051	25,123	23,474	55,711	45,241
Sadsbury Township Wastewater Utility				30,206	37,432
East Bradford Township Wastewater System Assets	31,368			13,057	7,835
Township of Mahoning Water System Assets				13,011	17,489
Township of Mahoning Sewer System Assets				10,703	17,601
Cheltenham Township Wastewater System Assets				16,026	20,689
East Norriton Township Wastewater System Assets	42,190			13,782	22,886
Valley Township Water System Assets				14,303	15,231
Valley Township Wastewater System Assets				14,548	29,006
Upper Pottsgrove Township Wastewater System Assets		11,595	9,347	31,380	38,739
Lower Makefield Township Wastewater System Assets	26,129		23,652	15,490	24,874
Willistown Township Wastewater Systems Assets	14,450	26,024	28,110	24,862	24,313
East Whiteland Township Wastewater System Assets	10,526	14,557	12,630	45,961	58,139
Average	$ 19,921	$18,378	$18,097	$27,846	$36,176
Indicated Valuation			**$ 24,083,523**		

Using an equal weighting of all comparable transactions under this approach, the indicated valuation of the Beaver Falls system is $24.1 million.

[17] *See* OCA Exhibit DJG-3.

Q. Were there additional adjustments you could have made that would have lowered the indicated valuation under this approach?

A. Yes. To be clear, the calculations presented in the figure above represent all of the comparable 1329 transactions and associated metrics provided in Mr. Walker's exhibits, without adjustment. The final indicated valuation of $24.1 million represents an equal weighting of all transactions. This result is significantly less than Mr. Walker's market approach valuation of $50.6 million. I made no decisions or assumptions that might have had an increasing or decreasing effect on the final results. However, additional adjustments could be made that would have a decreasing effect on the results. For example, instead of using the negotiated purchase price for the ratio calculation of each metric, the commission-approved rate base could have been used instead. It is not uncommon for the commission-approved rate base to be less than the negotiated purchase price, which would have a decreasing effect on the indicated valuations under the market approach. The argument in favor of using the approved rate base instead of the negotiated purchase price is that the approved rate base is effectively the actual approved fair market value as defined by Section 1329. The entire purpose of the appraisal process is to determine a fair market value ratemaking rate base for the City under Section 1329. However, I conservatively used the negotiated purchase prices in my analysis.

An additional adjustment that could have been considered is applying a greater weighting to the indicated valuations using the capital statistics than those using the demographic statistics. Arguably, capital statistics are more directly linked to indicated valuations than statistics such as population and customers. In fact, valuation methods such as the discounted cash flow ("DCF") method (discussed later in my testimony) *only*

consider financial metrics, and do not account for any demographic metrics. In that regard, if one were using the DCF method to conduct a valuation, capital statistics would receive a 100% weighting, and demographic statistics would receive a 0% weighting. In addition, metrics such as PP&E are tangible capital assets on a company's balance sheet that are used to generate revenues and profits. Investors would directly consider this type of metric when assessing the value of a company they were considering investing in – much more so than the current demographic statistics in a particular area. Despite this, Mr. Walker actually applied a three-fold *greater* weighting to the indicated valuation of the demographic statistics over the financial statistics. This decision does not appear to be tied to any objective approach to determining a fair market value of the system assets. Mr. Walker has not provided an adequate explanation as to why the level of customers and population should be primary drivers of a fair market valuation when compared with capital and financial metrics. In contrast to Mr. Walker's approach, I decided not to make the adjustments discussed above, which would have had a decreasing effect on the final results, despite the fact there are rational and objective arguments in favor of making those adjustments. This approach further indicates the fairness and reasonableness of my proposed adjustments.

Q. Does Mr. Walker's market multiples approach suffer from the same upwardly biased assumptions?

A. Yes. Under Mr. Walker's market multiples method, he uses a proxy group of publicly traded water companies and considers several metrics, such as revenue, EBIT, gross PP&E,

and net PP&E.[18] The adjustments Mr. Walker makes to his results under the market multiples method are based in part on his conclusory and unsupported assumptions that the Beaver Falls system is riskier than the proxy group simply because of its relatively small size.

Q. Do you agree with Mr. Walker that the City's system is riskier than the proxy group due to its size?

A. No. The "size effect" phenomenon, upon which Mr. Walker's assumptions are apparently based, arose from a 1981 study conducted by Banz, which found that "in the 1936 – 1975 period, the common stock of small firms had, on average, higher risk-adjusted returns than the common stock of large firms."[19] According to Ibbotson, Banz's size effect study was "[o]ne of the most remarkable discoveries of modern finance."[20] Perhaps there was some merit to this idea at the time, but the size effect phenomenon was short lived. Banz's 1981 publication generated much interest in the size effect and spurred the launch of significant new small cap investment funds. However, this "honeymoon period lasted for approximately two years. . . ." [21] After 1983, U.S. small-cap stocks actually underperformed relative to large cap stocks. In other words, the size effect essentially reversed. In *Triumph of the Optimists*, the authors conducted an extensive empirical study

[18] Aqua Exhibit R, Gannett Fleming Fair Market Value Appraisal, p. 42.

[19] Rolf W. Banz, *The Relationship Between Return and Market Value of Common Stocks* 3-18 (Journal of Financial Economics 9 (1981)).

[20] 2015 Ibbotson Stocks, Bonds, Bills, and Inflation Classic Yearbook 99 (Morningstar 2015).

[21] Elroy Dimson, Paul Marsh & Mike Staunton, *Triumph of the Optimists: 101 Years of Global Investment Returns* 131 (Princeton University Press 2002).

of the size effect phenomenon around the world. They found that after the size effect phenomenon was discovered in 1981, it disappeared within a few years:

> It is clear . . . that there was a global reversal of the size effect in virtually every country, with the size premium not just disappearing but going into reverse. Researchers around the world universally fell victim to Murphy's Law, with the very effect they were documenting – and inventing explanations for – promptly reversing itself shortly after their studies were published.[22]

In other words, the authors assert that the very discovery of the size effect phenomenon likely caused its own demise. The authors ultimately concluded that it is "inappropriate to use the term 'size effect' to imply that we should automatically expect there to be a small-cap premium," yet, this is exactly what utility witnesses often do in attempting to artificially inflate the cost of equity with a size premium. Other prominent sources have agreed that the size premium is a dead phenomenon. According to Ibbotson:

> The unpredictability of small-cap returns has given rise to another argument against the existence of a size premium: that markets have changed so that the size premium no longer exists. As evidence, one might observe the last 20 years of market data to see that the performance of large-cap stocks was basically equal to that of small cap stocks. In fact, large-cap stocks have outperformed small-cap stocks in five of the last 10 years.[23]

In addition to the studies discussed above, other scholars have concluded similar results. According to Kalesnik and Beck:

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[22] *Id*. at 133.

[23] 2015 Ibbotson Stocks, Bonds, Bills, and Inflation Classic Yearbook 112 (Morningstar 2015).

> Today, more than 30 years after the initial publication of Banz's paper, the empirical evidence is extremely weak even before adjusting for possible biases. . . . The U.S. long-term size premium is driven by the extreme outliers, which occurred three-quarters of a century ago. . . . Finally, adjusting for biases . . . makes the size premium vanish. If the size premium were discovered today, rather than in the 1980s, it would be challenging to even publish a paper documenting that small stocks outperform large ones.[24]

For all of these reasons, Mr. Walker's claims that the Beaver Falls system is risker than the proxy group and should thus somehow receive an upward adjustment in valuation, is unwarranted and should be rejected.

Q. Even if Mr. Walker's assumptions about risk were accepted, could the overall valuation under the market multiples method be considered reasonable if more reasonable weightings were given to the results?

A. Yes. As with the selected transactions method, Mr. Walker inexplicably gives a 3 to 1 preference for indicated valuations using demographic statistics over financial metrics. When investors are attempting to value assets and stocks, they almost exclusively consider financial metrics, not demographics. This fact can be directly observed in the financial models that investors have used for decades, including the capital asset pricing model ("CAPM") and Discounted Cash Flow Model ("DCF Model"). These models exclusively consider financial metrics, such as dividends, earnings growth, the risk-free rate, etc., and do not consider demographics at all. If we were to switch Mr. Walker's weightings to more appropriately give more credit to financial metrics over demographics, then his indicated

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[24] Vitali Kalesnik and Noah Beck, *Busting the Myth About Size* (Research Affiliates 2014), available at https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwic84ykqNL_AhWmmWoFHbwzCpcQFnoECAsQAQ&url=https%3A%2F%2Fwww.researchaffiliates.com%2Fcontent%2Fdam%2Fra%2Fpublications%2Fpdf%2F284-busting-the-myth-about-size.pdf&usg=AOvVaw3Yw7SggIT0R8KvzGmYkuAp&opi=89978449 (emphasis added).

valuation under his own market multiples approach (even using all of his other questionable assumptions about risk) is only $25.6 million.[25] Interestingly, this result is substantially similar to my adjusted valuation under the market approach of $24.1 million. However, if I were to apply a 75% weighting to my capital metrics under the selected transaction method (and a 25% weighting to demographic statistics), the indicated valuation under my adjusted market approach would be $22.1 million. If capital items were exclusively considered, which would arguably be a reasonable approach, then the indicated valuation falls even further to only $18.8 million.[26] This further highlights the reasonableness of my adjusted valuation of $24.1 million under the market approach.

Q. Please summarize Mr. D'Ascendis's market value approach.

A. Mr. D'Ascendis factors results as high as $62.3 million into his market valuations, which grossly exceed all other indicated valuations presented in this case, including others from Mr. D'Ascendis. **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFDIENTIAL]** and it results in an indicated valuation of $62.3 million.[27] His ultimate market valuation is less than this because **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

[25] See Aqua Exhibit R, Gannett Fleming Fair Market Value Appraisal, Exhibit 17, p. 1 (using 75% weighting for capital items rather than demographic items).

[26] See OCA Exhibit DJG-3 (averaging the results of the indicated valuations under the three capital metrics).

[27] *See* Confidential workpapers of Dylan W. D'Ascendis, 2.4-5 Market Comparison.

[28] *Id*.

Q. Do you believe Mr. D'Ascendis's market value approach results indicate a fair and reasonable valuation for the Beaver Falls system under the market approach?

A. No. Instead of relying on the financial metrics discussed above as part of the selected transactions approach that both Mr. Walker and I considered, such as investor capital and PP&E, Mr. D'Ascendis considered **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** This approach is clearly inferior to an approach which considers the actual financial metrics of the selected transactions discussed above. In valuing any asset, using **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL].** For these reasons, the Commission should reject the indicated valuations under Mr. D'Ascendis's market approach.

IV. COST APPROACH

Q. What is the Cost Approach?

A. The Cost Approach is a procedure to estimate the current costs to reproduce or create a property with another of comparable use and marketability.[30]

[29] *See* Confidential workpapers of Dylan W. D'Ascendis, 2.4-5 Market Comparison.

[30] https://www.appraisers.org/docs/default-source/5---standards/bv-standards-feb-2022.pdf?sfvrsn=5c9e5ac0_3

Q. Please summarize the UVEs' valuations under the cost approach.

A. Gannett Fleming's appraisal considers the original cost method and the replacement cost method,[31] and ScottMadden' appraisal relied on the reproduction cost new less depreciation ("RCNLD") method.[32] Both UVEs estimated accumulated depreciation, or the depreciation "reserve", as a reduction to their respective cost estimates.

Q. Please provide more details regarding Mr. D'Ascendis's RCNLD method.

A. According to the ScottMadden appraisal, the first step of the method is arriving at the "reproduction cost new" for the assets. ScottMadden began with the original cost of the assets provided by the Engineering Assessment. In certain instances, original costs were not available. In those instances, Gannett Fleming (Mr. Walker's firm) provided estimated probable replacement costs. ScottMadden then used the Handy-Whitman Index (the "Index") to determine the current reproduction value or original cost.[33] According to Mr. D'Ascendis, the next step in deriving the RCNLD for Beaver Falls was to quantify the amount of physical deterioration, functional obsolescence, and economic obsolescence of the assets, a process in which he relied in part on the Engineering Assessment conducted by Mr. Walker's firm.[34] To calculate the depreciation reserve, Mr. D'Ascendis estimated the useful life for each asset, then he reduced the original cost of each asset each year by 1

[31] *See* Aqua Exhibit R, Gannett Fleming Fair Market Value Appraisal, pp. 23-33.

[32] *See* Aqua Exhibit Q, ScottMadden Valuation Report, p. 3 *et seq*.

[33] *Id*. at p. 4.

[34] Aqua Statement No. 5, Direct Testimony of Dylan W. D'Ascendis, p. 8, lines 2-3 and pp. 14-15.

/ useful life until the asset was fully depreciated or through 2021, which ever one came first and put that value into the depreciation reserve.[35]

Q. In your opinion, was Mr. D'Ascendis's approach using the RCNLD reasonable?

A. Yes. I reviewed Mr. D'Ascendis's workpapers, including his service life estimates for the system assets. I do not propose any adjustments to his indicated valuation under this approach.

Q. Do the results of Mr. D'Ascendis's cost approach fall within the range of Mr. Walker's cost approach using the original cost new less depreciation ("OCNLD") and RCNLD methods?

A. Yes. According to Mr. Walker, the results of the OCNLD and RCNLD Cost Approaches show a range of value for the Beaver Falls system $7.9 million to $33.0 million.[36]

Q. Please describe your adjustment to Mr. Walker's estimated valuation under the cost approach.

A. My proposed adjustment of $21.5 million to Mr. Walker's cost approach valuation is simply the difference between his and Mr. D'Ascendis's cost approach valuations.

V. INCOME APPROACH

Q. Please summarize the income approach valuations estimated in the UVEs' appraisals.

A. Mr. Walker and Mr. D'Ascendis estimate income approach valuations of $45.5 million and $40.0 million, respectively.[37]

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[35] *Id*. at p. 15-20.

[36] Aqua Exhibit R, Gannett Fleming Fair Market Value Appraisal, p. 28.

[37] OCA Exhibit DJG-2.

Q. Are you proposing any adjustments to the UVEs' valuations under the income approach?

A. Yes. I propose adjustments reducing Mr. Walker's and Mr. D'Ascendis's income approach valuations by $22.1 million and $16.6 million, respectively.[38] I am proposing several adjustments to the income approaches of each UVE, including the amount of projected annual cash flow, the discount rate, and the growth rate used in their discounted cash flow models. Adjustments to the discount rate involve using a fundamental approach to estimating the cost of equity of the City through the use of financial modeling of a proxy group of utilities, which is further discussed below.

Q. Please summarize your income approach adjustment.

A. My income approach adjustment is based on the theory that assets that are expected to generate cash flows over time can be valued with various discounted cash flow models. While this basic premise also underlies the approach taken by the UVEs in their income approach valuations, I believe several reasonable adjustments are warranted, as further discussed in this section. Under this valuation method, the value of an asset (the City's wastewater system assets in this case), is equal to the present value of its future cash flows. This model also requires estimates for a growth rate and discount rate. For publicly traded assets, we can use the dividend discount model. A derivation of this model that solves for the discount rate is called the Discounted Cash Flow ("DCF") model in regulatory proceedings. However, since Beaver Falls is not publicly traded and does not issue dividends, we must consider its estimated free cash flow from operations, rather than

[38] *Id*.

dividends, as part of the valuation model.[39] I also proposed adjustments to the UVEs' long-term growth rate and discount rate, which are both key inputs to the DCF Model. Under the DCF Model used for the valuation adjustment in this case, the discount rate is the asset's estimated cost of capital.[40] My adjustment is the result of applying these reasonable estimates to the UVE income approaches.

A. Free Cash Flow From Operations

Q. Please summarize how you adjusted the City's free cash flows from operations.

A. First, I considered the average amount of operating revenues, earnings before interest and taxes ("EBIT"), depreciation, and capital expenditures for year 2021 (which is referred to as "Year 0" in Mr. Walker's income approach modeling) to calculate free cash flow from operations as the basis for discounted cash flow analysis.[41] This amount of annual projected cash flows will be grown at a constant growth rate and discounted back to present value using the estimate weighted average cost of capital as the discount rate. This present value amount is the indicated valuation under the income approach.

[39] OCA Exhibit DJG-5.

[40] The discount rate in DCF Model applied to publicly traded firms is the cost of equity, since the cash flows under that model are cash flows to equity (i.e., post debt dividend payments). In the discounted cash flow valuation model applied to the City, the discount rate is the cost of capital, since we are assuming cash flows to the firm (i.e., pre-debt cash flows).

[41] *See* Aqua Exhibit R, Gannett Fleming Fair Market Value Appraisal, Exhibit 13, p. 1.

B. Discount Rate – Cost of Capital

Q. Please summarize how you adjusted the City's cost of capital.

A. The weighted cost of capital essentially involves several key components, including the cost of debt, the cost of equity, and the capital structure. In terms of estimation, the most critical of these components is the cost of equity. To arrive at my adjusted cost of equity, I considered a proxy group of water utilities substantially similar to the proxy group considered by the UVEs. There are several benefits of using a proxy group when estimating the cost of equity for a regulated utility company. Frequently, the most apparent reason, as is the case here, is that the target asset is often not publicly traded. Publicly traded assets have readily obtainable data regarding some of the key components to cost of equity estimation, including stock prices, dividends, and beta estimates. Because I used the proxy group of utilities for the cost of equity adjustment, I used the same group for the cost of debt and capital structure estimates. This is because these elements of the cost of capital are related. Higher debt ratios can have an increasing effect on the cost of debt and equity (though sometimes a decreasing effect on the overall cost of capital to a certain point). I will discuss my adjustments regarding the individual components of the cost of capital in the following sections.

Q. What is your adjusted cost of capital for the City?

A. The following table summarizes my cost of capital adjustment for the City.[42]

[42] OCA Exhibit DJG-6.

Figure 8:
Cost of Capital Adjustment

Capital Component	Proposed Ratio	Cost Rate	After-Tax Rate	Weighted Cost
Long Term Debt	47%	4.0%	2.9%	1.35%
Equity	53%	7.8%	7.8%	4.14%
Total	100%			5.48%

The capital composition and rates contemplated in this calculation produce a cost of capital estimate of 5.48%. This is the figure I used in the discount rate of my discounted cash flow adjustment for the City.[43]

Q. How does your cost of capital adjustment compare to the UVEs' cost of capital estimates?

A. Mr. Walker estimates a range for the cost of capital of 6.59% – 8.50%.[44] Mr. D'Ascendis estimates a cost of capital of 6.62%.[45] Thus, my adjusted cost of capital is less than the estimate of both UVEs. All else held constant, a lower discount rate produces a higher indicated valuation under the income approach. The differences in our cost of capital estimates stem from the differences between the various components of the cost of capital – primarily the cost of equity and capital structure, which are further discussed below.

[43] *See* OCA Exhibit DJG-4.

[44] Beaver Falls Statement No. 6, Direct Testimony of Harold Walker, III, p. 21, line 13.

[45] Aqua Statement No. 5, Direct Testimony of Dylan W. D'Ascendis, p. 21, Table 3.

C. Cost of Equity

Q. Describe the cost of equity.

A. The cost of equity refers to the required return on equity expected from a company's equity investor based on the risk inherent in that investment. The required return from the investors' perspective is synonymous with the *cost* from the company's perspective. Unlike the known, contractual and embedded cost of debt, there is not any explicitly quantifiable "cost" of equity. Instead, the cost of equity must be estimated through various financial models. The two most widely used financial models to estimate the cost of equity (particularly in regulatory proceedings) are the DCF Model and the Capital Asset Pricing Model (the "CAPM"). I applied each of these models to the same proxy group in order to calculate my adjustment to the City's cost of equity.

1. DCF Analysis

Q. Describe the inputs to the DCF Model.

A. There are three primary inputs in the DCF Model: (1) stock price; (2) dividend; and (3) the long-term growth rate. The stock prices and dividends are known inputs based on recorded data, while the growth rate projection must be estimated. Further details regarding the theories of the DCF Model are discussed in Appendix B.

Q. How did you determine the stock price input of the DCF Model?

A. For the stock price (P_0), I used a 30-day average of stock prices for each company in the proxy group.[46] Analysts sometimes rely on average stock prices for longer periods (*e.g.*, 60, 90, or 180 days). According to the efficient market hypothesis, however, markets reflect all relevant information available at a particular time, and prices adjust instantaneously to the arrival of new information.[47] Past stock prices, in essence, reflect outdated information. The DCF Model used in utility rate cases is a derivation of the dividend discount model, which is used to determine the current value of an asset. Thus, according to the dividend discount model and the efficient market hypothesis, the value for the "P_0" term in the DCF Model should technically be the current stock price, rather than an average.

Q. Why did you use a 30-day average for the current stock price input?

A. Using a short-term average of stock prices for the current stock price input adheres to market efficiency principles while avoiding any irregularities that may arise from using a single current stock price. In the context of a utility rate proceeding, there is a significant length of time from when an application is filed, and testimony is due.[48] Choosing a current

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[46] Exhibit OCA DJG-8.

[47] *See* Eugene F. Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, Vol. 25, No. 2 The Journal of Finance 383 (1970); *see also* John R. Graham, Scott B. Smart & William L. Megginson, *Corporate Finance: Linking Theory to What Companies Do* 357 (3rd ed., South Western Cengage Learning 2010). The efficient market hypothesis was formally presented by Eugene Fama in 1970 and is a cornerstone of modern financial theory and practice.

[48] Further, it is worth noting that my market and financial analyses is based on much more recent and relevant information than those of Mr. Walker and Mr. D'Ascendis due to the significant difference in time during which the analysis was conducted. Mr. D'Ascendis and Mr. Walker filed their respective testimonies on February 23, 2023. However, this application was not formally accepted by the Commission until December 31, 2024. Neither Mr. D'Ascendis nor Mr. Walker updated their direct testimony to reflect current market conditions.

stock price for one particular day could raise a separate issue concerning which day was chosen to be used in the analysis. In addition, a single stock price on a particular day may be unusually high or low. It is arguably ill-advised to use a single stock price in a model that is ultimately used to set rates for several years, especially if a stock is experiencing some volatility. Thus, it is preferable to use a short-term average of stock prices, which represents a good balance between adhering to well-established principles of market efficiency while avoiding any unnecessary contentions that may arise from using a single stock price on a given day. The stock prices I used in my DCF analysis are based on 30-day averages of adjusted closing stock prices for each company in the proxy group.[49]

Q. Describe how you determined the dividend input of the DCF Model.

A. The dividend term in the DCF Model represents dividends per share (d_0). I used forward-looking annualized dividends published by Yahoo! Finance for the dividend input to my constant growth DCF Model.[50] Dividing these dividends by the stock prices for each proxy company results in the dividend yield for each company.[51]

Q. Please summarize the growth rate input in the DCF Model.

A. The most critical input in the DCF Model is the growth rate. Unlike the stock price and dividend inputs, the growth rate input (g) must be estimated. As a result, the growth rate is often the most contentious DCF input in utility rate cases. The DCF model used in this

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[49] Exhibit DJG-4. Adjusted closing prices, rather than actual closing prices, are ideal for analyzing historical stock prices. The adjusted price provides an accurate representation of the firm's equity value beyond the mere market price because it accounts for stock splits and dividends.

[50] Exhibit DJG-5.

[51] *Id*.

case is based on the constant growth valuation model. Under this model, a stock is valued by the present value of its future cash flows in the form of dividends. Before future cash flows are discounted by the cost of equity, however, they must be "grown" into the future by a long-term growth rate. As stated above, one of the inherent assumptions of this model is that these cash flows in the form of dividends grow at a constant rate forever. Thus, the growth rate term in the constant growth DCF model is often called the "constant" or "stable" growth rate. For young, high-growth firms, estimating the growth rate to be used in the model can be especially difficult, and may require the use of multi-stage growth models. For mature, low-growth firms such as utilities, however, estimating the constant growth rate is more transparent.

Q. Should the annual sustainable growth rate used in the DCF Model exceed the annual growth rate of the aggregate economy?

A. No. A fundamental concept in finance is that no firm can grow forever at a rate higher than the growth rate of the economy in which it operates.[52] Thus, the sustainable growth rate used in the DCF Model should not exceed the aggregate economic growth rate. This is especially true when the DCF Model is conducted on public utilities because these firms have defined service territories. As stated by Dr. Damodaran: "[i]f a firm is a purely domestic company, either because of internal constraints . . . or external constraints (such as those imposed by a government), the growth rate in the domestic economy will be the limiting value."[53]

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[52] *See Id.* at p. 306.

[53] *Id.*

In fact, it is reasonable to assume that a regulated utility would grow at a rate that is less than the U.S. economic growth rate. Unlike competitive firms, which might increase their growth by launching a new product line, franchising, or expanding into new and developing markets, utility operating companies with defined service territories cannot do any of these things to grow. Gross Domestic Product ("GDP") is one of the most widely used measures of economic production and is used to measure aggregate economic growth. According to the Congressional Budget Office's 2022 Long-Term Budget Outlook, the long-term forecast for nominal U.S. GDP growth is 3.9%.[54] In contrast, the UVEs used various growth rates over different periods of time, as further discussed below.

Q. How do your adjustments to the DCF Model in this case compare with the approach used by the UVEs?

A. One of the primary differences between the UVEs' DCF Models and my adjustments relate to the time period over which we are discounting the assumed cash flows. In the vast majority of utility rate cases, expert witnesses who apply the DCF Model to estimate the utility's cost of capital use the constant growth form of the DCF Model. That is, annual cash flows are assumed to be consistent, and one growth rate is applied to those cash flows. Very rarely do I see cost of capital witnesses use multi-stage DCF Models, as the UVEs did in this case. In this case, the UVEs have considered cash flows for over 20 years. Again, my application of the DCF Model in this case to arrive at my adjustments to the

[54] Congressional Budget Office, The 2022 Long-Term Budget Outlook, https://www.cbo.gov/system/files/2022-07/57971-LTBO.pdf.

UVEs' income approach valuations is consistent with my approach to the DCF Model in other cases.

Q. Please describe the final results of your DCF Model.

A. My DCF Model cost of equity estimate for the City is 6.7%.[55] This is based on the average DCF result for each company in the proxy group.

2. CAPM Analysis

Q. Describe the CAPM.

A. The CAPM is a market-based model founded on the principle that investors expect higher returns for incurring additional risk.[56] The CAPM estimates this expected return. The various assumptions, theories, and equations involved in the CAPM are discussed further in Appendix C. The CAPM is a useful model because it directly considers the amount of risk inherent in a business.

Q. Describe the inputs for the CAPM.

A. The basic CAPM equation requires only three inputs to estimate the cost of equity: (1) the risk-free rate; (2) the beta coefficient; and (3) the equity risk premium. Here is the CAPM formula:

Equation 1:
Basic CAPM

$$\textbf{Cost of Equity} = \textbf{Risk-free Rate} + (\textbf{Beta} \times \textbf{Equity Risk Premium})$$

[55] *See* OCA Exhibit DJG-7.

[56] William F. Sharpe, *A Simplified Model for Portfolio Analysis* 277–93 (Management Science IX 1963).

Each input is discussed separately below.

A. The Risk-Free Rate

Q. Explain the risk-free rate.

A. The first term in the CAPM is the risk-free rate (R_F). The risk-free rate is simply the level of return investors can achieve without assuming any risk. The risk-free rate represents the bare minimum return that any investor would require on a risky asset. Even though no investment is technically void of risk, investors often use U.S. Treasury securities to represent the risk-free rate because they accept that those securities essentially contain no default risk. The Treasury issues securities with different maturities, including short-term Treasury Bills, intermediate-term Treasury Notes, and long-term Treasury Bonds.

Q. Is it preferable to use the yield on long-term Treasury bonds for the risk-free rate in the CAPM?

A. Yes. In valuing an asset, investors estimate cash flows over long periods of time. Common stock is viewed as a long-term investment, and the cash flows from dividends are assumed to last indefinitely. Thus, short-term Treasury Bill yields are rarely used in the CAPM to represent the risk-free rate. Short-term rates are subject to greater volatility and thus can lead to unreliable estimates. Instead, long-term Treasury bonds are usually used to represent the risk-free rate in the CAPM. I considered a 30-day average of daily Treasury yield curve rates on 30-year Treasury Bonds in my risk-free rate estimate, which resulted in a risk-free rate of 4.64%.[57]

[57] OCA Exhibit DJG-10.

Q. How is the beta coefficient used in this model?

A. As discussed above, beta represents the sensitivity of a given security to movements in the overall market. The CAPM states that in efficient capital markets, the expected risk premium on each investment is proportional to its beta. Recall that a security with a beta greater (or less) than one is more (or less) risky than the market portfolio. An index such as the S&P 500 Index is used as a proxy for the market portfolio. The historical betas for publicly traded firms are published by various institutional analysts. Beta may also be calculated through a linear regression analysis, which provides additional statistical information about the relationship between a single stock and the market portfolio. As discussed above, beta also represents the sensitivity of a given security to the market as a whole. The market portfolio of all stocks has a beta equal to one. Stocks with betas greater than 1.0 are relatively more sensitive to market risk than the average stock. For example, if the market increases (or decreases) by 1.0%, a stock with a beta of 1.5 will, on average, increase (or decrease) by 1.5%. In contrast, stocks with betas of less than 1.0 are less sensitive to market risk. For example, if the market increases (or decreases) by 1.0%, a stock with a beta of 0.5 will, on average, only increase (or decrease) by 0.5%.

Q. Describe the source for the betas you used in your CAPM analysis.

A. I used betas recently published by Value Line Investment Survey. The beta for each proxy company is less than 1.0.[58] Thus, we have an objective measure to prove the well-known concept that utility stocks are less risky than the average stock in the market.

[58] *See* OCA Exhibit DJG-7.

Q. Describe the equity risk premium.

A. The final term of the CAPM is the equity risk premium ("ERP"), which is the required return on the market portfolio less the risk-free rate ($R_M - R_F$). In other words, the ERP is the level of return investors expect above the risk-free rate in exchange for investing in risky securities. To estimate the ERP, I considered expert surveys, an implied ERP calculation, and the ERP published by a third-party financial advising firm.

Q. Describe the expert survey approach to estimating the ERP.

A. As its name implies, the expert survey approach to estimating the ERP involves conducting a survey of experts including professors, analysts, chief financial officers, and other executives around the country and asking them what they think the ERP is. The IESE Business School conducts a periodic survey that asks experts around the country about their opinions on the ERP. Their 2024 expert survey reported an average ERP of 5.5%.[59]

Q. Describe the implied ERP approach.

A. The third method of estimating the ERP is arguably the best. The implied ERP relies on the stable growth model proposed by Gordon, often called the "Gordon Growth Model," which is a basic stock valuation model widely used in finance for many years.[60] This model is a mathematical derivation of the DCF Model. In fact, the underlying concept in both

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[59] Pablo Fernandez, et al., *Survey: market Risk Premium and Risk-Free Rate used for 80 countries in 2023* (IESE Business School 2020), copy available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4407839 IESE Business School is the graduate business school of the University of Navarra. IESE offers Master of Business Administration (MBA), Executive MBA and Executive Education programs. IESE is consistently ranked among the leading business schools in the world.

[60] Myron J. Gordon and Eli Shapiro, *Capital Equipment Analysis: The Required Rate of Profit* 102–10 (Management Science Vol. 3, No. 1 Oct. 1956).

models is the same: the current value of an asset is equal to the present value of its future cash flows. Instead of using this model to determine the discount rate of one company, we can use it to determine the discount rate for the entire market by substituting the inputs of the model. Specifically, instead of using the current stock price (P_0), we will use the current value of the S&P 500 (V_{500}). Similarly, instead of using the dividends of a single firm, we will consider the dividends paid by the entire market. Additionally, we should consider potential dividends. In other words, stock buybacks should be considered in addition to paid dividends, as stock buybacks represent another way for the firm to transfer free cash flow to shareholders. Focusing on dividends alone without considering stock buybacks could understate the cash flow component of the model, and ultimately understate the implied ERP. The market dividend yield plus the market buyback yield gives us the gross cash yield to use as our cash flow in the numerator of the discount model. This gross cash yield is increased each year over the next five years by the growth rate. These cash flows must be discounted to determine their present value. The discount rate in each denominator is the risk-free rate (R_F) plus the discount rate (K). The following formula shows how the implied return is calculated. Since the current value of the S&P is known, we can solve for K: the implied market return.[61]

[61] *See* Exhibit DJG-9 for detailed calculation.

Equation 2:
Implied Market Return

$$V_{500} = \frac{CY_1(1+g)^1}{(1+R_F+K)^1} + \frac{CY_2(1+g)^2}{(1+R_F+K)^2} + \cdots + \frac{CY_5(1+g)^5 + TV}{(1+R_F+K)^5}$$

where:
- V_{500} = *current value of index (S&P 500)*
- $CY_{1\text{-}5}$ = *average cash yield over last five years (includes dividends and buybacks)*
- g = *compound growth rate in earnings over last five years*
- R_F = *risk-free rate*
- K = *implied market return (this is what we are solving for)*
- TV = *terminal value* $= CY_5\,(1+R_F) / K$

The discount rate is called the "implied" return here because it is based on the current value of the index as well as the value of free cash flow to investors projected over the next five years. Thus, based on these inputs, the market is "implying" the expected return; or in other words, based on the current value of all stocks (the index price), and the projected value of future cash flows, the market is telling us the return expected by investors for investing in the market portfolio. After solving for the implied market return (K), we simply subtract the risk-free rate from it to arrive at the implied ERP.

Equation 3:
Implied Equity Risk Premium

$$Implied\ Expected\ Market\ Return - R_F = Implied\ ERP$$

Q. Discuss the results of your implied ERP calculation.

A. After collecting data for the index value, operating earnings, dividends, and buybacks for the S&P 500 over the past six years, I calculated the dividend yield, buyback yield, and gross cash yield for each year. I also calculated the compound annual growth rate (g) from operating earnings. I used these inputs, along with the risk-free rate and current value of the index to calculate a current expected return on the entire market of 9.7%. I subtracted

the risk-free rate to arrive at the implied equity risk premium of 5.1%.[62] Dr. Damodaran, one of the world's leading experts on the ERP, promotes the implied ERP method discussed above. He calculates monthly and annual implied ERPs with this method and publishes his results. Dr. Damodaran's average ERP estimate for January 2025 using several implied ERP variations was 4.5%.[63]

Q. What are the results of your final ERP estimate?

A. For the final ERP estimate I used in my CAPM analysis, I considered the results of the ERP surveys along with the implied ERP calculations and the ERP reported by Kroll (formerly Duff & Phelps).[64] The results are presented in the following figure:

Figure 9:
Equity Risk Premium Results

IESE Business School Survey	5.5%
Kroll (Duff & Phelps) Report	5.0%
Damodaran (average)	4.5%
Garrett	5.1%
Average	**5.0%**

I selected the average ERP estimate of 5.0% to use in my CAPM analysis.

[62] OCA Exhibit DJG-11.

[63] Aswath Damodaran, *Implied Equity Risk Premium Update*, DAMODARAN ONLINE (last visited Nov. 2, 2020) http://pages.stern.nyu.edu/~adamodar/.

[64] OCA Exhibit DJG-12.

Q. Please explain the final results of your CAPM analysis.

A. Using the inputs for the risk-free rate, beta coefficient, and ERP discussed above, I estimate that the CAPM cost of equity is 8.9%.[65]

Q. Please explain how your adjusted CAPM results compare with Mr. D'Ascendis's CAPM results.

A. Mr. D'Ascendis's CAPM cost of equity estimates were notably higher than my adjusted estimate. Specifically, Mr. D'Ascendis estimates an average CAPM cost of equity of **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** Mr. Walker does not appear to conduct a company-specific CAPM for the discount rate used in his income approach valuation. The primary problem with Mr. D'Ascendis's CAPM is the overestimation of the ERP. Mr. D'Ascendis estimates an ERP of 10.09%, which is considerably higher than the 5.0% estimate I discussed above, which is derived from several reasonable and objective sources for the ERP.

Q. Given the results of your DCF and CAPM analyses, what is your estimated cost of equity for the City?

A. To arrive at my cost of equity estimate, I average the indicated cost of equity results of the CAPM (8.2%) and DCF Model (6.0%), to arrive at an overall cost of equity estimate of 7.8%.[67]

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[65] OCA Exhibit DJG-7.

[66] *See* Confidential workpapers of Dylan W. D'Ascendis, H.25 CAPM.

[67] OCA Exhibit DJG-7.

Q. Please summarize your adjustment to Gannett Fleming's and ScottMadden' income approach valuations.

A. Based on my cost of equity and the other cost of capital components discussed above, my adjustments to the UVEs' appraisals result in an adjusted income approach valuation of $23.3 million, which is $22.1 million less than Mr. Walker's valuation of $45.6 million, and it is $16.6 million less than Mr. D'Ascendis's valuation of $40.0 million.[68]

D. Cost of Debt and Capital Structure

Q. Please describe your adjustments to the cost of debt and capital structure.

A. As discussed above, the cost of debt and capital structure are also components that comprise the overall cost of capital. Since I used the utility proxy group to estimate the cost of equity, I used the same group to estimate the cost of debt and capital structure. In addition, I relied on the same source for the information – Value Line Investment Survey. To estimate the cost of debt, I considered the interest expense and long-term debt reported for each of the proxy companies. To estimate the capital structure, I considered the long-term debt ratios for each proxy company. Again, I considered substantially the same proxy group of companies as both UVEs as well as their consideration of Value Line as a source for some of the pertinent financial data used in their analyses, including the debt ratios. My average, adjusted cost of debt (pre-tax) and debt ratio for the proxy group is 4.0% and 47%, respectively.[69]

[68] OCA Exhibit DJG-2.

[69] OCA Exhibit DJG-7.

Q. How does your capital structure adjustment compare with the capital structures used by the UVEs?

A. Mr. Walker utilized a debt ratio of only 22.7%,[70] which is significantly less than the average debt ratio of the proxy group. Assuming an unreasonably low level of debt will have an increasing effect on the estimated cost of capital. This is because the cost of debt is significantly less than the cost of equity, so having less debt (and thus more equity) in the capital structure will increase the cost of capital. Mr. D'Ascendis assumes a capital structure consisting of **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**

Q. Please summarize and illustrate the final results of your proposed adjustments under the income approach.

A. First, I used a Year 0 annual cash flow of $378,971. I then applied an annual, constant growth rate of 3.8%, which is equal to projected long-term GDP growth. I then discounted the projected future cash flows back to present value using the City's estimated weighted average cost of capital of 5.48%. The following figure presents the final results:[72]

[70] Beaver Falls Statement No. 6, Direct Testimony of Harold Walker, III, p. 21, line 15.

[71] *See* Confidential workpapers of Dylan W. D'Ascendis, H.1 Recommended Capital Structure.

[72] *See also* OCA Exhibit DJG-4.

Figure 10:
Adjusted Income Approach Results

Annual Cash Flow	$	378,971
Constant Growth Rate		3.80%
Discount Rate		5.48%
Adjusted Value	**$**	**23,354,612**

Under these assumptions, the City's indicated valuation under the income approach is $23.3 million, which is nearly equal to the indicated valuation under the market approach.

VI. APPROACH WEIGHTINGS

Q. Please summarize the weightings applied to the three approaches by the UVEs.

A. Both Mr. Walker and Mr. D'Ascendis applied unequal weightings to their three indicated valuations under the three approaches. Notably, they both applied a substantially lower weighting to the lowest indicated valuation, which was the income approach for both appraisals.[73]

Q. Do you agree with the UVEs' decision to use unequal weightings?

A. No. The UVEs' decision to use a significantly lower weighting for the lowest of their three indicated valuations appears to be a decision that is influenced by bias, rather than one that is designed to produce the fairest overall valuation. While I do not necessarily believe that equal weightings must always be applied to the valuation results, I believe there should be a good, rational basis for deviating from equal weightings. I did not see any persuasive

[73] See OCA Exhibit DJG-2.

arguments made by the UVEs to deviate from equal weightings. In rate proceedings, a utility's rate base is determined by original cost less accumulated depreciation. In that regard, it does not make sense to significantly discount a valuation approach that considers original (or replacement) cost less depreciation. Certainly, the indicated valuations under the market and income approaches are also important, but in this case, I do not believe they are significantly more important than the indicated valuations under the cost approach to warrant a significant discounting of the cost approach results.

Q. Please describe what the results of the UVE valuations had equal weightings been used for each approach.

A. The following table outlines the results of Gannett Fleming's appraisal had equal weightings been applied.

Figure 11:
Gannett Fleming Appraisal Results (with equal weightings)

Approach	Base Value	Weight	Weighted Value
Market	$ 50,664,671	33.3%	$ 16,888,224
Cost	32,994,154	33.3%	10,998,051
Income	45,450,675	33.3%	15,150,225
Total			$ 43,036,500

As shown in the table, the weighted average FMV estimated by Gannett Fleming using equal weightings is $43.0 million. The table below shows the results of ScottMadden's appraisal using equal weightings.

Figure 12:
ScottMadden Appraisal Results

Approach	Base Value	Weight	Weighted Value
Market	$ 46,817,319	33.3%	$ 15,605,773
Cost	11,446,928	33.3%	3,815,643
Income	39,970,803	33.3%	13,323,601
Total			$ 32,745,017

The weighted average FMV estimated by ScottMadden using equal weightings is $32.7 million. The results of both appraisals are lower when using equal weightings rather than the unequal weightings applied by the UVEs. Moreover, the average of the two appraisals using equal weightings is $37,890,758.50.[74] Compared to the Joint Applicants' proposal to value the system at $41,250,000 for rate base purposes, the average of the two appraisals using equal weightings is $3,359,41.50, or 8.14%, less than the proposed ratemaking rate base of the system.

VII. CONCLUSION AND RECOMMENDATION

Q. Please summarize the key points of your testimony.

A. I reviewed the market, cost, and income valuations proposed by each appraisal. Certain assumptions made by each UVE caused the results of their valuations under each approach to be unreasonably high. Applying reasonable adjustments to their models, I estimated a reasonable fair market value for acquisition of the Beaver Falls system.

[74] ($43,036,500 + $32,745,017) / 2 = $37,890,758.50.

Q. What is your recommendation to the Commission?

A. If the Commission approves the acquisition, the Commission should adopt my proposed adjustments to the appraisals. Also, if the Commission approves the acquisition, I recommend a ratemaking rate base of $19,628,354 for the City's system, as outlined in OCA Exhibit DJG-2, rather than the $41,250,000 proposed by Aqua. Additionally, the Commission should adopt the recommendations of OCA witness Nicholas DeMarco if the transaction is approved.

Q. Does this conclude your testimony?

A. Yes. To the extent that I did not specifically address a particular issue, that does not constitute my agreement with such issue. I reserve the right to modify or supplement my testimony if additional information is received.

APPENDIX A:

DISCOUNTED CASH FLOW MODEL THEORY

The Discounted Cash Flow ("DCF") Model is based on a fundamental financial model called the "dividend discount model," which maintains that the value of a security is equal to the present value of the future cash flows it generates. Cash flows from common stock are paid to investors in the form of dividends. There are several variations of the DCF Model. In its most general form, the DCF Model is expressed as follows:[1]

Equation 1:
General Discounted Cash Flow Model

$$P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \cdots + \frac{D_n}{(1+k)^n}$$

where: P_0 = *current stock price*
$D_1 \ldots D_n$ = *expected future dividends*
k = *discount rate / required return*

The General DCF Model would require an estimation of an infinite stream of dividends. Since this would be impractical, analysts use more feasible variations of the General DCF Model, which are discussed further below.

The DCF Models rely on the following four assumptions:

1. Investors evaluate common stocks in the classical valuation framework; that is, they trade securities rationally at prices reflecting their perceptions of value;
2. Investors discount the expected cash flows at the same rate (K) in every future period;

[1] *See* Zvi Bodie, Alex Kane & Alan J. Marcus, *Essentials of Investments* 410 (9th ed., McGraw-Hill/Irwin 2013).

3. The K obtained from the DCF equation corresponds to that specific stream of future cash flows alone; and

4. Dividends, rather than earnings, constitute the source of value.

The General DCF can be rearranged to make it more practical for estimating the cost of equity. Regulators typically rely on some variation of the Constant Growth DCF Model, which is expressed as follows:

Equation 2:
Constant Growth Discounted Cash Flow Model

$$K = \frac{D_1}{P_0} + g$$

where: K = *discount rate / required return on equity*
D_1 = *expected dividend per share one year from now*
P_0 = *current stock price*
g = *expected growth rate of future dividends*

Unlike the General DCF Model, the Constant Growth DCF Model solves directly for the required return (K). In addition, by assuming that dividends grow at a constant rate, the dividend stream from the General DCF Model may be essentially substituted with a term representing the expected constant growth rate of future dividends (g). The Constant Growth DCF Model may be considered in two parts. The first part is the dividend yield (D_1/P_0), and the second part is the growth rate (g). In other words, the required return in the DCF Model is equivalent to the dividend yield plus the growth rate.

In addition to the four assumptions listed above, the Constant Growth DCF Model relies on four additional assumptions as follows:[2]

[2] *Id.* at 254-56.

1. The discount rate (K) must exceed the growth rate (g);
2. The dividend growth rate (g) is constant in every year to infinity;
3. Investors require the same return (K) in every year; and
4. There is no external financing; that is, growth is provided only by the retention of earnings.

Because the growth rate in this model is assumed to be constant, it is important not to use growth rates that are unreasonably high. In fact, the constant growth rate estimate for a regulated utility with a defined service territory should not exceed the growth rate for the economy in which it operates.

APPENDIX B:

CAPITAL ASSET PRICING MODEL THEORY

The Capital Asset Pricing Model ("CAPM") is a market-based model founded on the principle that investors demand higher returns for incurring additional risk.[1] The CAPM estimates this required return. The CAPM relies on the following assumptions:

1. Investors are rational, risk-adverse, and strive to maximize profit and terminal wealth;
2. Investors make choices based on risk and return. Return is measured by the mean returns expected from a portfolio of assets; risk is measured by the variance of these portfolio returns;
3. Investors have homogenous expectations of risk and return;
4. Investors have identical time horizons;
5. Information is freely and simultaneously available to investors.
6. There is a risk-free asset, and investors can borrow and lend unlimited amounts at the risk-free rate;
7. There are no taxes, transaction costs, restrictions on selling short, or other market imperfections; and,
8. Total asset quality is fixed, and all assets are marketable and divisible.[2]

[1] William F. Sharpe, *A Simplified Model for Portfolio Analysis* 277-93 (Management Science IX 1963); *see also* John R. Graham, Scott B. Smart & William L. Megginson, *Corporate Finance: Linking Theory to What Companies Do* 208 (3rd ed., South Western Cengage Learning 2010).

[2] *Id*.

While some of these assumptions may appear to be restrictive, they do not outweigh the inherent value of the model. The CAPM has been widely used by firms, analysts, and regulators for decades to estimate the cost of equity capital.

The basic CAPM equation is expressed as follows:

Equation 1:
Capital Asset Pricing Model

$$K = R_F + \beta_i(R_M - R_F)$$

where: K = *required return*
R_F = *risk-free rate*
β = *beta coefficient of asset i*
R_M = *required return on the overall market*

There are essentially three terms within the CAPM equation that are required to calculate the required return (K): (1) the risk-free rate (R_F); (2) the beta coefficient (β); and (3) the equity risk premium ($R_M - R_F$), which is the required return on the overall market less the risk-free rate.

Raw Beta Calculations and Adjustments

A stock's beta equals the covariance of the asset's returns with the returns on a market portfolio, divided by the portfolio's variance, as expressed in the following formula:[3]

Equation 2:
Beta

$$\beta_i = \frac{\sigma_{im}}{\sigma_m^2}$$

where: β_i = *beta of asset i*
σ_{im} = *covariance of asset i returns with market portfolio returns*
σ^2_m = *variance of market portfolio*

[3] John R. Graham, Scott B. Smart & William L. Megginson, *Corporate Finance: Linking Theory to What Companies Do* 180-81 (3rd ed., South Western Cengage Learning 2010).

Betas that are published by various research firms are typically calculated through a regression analysis that considers the movements in price of an individual stock and movements in the price of the overall market portfolio. The betas produced by this regression analysis are considered "raw" betas. There is empirical evidence that raw betas should be adjusted to account for beta's natural tendency to revert to an underlying mean.[4] Some analysts use an adjustment method proposed by Blume, which adjusts raw betas toward the market mean of one.[5] While the Blume adjustment method is popular due to its simplicity, it is arguably arbitrary, and some would say not useful at all. According to Dr. Damodaran: "While we agree with the notion that betas move toward 1.0 over time, the [Blume adjustment] strikes us as arbitrary and not particularly useful."[6] The Blume adjustment method is especially arbitrary when applied to industries with consistently low betas, such as the utility industry. For industries with consistently low betas, it is better to employ an adjustment method that adjusts raw betas toward an industry average, rather than the market average. Vasicek proposed such a method, which is preferable to the Blume adjustment method because it allows raw betas to be adjusted toward an industry average, and also accounts for the statistical accuracy of the raw beta calculation.[7] In other words, "[t]he Vasicek adjustment seeks to overcome one weakness of the Blume model by not applying the same adjustment to every security; rather, a security-specific adjustment is made depending on the

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[4] *See* Michael J. Gombola and Douglas R. Kahl, *Time-Series Processes of Utility Betas: Implications for Forecasting Systematic Risk* 84-92 (Financial Management Autumn 1990).

[5] See Marshall Blume, *On the Assessment of Risk*, Vol. 26, No. 1, The Journal of Finance 1 (1971).

[6] *See* Aswath Damodaran, *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset* 187 (3rd ed., John Wiley & Sons, Inc. 2012).

[7] Oldrich A. Vasicek, *A Note on Using Cross-Sectional Information in Bayesian Estimation of Security Betas* 1233-1239 (Journal of Finance, Vol. 28, No. 5, December 1973).

statistical quality of the regression."[8] The Vasicek beta adjustment equation is expressed as follows:

Equation 3:
Vasicek Beta Adjustment

$$\beta_{i1} = \frac{\sigma^2_{\beta i0}}{\sigma^2_{\beta 0} + \sigma^2_{\beta i0}} \beta_0 + \frac{\sigma^2_{\beta 0}}{\sigma^2_{\beta 0} + \sigma^2_{\beta i0}} \beta_{i0}$$

where:	β_{i1}	=	*Vasicek adjusted beta for security i*
	β_{i0}	=	*historical beta for security i*
	β_0	=	*beta of industry or proxy group*
	$\sigma^2_{\beta 0}$	=	*variance of betas in the industry or proxy group*
	$\sigma^2_{\beta i0}$	=	*square of standard error of the historical beta for security i*

The Vasicek beta adjustment is an improvement on the Blume model because the Vasicek model does not apply the same adjustment to every security. A higher standard error produced by the regression analysis indicates a lower statistical significance of the beta estimate. Thus, a beta with a high standard error should receive a greater adjustment than a beta with a low standard error. As stated in Ibbotson:

> While the Vasicek formula looks intimidating, it is really quite simple. The adjusted beta for a company is a weighted average of the company's historical beta and the beta of the market, industry, or peer group. How much weight is given to the company and historical beta depends on the statistical significance of the company beta statistic. If a company beta has a low standard error, then it will have a higher weighting in the Vasicek formula. If a company beta has a high standard error, then it will have lower weighting in the Vasicek formula. An advantage of this adjustment methodology is that it does not force an adjustment to the market as a whole. Instead, the adjustment can be toward an industry or some other peer group. *This is most useful in looking at companies in industries that on average have high or low betas*.[9]

[8] 2012 Ibbotson Stocks, Bonds, Bills, and Inflation Valuation Yearbook 77-78 (Morningstar 2012).

[9] *Id*. at 78 (emphasis added).

Thus, the Vasicek adjustment method is statistically more accurate, and is the preferred method to use when analyzing companies in an industry that has inherently low betas, such as the utility industry. The Vasicek method was also confirmed by Gombola, who conducted a study specifically related to utility companies. Gombola concluded that "[t]he strong evidence of auto-regressive tendencies in *utility* betas lends support to the application of adjustment procedures such as the . . . adjustment procedure presented by Vasicek."[10] Gombola also concluded that adjusting raw betas toward the market mean of 1.0 is *too high*, and that "[i]nstead, they should be adjusted toward a value that is less than one."[11] In conducting the Vasicek adjustment on betas in previous cases, it reveals that utility betas are even lower than those published by Value Line.[12] Gombola's findings are particular important here, because his study was conducted specifically on utility companies. This evidence indicates that using Value Line's betas in a CAPM cost of equity estimate for a utility company may lead to overestimated results. Regardless, adjusting betas to a level that is *higher* than Value Line's betas is not reasonable, and it would produce CAPM cost of equity results that are too high.

[10] Michael J. Gombola and Douglas R. Kahl, *Time-Series Processes of Utility Betas: Implications for Forecasting Systematic Risk* 92 (Financial Management Autumn 1990) (emphasis added).

[11] *Id*. at 91-92.

[12] *See e.g.* Responsive Testimony of David J. Garrett, filed March 21, 2016 in Cause No. PUD 201500273 before the Corporation Commission of Oklahoma (the Company's 2015 rate case), at pp. 56 – 59.

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EDUCATION

University of Oklahoma — Norman, OK
Master of Business Administration — 2014
Areas of Concentration: Finance, Energy

University of Oklahoma College of Law — Norman, OK
Juris Doctor — 2007
Member, American Indian Law Review

University of Oklahoma — Norman, OK
Bachelor of Business Administration — 2003
Major: Finance

PROFESSIONAL DESIGNATIONS

Society of Depreciation Professionals
Certified Depreciation Professional (CDP)

Society of Utility and Regulatory Financial Analysts
Certified Rate of Return Analyst (CRRA)

WORK EXPERIENCE

Resolve Utility Consulting PLLC — Oklahoma City, OK
Managing Member — 2016 – Present
Provide expert analysis and testimony specializing in depreciation and cost of capital issues for clients in utility regulatory proceedings.

Oklahoma Corporation Commission — Oklahoma City, OK
Public Utility Regulatory Analyst — 2012 – 2016
Assistant General Counsel — 2011 – 2012
Represented commission staff in utility regulatory proceedings and provided legal opinions to commissioners. Provided expert analysis and testimony in depreciation, cost of capital, incentive compensation, payroll and other issues.

Perebus Counsel, PLLC — Oklahoma City, OK
Managing Member — 2009 – 2011
Represented clients in the areas of family law, estate planning, debt negotiations, business organization, and utility regulation.

Moricoli & Schovanec, P.C. — Oklahoma City, OK
Associate Attorney — 2007 – 2009
Represented clients in the areas of contracts, oil and gas, business structures and estate administration.

TEACHING EXPERIENCE

University of Oklahoma — Norman, OK
Adjunct Instructor – "Conflict Resolution" — 2014 – 2021
Adjunct Instructor – "Ethics in Leadership"

Rose State College — Midwest City, OK
Adjunct Instructor – "Legal Research" — 2013 – 2015
Adjunct Instructor – "Oil & Gas Law"

PROFESSIONAL ASSOCIATIONS

Oklahoma Bar Association — 2007 – Present

Society of Depreciation Professionals — 2014 – Present
Board Member – President — 2017
Participate in management of operations, attend meetings, review performance, organize presentation agenda.

Society of Utility Regulatory Financial Analysts — 2014 – Present

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Pennsylvania Public Utility Commission	Veolia Water Pennsylvania, Inc.	R-2024-3045192 R-2024-3045193	Cost of capital, depreciation rates, net salvage	Pennsylvania Office of Consumer Advocate
Pennsylvania Public Utility Commission	PECO Energy Company - Gas Division	R-2024-3046932	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Pennsylvania Public Utility Commission	PECO Energy Company - Electric Division	R-2024-3046931	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Oklahoma Corporation Commission	Oklahoma Gas & Electric Company	PUD 2023-000087	Cost of capital, depreciation rates, net salvage	Oklahoma Industrial Energy Consumers
Maryland Public Service Commission	Maryland Water Service, Inc.	9729	Cost of capital, awarded rate of return, capital structure	Maryland Office of People's Counsel
Kansas Corporation Commission	Kansas Gas Service	24-KGSG-610-RTS	Depreciation rates, service lives, net salvage	The Citizens' Utility Ratepayer Board
Pennsylvania Public Utility Commission	FirstEnergy Pennsylvania Electric Company	R-2024-3047068	Depreciation rates, service lives, net salvage	Pennsylvania Office of Consumer Advocate
Maryland Public Service Commission	Chesapeake Utilities Corporation Sandpiper Energy, Inc. Elkton Gas Company	9721	Depreciation rates, service lives, net salvage	Maryland Office of People's Counsel
Pennsylvania Public Utility Commission	Duquesne Light Company	R-2024-3046523	Cost of capital, depreciation rates, net salvage	Pennsylvania Office of Consumer Advocate
Public Utility Commission of Texas	CenterPoint Energy Houston Electric	PUC 56211	Depreciation rates, service lives, net salvage	Texas Coast Utilities Coalition
Washington Utilities & Transportation Commission	Avista Corporation	UE-240006 UG-240007	Cost of capital, awarded rate of return, capital structure	Washington Office of Attorney General
Public Utility Commission of Texas	AEP Texas Inc.	PUC 56165	Depreciation rates, service lives, net salvage	Cities Served by AEP Texas
Public Utilities Commission of Nevada	Southwest Gas Corporation	23-09012	Depreciation rates, service lives, net salvage	Bureau of Consumer Protection
Public Utilities Commission of the State of California	Southern California Edison	A.23-05-010	Depreciation rates, service lives, net salvage	The Utility Reform Network

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Pennsylvania Public Utility Commission	Pennsylvania-American Water Company	R-2023-3043189 R-2023-3043190	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Indiana Utility Regulatory Commission	Northern Indiana Public Service Company	45967	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Massachusetts Department of Public Utilities	Massachusetts Electric Company and Nantucket Electric Company D/B/A National Grid	D.P.U. 23-150	Depreciation rates, service lives, net salvage	Massachusetts Office of the Attorney General, Office of Ratepayer Advocacy
Iowa Utilities Board	Interstate Power and Light Company	RPU-2023-0002	Depreciation rates, service lives, net salvage	Office of Consumer Advocate
Public Service Commission of South Carolina	Duke Energy Carolinas	2023-388-E 2023-403-E	Depreciation rates, service lives, net salvage	South Carolina Office of Regulatory Staff
Indiana Utility Regulatory Commission	Citizens Energy Group	45988	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Railroad Commission of Texas	CenterPoint Energy Resources Corp.	OS-23-00015513	Depreciation rates, service lives, net salvage	Alliance of CenterPoint Municipalities
Indiana Utility Regulatory Commission	CenterPoint Energy Indiana South	45990	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Delaware Public Service Commission	Artesian Water Company, Inc.	23-0601	Cost of capital, depreciation rates, net salvage	Division of the Public Advocate
Maryland Public Service Commission	Washington Gas Light Company	9704	Cost of capital, awarded rate of return, capital structure	Maryland Office of People's Counsel
Delaware Public Service Commission	Veolia Water Delaware Inc.	23-0598	Cost of capital, awarded rate of return, capital structure	Division of the Public Advocate
Connecticut Public Utilities Regulatory Authority	United Illuminating Company	22-08-08	Depreciation rates, service lives, net salvage	PURA Staff
Public Utility Commission of Texas	Southwestern Public Service Company	PUC 54634	Depreciation rates, service lives, net salvage	Alliance of Xcel Municipalities
Railroad Commission of Texas	SiEnergy, LP	OS-23-00013504	Depreciation rates, service lives, net salvage	Texas municipal intervenor group

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Pennsylvania Public Utility Commission	Aqua Pennsylvania, Inc.	A-2022-3034143	Fair market value review	Pennsylvania Office of Consumer Advocate
Wyoming Public Service Commission	Rocky Mountain Power	20000-633-ER-23	Cost of capital and authorized rate of return	Wyoming Industrial Energy Consumers
Maryland Public Service Commission	Potomac Electric Power Company	9702	Depreciation rates, service lives, net salvage	Maryland Office of People's Counsel
Public Utilities Commission of Nevada	Nevada Power Company d/b/a NV Energy	23-06007 23-06008	Depreciation rates, service lives, net salvage	Bureau of Consumer Protection
Public Utilities Commission of Ohio	Northeast Ohio Natural Gas Corp.	23-0154-GA-AIR	Cost of capital, awarded rate of return, capital structure	Office of the Ohio Consumers' Counsel
New York State Public Service Commission	The Brooklyn Untion Gas Company and Keyspan Gas East Corporation d/b/a Nation Grid	23-G-0225 23-G-0226	Depreciation rates, service lives, net salvage, depreciation reserve	The City of New York
Idaho Public Utilities Commission	Idaho Power Company	IPC-E-23-11	Cost of capital, awarded rate of return, capital structure	Micron Technology, Inc.
Indiana Utility Regulatory Commission	Indiana Michigan Power Company	45933	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Massachusetts Department of Public Utilities	Fitchburg Gas and Electric Company d/b/a Unitil	D.P.U. 23-80; D.P.U. 23-81	Depreciation rates, service lives, net salvage	Massachusetts Office of the Attorney General, Office of Ratepayer Advocacy
Kansas Corporation Commission	Evergy Kansas Central, Evergy Kansas South, and Evergy Metro	23-EKCE-775-RTS	Depreciation rates, service lives, net salvage	The Citizens' Utility Ratepayer Board
Delaware Public Service Commission	Delmarva Power & Light Company	22-0897	Cost of capital, awarded rate of return, capital structure	Division of the Public Advocate
Connecticut Public Utilities Regulatory Authority	Connecticut Water Company	23-08-32	Depreciation rates, service lives, net salvage	PURA Staff
Connecticut Public Utilities Regulatory Authority	Connecticut Natural Gas Corporation and The Southern Connecticut Gas Company	23-11-02	Depreciation rates, service lives, net salvage	PURA Staff
Railroad Commission of Texas	Atmos Pipeline – Texas	OS-23-00013758	Depreciation rates, service lives, net salvage	Atmos Texas Municipalities

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Wyoming Public Service Commission	Black Hills Wyoming Gas	30026-78-GR-23	Depreciation rates, service lives, net salvage	Wyoming Office of Consumer Advocate
Indiana Utility Regulatory Commission	Indianapolis Power & Light Company d/b/a AES Indiana	45911	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
New Mexico Public Regulation Commission	Southwestern Public Service Company	22-00286-UT	Cost of capital, depreciation rates, net salvage	The New Mexico Large Customer Group; Occidental Permian
Public Utilities Commission of the State of California	Southern California Gas Company San Diego Gas & Electric Company	A.22-05-015 A.22-05-016	Depreciation rates, service lives, net salvage	The Utility Reform Network
Public Utilties Commission of the State of Colorado	Public Service Company of Colorado	22AL-0530E 22AL-0478E	Cost of capital, awarded rate of return, capital structure	Colorado Energy Consumers
New Mexico Public Regulatory Commission	Public Service Company of New Mexico	22-00270-UT	Cost of capital, depreciation rates, net salvage	The Albuquerque Bernalillo County Water Utility Authority
Florida Public Service Commission	Peoples Gas System	20230023-GU 20220219-GU 20220212-GU	Cost of capital, depreciation rates, net salvage	Florida Office of Public Counsel
Maryland Public Service Commission	Potomac Edison Company	9695	Cost of capital, depreciation rates, net salvage	Maryland Office of People's Counsel
Public Service Commission of the State of Montana	Montana-Dakota Utilities Company	2022.11.099	Depreciation rates, service lives, net salvage	Montana Consumer Counsel and Denbury Onshore
Indiana Utility Regulatory Commission	Indiana-American Water Company	45870	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Public Service Commission of South Carolina	Dominion Energy South Carolina	2023-70-G	Depreciation rates, service lives, net salvage	South Carolina Office of Regulatory Staff
Maryland Public Service Commission	Columbia Gas of Maryland	9701	Cost of capital, awarded rate of return, capital structure	Maryland Office of People's Counsel
Pennsylvania Public Utility Commission	Columbia Water Company	R-2023-3040258	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Maryland Public Service Commission	Baltimore Gas and Electric Company	9692	Depreciation rates, service lives, net salvage	Maryland Office of People's Counsel

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Arizona Corporation Commission	Arizona Public Service Company	E-01345A-22-0144	Cost of capital, awarded rate of return, capital structure	Residential Utility Consumer Office
Oklahoma Corporation Commission	Public Service Company of Oklahoma	PUD 2022-000093	Cost of capital, depreciation rates, net salvage	Oklahoma Industrial Energy Consumers
Public Service Commission of the State of Montana	NorthWestern Energy	2022.07.078	Cost of capital, depreciation rates, net salvage	Montana Consumer Counsel and Montana Large Customer Group
Indiana Utility Regulatory Commission	Northern Indiana Public Service Company	45772	Cost of capital, depreciation rates, net salvage	Indiana Office of Utility Consumer Counselor
Public Service Commission of South Carolina	Duke Energy Progress	2022-254-E	Depreciation rates, service lives, net salvage	South Carolina Office of Regulatory Staff
Wyoming Public Service Commission	Cheyenne Light, Fuel and Power Company D/B/A Black Hills Energy	20003-214-ER-22	Depreciation rates, service lives, net salvage	Wyoming Office of Consumer Advocate
Railroad Commission of Texas	Texas Gas Services Company	OS-22-00009896	Depreciation rates, service lives, net salvage	The City of El Paso
Public Utilities Commission of Nevada	Sierra Pacific Power Company	22-06014	Depreciation rates, service lives, net salvage	Bureau of Consumer Protection
Washington Utilities & Transportation Commission	Puget Sound Energy	UE-220066 UG-220067 UG-210918	Depreciation rates, service lives, net salvage	Washington Office of Attorney General
Public Utility Commission of Texas	Oncor Electric Delivery Company LLC	PUC 53601	Depreciation rates, service lives, net salvage	Alliance of Oncor Cities
Florida Public Service Commission	Florida Public Utilities Company	20220067-GU	Cost of capital, depreciation rates	Florida Office of Public Counsel
Public Utility Commission of Texas	Entergy Texas, Inc.	PUC 53719	Depreciation rates, decommissioning costs	Texas Municipal Group
Florida Public Service Commission	Florida City Gas	2020069-GU	Cost of capital, depreciation rates	Florida Office of Public Counsel
Connecticut Public Utilities Regulatory Authority	Aquarion Water Company of Connecticut	22-07-01	Depreciation rates, service lives, net salvage	PURA Staff

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Washington Utilities & Transportation Commission	Avista Corporation	UE-220053 UG-220054 UE-210854	Cost of capital, awarded rate of return, capital structure	Washington Office of Attorney General
Federal Energy Regulatory Commission	ANR Pipeline Company	RP22-501-000	Depreciation rates, service lives, net salvage	Ascent Resources - Utica, LLC
Pennsylvania Public Utility Commission	Columbia Gas of Pennsylvania, Inc.	R-2022-3031211	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Public Service Commission of South Carolina	Piedmont Natural Gas Company	2022-89-G	Depreciation rates, service lives, net salvage	South Carolina Office of Regulatory Staff
Pennsylvania Public Utility Commission	UGI Utilities, Inc. - Gas Division	R-2021-3030218	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Public Utilities Commission of the State of California	Pacific Gas & Electric Company	A.21-06-021	Depreciation rates, service lives, net salvage	The Utility Reform Network
Pennsylvania Public Utility Commission	PECO Energy Company - Gas Division	R-2022-3031113	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Oklahoma Corporation Commission	Oklahoma Gas & Electric Company	PUD 202100164	Cost of capital, depreciation rates, net salvage	Oklahoma Industrial Energy Consumers
Massachusetts Department of Public Utilities	NSTAR Electric Company D/B/A Eversource Energy	D.P.U. 22-22	Depreciation rates, service lives, net salvage	Massachusetts Office of the Attorney General, Office of Ratepayer Advocacy
Michigan Public Service Company	DTE Electric Company	U-20836	Cost of capital, awarded rate of return, capital structure	Michigan Environmental Council and Citizens Utility Board of Michigan
New York State Public Service Commission	Consolidated Edison Company of New York, Inc.	22-E-0064 22-G-0065	Depreciation rates, service lives, net salvage, depreciation reserve	The City of New York
Pennsylvania Public Utility Commission	Aqua Pennsylvania Wastewater / East Whiteland Township	A-2021-3026132	Fair market value estimates for wastewater assets	Pennsylvania Office of Consumer Advocate
Public Service Commission of South Carolina	Kiawah Island Utility, Inc.	2021-324-WS	Cost of capital, awarded rate of return, capital structure	South Carolina Office of Regulatory Staff
Pennsylvania Public Utility Commission	Aqua Pennsylvania Wastewater / Willistown Township	A-2021-3027268	Fair market value estimates for wastewater assets	Pennsylvania Office of Consumer Advocate

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Indiana Utility Regulatory Commission	Northern Indiana Public Service Company	45621	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Arkansas Public Service Commission	Southwestern Electric Power Company	21-070-U	Cost of capital, depreciation rates, net salvage	Western Arkansas Large Energy Consumers
Federal Energy Regulatory Commission	Southern Star Central Gas Pipeline	RP21-778-002	Depreciation rates, service lives, net salvage	Consumer-Owned Shippers
Railroad Commission of Texas	Participating Texas gas utilities in consolidated proceeding	OS-21-00007061	Securitization of extraordinary gas costs arising from winter storms	The City of El Paso
Public Service Commission of South Carolina	Palmetto Wastewater Reclamation, Inc.	2021-153-S	Cost of capital, awarded rate of return, capital structure, ring-fencing	South Carolina Office of Regulatory Staff
Public Utilties Commission of the State of Colorado	Public Service Company of Colorado	21AL-0317E	Cost of capital, depreciation rates, net salvage	Colorado Energy Consumers
Pennsylvania Public Utility Commission	City of Lancaster - Water Department	R-2021-3026682	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Public Utility Commission of Texas	Southwestern Public Service Company	PUC 51802	Depreciation rates, service lives, net salvage	The Alliance of Xcel Municipalities
Pennsylvania Public Utility Commission	The Borough of Hanover - Hanover Municipal Waterworks	R-2021-3026116	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Maryland Public Service Commission	Delmarva Power & Light Company	9670	Cost of capital and authorized rate of return	Maryland Office of People's Counsel
Oklahoma Corporation Commission	Oklahoma Natural Gas Company	PUD 202100063	Cost of capital, awarded rate of return, capital structure	Oklahoma Industrial Energy Consumers
Indiana Utility Regulatory Commission	Indiana Michigan Power Company	45576	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Public Utility Commission of Texas	El Paso Electric Company	PUC 52195	Depreciation rates, service lives, net salvage	The City of El Paso
Pennsylvania Public Utility Commission	Aqua Pennsylvania	R-2021-3027385	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Public Service Commission of the State of Montana	NorthWestern Energy	D2021.02.022	Cost of capital, awarded rate of return, capital structure	Montana Consumer Counsel
Pennsylvania Public Utility Commission	PECO Energy Company	R-2021-3024601	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
New Mexico Public Regulation Commission	Southwestern Public Service Company	20-00238-UT	Cost of capital and authorized rate of return	The New Mexico Large Customer Group; Occidental Permian
Oklahoma Corporation Commission	Public Service Company of Oklahoma	PUD 202100055	Cost of capital, depreciation rates, net salvage	Oklahoma Industrial Energy Consumers
Pennsylvania Public Utility Commission	Duquesne Light Company	R-2021-3024750	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Maryland Public Service Commission	Columbia Gas of Maryland	9664	Cost of capital and authorized rate of return	Maryland Office of People's Counsel
Indiana Utility Regulatory Commission	Southern Indiana Gas Company, d/b/a Vectren Energy Delivery of Indiana, Inc.	45447	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Public Utility Commission of Texas	Southwestern Electric Power Company	PUC 51415	Depreciation rates, service lives, net salvage	Cities Advocating Reasonable Deregulation
New Mexico Public Regulatory Commission	Avangrid, Inc., Avangrid Networks, Inc., NM Green Holdings, Inc., PNM, and PNM Resources	20-00222-UT	Ring fencing and capital structure	The Albuquerque Bernalillo County Water Utility Authority
Indiana Utility Regulatory Commission	Indiana Gas Company, d/b/a Vectren Energy Delivery of Indiana, Inc.	45468	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Public Utilities Commission of Nevada	Nevada Power Company and Sierra Pacific Power Company, d/b/a NV Energy	20-07023	Construction work in progress	MGM Resorts International, Caesars Enterprise Services, LLC, and the Southern Nevada Water Authority
Massachusetts Department of Public Utilities	Boston Gas Company, d/b/a National Grid	D.P.U. 20-120	Depreciation rates, service lives, net salvage	Massachusetts Office of the Attorney General, Office of Ratepayer Advocacy
Public Service Commission of the State of Montana	ABACO Energy Services, LLC	D2020.07.082	Cost of capital and authorized rate of return	Montana Consumer Counsel
Maryland Public Service Commission	Washington Gas Light Company	9651	Cost of capital and authorized rate of return	Maryland Office of People's Counsel

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Florida Public Service Commission	Utilities, Inc. of Florida	20200139-WS	Cost of capital and authorized rate of return	Florida Office of Public Counsel
New Mexico Public Regulatory Commission	El Paso Electric Company	20-00104-UT	Cost of capital, depreciation rates, net salvage	City of Las Cruces and Doña Ana County
Public Utilities Commission of Nevada	Nevada Power Company	20-06003	Cost of capital, awarded rate of return, capital structure, earnings sharing	MGM Resorts International, Caesars Enterprise Services, LLC, Wynn Las Vegas, LLC, Smart Energy Alliance, and Circus Circus Las Vegas, LLC
Wyoming Public Service Commission	Rocky Mountain Power	20000-578-ER-20	Cost of capital and authorized rate of return	Wyoming Industrial Energy Consumers
Florida Public Service Commission	Peoples Gas System	20200051-GU 20200166-GU	Cost of capital, depreciation rates, net salvage	Florida Office of Public Counsel
Wyoming Public Service Commission	Rocky Mountain Power	20000-539-EA-18	Depreciation rates, service lives, net salvage	Wyoming Industrial Energy Consumers
Public Service Commission of South Carolina	Dominion Energy South Carolina	2020-125-E	Depreciation rates, service lives, net salvage	South Carolina Office of Regulatory Staff
Pennsylvania Public Utility Commission	The City of Bethlehem	2020-3020256	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Railroad Commission of Texas	Texas Gas Services Company	GUD 10928	Depreciation rates, service lives, net salvage	Gulf Coast Service Area Steering Committee
Public Utilities Commission of the State of California	Southern California Edison	A.19-08-013	Depreciation rates, service lives, net salvage	The Utility Reform Network
Massachusetts Department of Public Utilities	NSTAR Gas Company	D.P.U. 19-120	Depreciation rates, service lives, net salvage	Massachusetts Office of the Attorney General, Office of Ratepayer Advocacy
Georgia Public Service Commission	Liberty Utilities (Peach State Natural Gas)	42959	Depreciation rates, service lives, net salvage	Public Interest Advocacy Staff
Florida Public Service Commission	Florida Public Utilities Company	20190155-EI 20190156-EI 20190174-EI	Depreciation rates, service lives, net salvage	Florida Office of Public Counsel
Illinois Commerce Commission	Commonwealth Edison Company	20-0393	Depreciation rates, service lives, net salvage	The Office of the Illinois Attorney General

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Public Utility Commission of Texas	Southwestern Public Service Company	PUC 49831	Depreciation rates, service lives, net salvage	Alliance of Xcel Municipalities
Public Service Commission of South Carolina	Blue Granite Water Company	2019-290-WS	Depreciation rates, service lives, net salvage	South Carolina Office of Regulatory Staff
Railroad Commission of Texas	CenterPoint Energy Resources	GUD 10920	Depreciation rates and grouping procedure	Alliance of CenterPoint Municipalities
Pennsylvania Public Utility Commission	Aqua Pennsylvania Wastewater / East Norriton Township	A-2019-3009052	Fair market value estimates for wastewater assets	Pennsylvania Office of Consumer Advocate
New Mexico Public Regulation Commission	Southwestern Public Service Company	19-00170-UT	Cost of capital and authorized rate of return	The New Mexico Large Customer Group; Occidental Permian
Indiana Utility Regulatory Commission	Duke Energy Indiana	45253	Cost of capital, depreciation rates, net salvage	Indiana Office of Utility Consumer Counselor
Maryland Public Service Commission	Columbia Gas of Maryland	9609	Depreciation rates, service lives, net salvage	Maryland Office of People's Counsel
Washington Utilities & Transportation Commission	Avista Corporation	UE-190334	Cost of capital, awarded rate of return, capital structure	Washington Office of Attorney General
Indiana Utility Regulatory Commission	Indiana Michigan Power Company	45235	Cost of capital, depreciation rates, net salvage	Indiana Office of Utility Consumer Counselor
Public Utilities Commission of the State of California	Pacific Gas & Electric Company	18-12-009	Depreciation rates, service lives, net salvage	The Utility Reform Network
Oklahoma Corporation Commission	The Empire District Electric Company	PUD 201800133	Cost of capital, authorized ROE, depreciation rates	Oklahoma Industrial Energy Consumers and Oklahoma Energy Results
Arkansas Public Service Commission	Southwestern Electric Power Company	19-008-U	Cost of capital, depreciation rates, net salvage	Western Arkansas Large Energy Consumers
Public Utility Commission of Texas	CenterPoint Energy Houston Electric	PUC 49421	Depreciation rates, service lives, net salvage	Texas Coast Utilities Coalition
Massachusetts Department of Public Utilities	Massachusetts Electric Company and Nantucket Electric Company	D.P.U. 18-150	Depreciation rates, service lives, net salvage	Massachusetts Office of the Attorney General, Office of Ratepayer Advocacy

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Oklahoma Corporation Commission	Oklahoma Gas & Electric Company	PUD 201800140	Cost of capital, authorized ROE, depreciation rates	Oklahoma Industrial Energy Consumers and Oklahoma Energy Results
Public Service Commission of the State of Montana	Montana-Dakota Utilities Company	D2018.9.60	Depreciation rates, service lives, net salvage	Montana Consumer Counsel and Denbury Onshore
Indiana Utility Regulatory Commission	Northern Indiana Public Service Company	45159	Depreciation rates, grouping procedure, demolition costs	Indiana Office of Utility Consumer Counselor
Public Service Commission of the State of Montana	NorthWestern Energy	D2018.2.12	Depreciation rates, service lives, net salvage	Montana Consumer Counsel
Oklahoma Corporation Commission	Public Service Company of Oklahoma	PUD 201800097	Depreciation rates, service lives, net salvage	Oklahoma Industrial Energy Consumers and Wal-Mart
Nevada Public Utilities Commission	Southwest Gas Corporation	18-05031	Depreciation rates, service lives, net salvage	Nevada Bureau of Consumer Protection
Public Utility Commission of Texas	Texas-New Mexico Power Company	PUC 48401	Depreciation rates, service lives, net salvage	Alliance of Texas-New Mexico Power Municipalities
Oklahoma Corporation Commission	Oklahoma Gas & Electric Company	PUD 201700496	Depreciation rates, service lives, net salvage	Oklahoma Industrial Energy Consumers and Oklahoma Energy Results
Maryland Public Service Commission	Washington Gas Light Company	9481	Depreciation rates, service lives, net salvage	Maryland Office of People's Counsel
Indiana Utility Regulatory Commission	Citizens Energy Group	45039	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Public Utility Commission of Texas	Entergy Texas, Inc.	PUC 48371	Depreciation rates, decommissioning costs	Texas Municipal Group
Washington Utilities & Transportation Commission	Avista Corporation	UE-180167	Depreciation rates, service lives, net salvage	Washington Office of Attorney General
New Mexico Public Regulation Commission	Southwestern Public Service Company	17-00255-UT	Cost of capital and authorized rate of return	HollyFrontier Navajo Refining; Occidental Permian
Public Utility Commission of Texas	Southwestern Public Service Company	PUC 47527	Depreciation rates, plant service lives	Alliance of Xcel Municipalities

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Public Service Commission of the State of Montana	Montana-Dakota Utilities Company	D2017.9.79	Depreciation rates, service lives, net salvage	Montana Consumer Counsel
Florida Public Service Commission	Florida City Gas	20170179-GU	Cost of capital, depreciation rates	Florida Office of Public Counsel
Washington Utilities & Transportation Commission	Avista Corporation	UE-170485	Cost of capital and authorized rate of return	Washington Office of Attorney General
Wyoming Public Service Commission	Powder River Energy Corporation	10014-182-CA-17	Credit analysis, cost of capital	Private customer
Oklahoma Corporation Commission	Public Service Co. of Oklahoma	PUD 201700151	Depreciation, terminal salvage, risk analysis	Oklahoma Industrial Energy Consumers
Public Utility Commission of Texas	Oncor Electric Delivery Company	PUC 46957	Depreciation rates, simulated analysis	Alliance of Oncor Cities
Nevada Public Utilities Commission	Nevada Power Company	17-06004	Depreciation rates, service lives, net salvage	Nevada Bureau of Consumer Protection
Public Utility Commission of Texas	El Paso Electric Company	PUC 46831	Depreciation rates, interim retirements	City of El Paso
Idaho Public Utilities Commission	Idaho Power Company	IPC-E-16-24	Accelerated depreciation of North Valmy plant	Micron Technology, Inc.
Idaho Public Utilities Commission	Idaho Power Company	IPC-E-16-23	Depreciation rates, service lives, net salvage	Micron Technology, Inc.
Public Utility Commission of Texas	Southwestern Electric Power Company	PUC 46449	Depreciation rates, decommissioning costs	Cities Advocating Reasonable Deregulation
Massachusetts Department of Public Utilities	Eversource Energy	D.P.U. 17-05	Cost of capital, capital structure, and rate of return	Sunrun Inc.; Energy Freedom Coalition of America
Railroad Commission of Texas	Atmos Pipeline - Texas	GUD 10580	Depreciation rates, grouping procedure	City of Dallas
Public Utility Commission of Texas	Sharyland Utility Company	PUC 45414	Depreciation rates, simulated analysis	City of Mission

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Oklahoma Corporation Commission	Empire District Electric Company	PUD 201600468	Cost of capital, depreciation rates	Oklahoma Industrial Energy Consumers
Railroad Commission of Texas	CenterPoint Energy Texas Gas	GUD 10567	Depreciation rates, simulated plant analysis	Texas Coast Utilities Coalition
Arkansas Public Service Commission	Oklahoma Gas & Electric Company	160-159-GU	Cost of capital, depreciation rates, terminal salvage	Arkansas River Valley Energy Consumers; Wal-Mart
Florida Public Service Commission	Peoples Gas	160-159-GU	Depreciation rates, service lives, net salvage	Florida Office of Public Counsel
Arizona Corporation Commission	Arizona Public Service Company	E-01345A-16-0036	Cost of capital, depreciation rates, terminal salvage	Energy Freedom Coalition of America
Nevada Public Utilities Commission	Sierra Pacific Power Company	16-06008	Depreciation rates, net salvage, theoretical reserve	Northern Nevada Utility Customers
Oklahoma Corporation Commission	Oklahoma Gas & Electric Co.	PUD 201500273	Cost of capital, depreciation rates, terminal salvage	Public Utility Division
Oklahoma Corporation Commission	Public Service Co. of Oklahoma	PUD 201500208	Cost of capital, depreciation rates, terminal salvage	Public Utility Division
Oklahoma Corporation Commission	Oklahoma Natural Gas Company	PUD 201500213	Cost of capital, depreciation rates, net salvage	Public Utility Division

Summary Results

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]

Gannett Fleming Results and Adjustments

Approach	Base Value	Weight	Weighted Value	OCA Adjustment	Adjusted Value	OCA Weight	OCA Weighted Value
Market	$ 50,664,671	37.5%	$ 18,999,252	$ (26,581,148)	$ 24,083,523	33.3%	$ 8,027,841
Cost	32,994,154	25.0%	8,248,539	(21,547,226)	11,446,928	33.3%	3,815,643
Income	45,450,675	37.5%	17,044,003	(22,096,063)	23,354,612	33.3%	7,784,871
Total		100.0%	$ 44,291,793	**Total**			$ 19,628,354

ScottMadden Results and Adjustments

Approach	Base Value	Weight	Weighted Value	OCA Adjustment	Adjusted Value	OCA Weight	OCA Weighted Value
Market	$ 46,817,319	45.0%	$ 21,067,794	$ (22,733,796)	$ 24,083,523	33.3%	$ 8,027,841
Cost	11,446,928	10.0%	1,144,693	-	11,446,928	33.3%	3,815,643
Income	39,970,803	45.0%	17,986,861	(16,616,191)	23,354,612	33.3%	7,784,871
Total		100.0%	$ 40,199,348	**Total**			$ 19,628,354

Results Summary

	Appraiser Weighted Value	OCA Adjusted Value
Gannett Fleming	$ 44,292,000	$ 19,628,354
AUS Consultants	40,199,348	19,628,354
Average	$ 42,245,674	$ 19,628,354
Purchase Price	$ 41,250,000	$ 41,250,000
Lesser of Purchase Price and Market Value	**$ 41,250,000**	**$ 19,628,354**

[1] Valuation apprach
[2] Appraised value
[3] Applied weighting
[4] = [2] * [3];
[5] = [6] - [2]
[6] OCA adjusted value
[7] Applied weighting
[8] = [6] * [7]

Market Approach Valuation Adjustment

			Selected Transaction Metrics					
System Name	Service Type	System Type	Purchase Price	Investor Capital	Gross PP&E	Net PP&E	Customers	Population
Municipal Authority of the City of Mckeesport	WW	INT	$ 156,000,000	$ 83,903,219	$ 91,435,797	$ 73,813,794	12,780	46,468
New Garden Township/Authority's WW System's Assets	WW	INT	$ 29,500,000	$ 23,001,140	$ 25,988,330	$ 17,967,319	1,796	12,085
Limerick Township Wastewater System's Assets	WW	INT	$ 75,100,000	$ 43,501,755	$ 60,847,250	$ 36,113,701	5,416	18,798
Steelton Borough (Water) Authority	W	INT	$ 22,500,000				2,472	5,932
Exeter Township Wastewater System Assets	WW	INT	$ 96,000,000				8,984	27,609
Kane Borough Authority Wastewater System	WW	INT	$ 17,560,000	$ 10,809,115	$ 20,265,926	$ 8,897,773	2,019	4,645
Borough of Royersford Wastewater System Assets	WW	INT	$ 13,000,000	$ 4,702,972	$ 6,883,116	$ 4,545,699	1,596	5,154
York City Sewer Authority Wastewater System Assets	WW	INT	$ 235,000,000	$ 100,493,098	$ 120,654,506	$ 78,592,332	13,747	80,929
Sadsbury Township Wastewater Utility	WW	C/D	$ 9,250,000				998	3,850
East Bradford Township Wastewater System Assets	WW	C/D	$ 5,000,000	$ 1,298,627			1,248	9,942
Township of Mahoning Water System Assets	W	C/D	$ 4,734,800				1,186	4,218
Township of Mahoning Sewer System Assets	WW	C/D	$ 4,765,200				1,451	4,218
Cheltenham Township Wastewater System Assets	WW	C/D	$ 50,250,000				10,219	37,841
East Norriton Township Wastewater System Assets	WW	C/D	$ 21,000,000	$ 4,055,138			4,966	14,296
Valley Township Water System Assets	W	C/D	$ 7,325,000				1,669	7,493
Valley Township Wastewater System Assets	WW	C/D	$ 13,950,000				3,125	7,493
Upper Pottsgrove Township Wastewater System Assets	WW	C/D	$ 13,750,000		$ 15,295,347	$ 11,548,897	1,428	5,530
Lower Makefield Township Wastewater System Assets	WW	C/D	$ 53,000,000	$ 16,525,411		$ 17,592,071	11,151	33,197
Willistown Township Wastewater Systems Assets	WW	C/D	$ 17,500,000	$ 9,866,721	$ 8,673,707	$ 4,887,532	2,294	11,214
East Whiteland Township Wastewater System Assets	WW	C/D	$ 54,930,000	$ 42,513,245	$ 48,672,940	$ 34,143,673	3,895	14,720
City of Beaver Falls Wastewater System Assets				**$ 8,146,961**	**$ 12,898,487**	**$ 7,850,687**	**3,259**	**15,580**

	Indicated Valuations				
Municipal Authority of the City of Mckeesport	$ 15,147,523	$ 22,006,304	$ 16,591,847	$ 39,781,221	$ 52,304,382
New Garden Township/Authority's WW System's Assets	$ 10,448,845	$ 14,641,394	$ 12,889,807	$ 53,530,345	$ 38,031,444
Limerick Township Wastewater System's Assets	$ 14,064,646	$ 15,919,805	$ 16,325,842	$ 45,190,343	$ 62,243,749
Steelton Borough (Water) Authority				$ 29,663,228	$ 59,094,740
Exeter Township Wastewater System Assets				$ 34,824,577	$ 54,173,639
Kane Borough Authority Wastewater System	$ 13,235,185	$ 11,176,269	$ 15,493,547	$ 28,344,745	$ 58,898,773
Borough of Royersford Wastewater System Assets	$ 22,519,907	$ 24,361,108	$ 22,451,757	$ 26,545,739	$ 39,297,633
York City Sewer Authority Wastewater System Assets	$ 19,051,416	$ 25,122,513	$ 23,474,446	$ 55,711,428	$ 45,240,890
Sadsbury Township Wastewater Utility				$ 30,206,162	$ 37,432,468
East Bradford Township Wastewater System Assets	$ 31,367,594			$ 13,056,891	$ 7,835,446
Township of Mahoning Water System Assets				$ 13,010,719	$ 17,488,901
Township of Mahoning Sewer System Assets				$ 10,702,817	$ 17,601,189
Cheltenham Township Wastewater System Assets				$ 16,025,516	$ 20,689,067
East Norriton Township Wastewater System Assets	$ 42,189,978			$ 13,781,514	$ 22,886,122
Valley Township Water System Assets				$ 14,303,280	$ 15,230,682
Valley Township Wastewater System Assets				$ 14,548,176	$ 29,005,872
Upper Pottsgrove Township Wastewater System Assets		$ 11,595,304	$ 9,346,949	$ 31,380,427	$ 38,738,698
Lower Makefield Township Wastewater System Assets	$ 26,128,786		$ 23,651,929	$ 15,489,822	$ 24,873,934
Willistown Township Wastewater Systems Assets	$ 14,449,767	$ 26,023,881	$ 28,109,693	$ 24,861,595	$ 24,313,358
East Whiteland Township Wastewater System Assets	$ 10,526,427	$ 14,556,628	$ 12,630,107	$ 45,960,685	$ 58,139,226
Average	$ 19,920,916	$ 18,378,134	$ 18,096,592	$ 27,845,962	$ 36,176,011
Indicated Valuation			**$ 24,083,523**		

Income Approach Adjustment Summary

Annual Cash Flow	$	378,971	[1]
Constant Growth Rate		3.80%	[2]
Discount Rate		5.48%	[3]
Adjusted Value	**$**	**23,354,612**	[4]

[1] From OCA Exhibit DJG-5
[2] From OCA Exhibit DJG-7
[3] From OCA Exhibit DJG-6
[4] = [1] * (1+[2]) / ([3] - [2])

Annual Free Cash Flow Calculation

	Year 0
Operating Revenues	$ 3,025,415
EBIT	532,936
Tax (28.89%)	153,965
EBIT (1-t)	378,971
Depreciation	154,351
Capital Expenditures	(154,351)
Free Cash Flow from Operations	**$ 378,971**

See Exhibit R, Gannett Fleming Appraisal, Exh. 13, p. 1.

Adjust to account for capital expenditures

Weighted Cost of Capital Calculation

Capital Component	Proposed Ratio	Cost Rate	After-Tax Rate	Weighted Cost
Long Term Debt	47%	4.0%	2.9%	1.35%
Equity	53%	7.8%	7.8%	4.14%
Total	100%			5.48%

Cost of Capital Summary

Company	Ticker	[1] Stock Price ($)	[2] Dividend ($)	[3] Beta	[4] Debt Ratio	[5] Interest Exp. (mill)	[6] Long-Term Debt (mill)	[7] Debt Cost	[8] DCF Result	[9] CAPM Result
American States Water Co	AWR	80.14	1.860	0.75	42%	$ 42.0	$ 640.2	6.6%	6.2%	8.4%
American Water Works Co Inc	AWK	128.31	3.060	1.00	56%	506.0	12,533.0	4.0%	6.3%	9.7%
Artesian Resources -CL A	ARTNA	32.51	1.210	0.75	44%	9.1	176.9	5.1%	7.7%	8.4%
California Water Service Gp	CWT	47.12	1.120	0.75	39%	40.0	1,051.6	3.8%	6.3%	8.4%
Essential Utilities, Inc.	WTRG	37.58	1.300	1.00	55%	300.0	7,279.0	4.1%	7.4%	9.7%
Middlesex Water Co	MSEX	57.15	1.360	0.80	43%	7.5	352.3	2.1%	6.3%	8.7%
SJW Corp	SJW	51.37	1.600	0.85	53%	50.0	1,673.7	3.0%	7.0%	8.9%
York Water Co	YORW	33.65	0.880	0.85	45%	7.0	198.4	3.5%	6.5%	8.9%
Average		58.48	1.549	0.84	47%	$ 120.2	$ 2,988.1	4.0%	6.7%	8.9%

Terminal Growth Rate (DCF)	**3.8%**	[10]
Risk-Free Rate (CAPM)	**4.6%**	[11]
Equity Risk Premium (CAPM)	**5.0%**	[12]
Average Cost of Equity Result	**7.8%**	[13]

[1] Average stock prices from OCA Exhibit DJG-8
[2] Yahoo! Finance
[3], [4], [5], [6] Value Line Investment Survey
[7] = [5] / [6]
[8] Constant annaul growth DCF model = [2] * (1 + [10]) / [1] + [10]
[9] = [11] + [3] * [12]
[10] Growth rate from OCA Exhibit DJG-9
[11] Risk-free rate from OCA Exhibit DJG-10
[12] Equity risk premium from OCA Exhibit DJG-12
[13] = Average of [8] and [9]

DCF Stock and Index Prices

Ticker	^GSPC	AWR	AWK	ARTNA	CWT	WTRG	MSEX	SJW	YORW
30-day Average	5991	80.14	128.31	32.51	47.12	37.58	57.15	51.37	33.65
Standard Deviation	79.1	4.02	4.97	1.44	2.46	1.80	5.16	2.96	1.45
01/10/25	5827	70.84	121.12	29.71	41.88	34.08	48.87	45.47	30.52
01/08/25	5918	72.95	122.61	30.68	43.27	35.00	50.34	46.27	31.09
01/07/25	5909	73.05	121.63	30.66	44.36	35.27	51.03	46.82	31.28
01/06/25	5975	74.59	121.97	30.27	43.95	35.44	50.27	47.15	31.37
01/03/25	5942	76.38	123.77	31.11	44.78	36.16	51.73	48.27	32.38
01/02/25	5869	76.59	123.86	31.33	44.77	36.04	51.38	48.70	32.49
12/31/24	5882	77.72	124.49	31.62	45.33	36.32	52.63	49.22	32.72
12/30/24	5907	78.04	124.24	31.59	45.66	36.22	53.25	49.55	32.91
12/27/24	5971	77.97	125.29	31.49	45.63	36.46	52.88	49.38	32.73
12/26/24	6038	78.63	126.16	31.77	45.93	36.61	53.66	49.96	33.11
12/24/24	6040	78.35	125.73	31.26	45.62	36.40	53.50	49.54	32.78
12/23/24	5974	78.34	125.98	31.37	45.47	36.25	53.66	49.07	32.89
12/20/24	5931	79.51	125.92	32.02	46.00	36.36	54.77	50.20	33.21
12/19/24	5867	79.46	123.83	31.25	45.92	36.18	54.84	51.05	33.19
12/18/24	5872	79.01	124.43	32.17	46.09	36.24	55.56	50.99	33.44
12/17/24	6051	82.41	129.18	33.29	47.91	37.99	58.95	53.47	34.83
12/16/24	6074	83.51	128.91	33.50	48.37	38.35	59.23	53.90	34.59
12/13/24	6051	83.18	129.59	33.43	48.50	38.69	59.42	54.33	34.59
12/12/24	6051	83.22	130.55	33.26	48.44	39.08	59.55	53.55	34.51
12/11/24	6084	82.75	130.34	33.46	48.83	38.62	59.92	53.21	34.81
12/10/24	6035	82.79	130.98	33.87	48.64	39.08	61.32	53.68	34.68
12/09/24	6053	81.73	130.72	33.45	48.30	38.83	60.31	53.14	34.36
12/06/24	6090	82.11	132.37	34.18	48.70	38.94	60.61	52.99	34.36
12/05/24	6075	82.74	132.10	33.50	49.11	39.32	61.07	53.10	34.56
12/04/24	6086	82.54	131.01	33.73	48.53	39.17	61.88	52.70	34.75
12/03/24	6050	84.07	134.10	33.50	49.65	39.67	62.61	54.13	34.85
12/02/24	6047	85.77	135.60	34.01	50.54	40.19	63.98	55.19	35.46
11/29/24	6032	85.31	136.94	34.74	51.19	40.03	65.44	55.72	35.60
11/27/24	5999	85.37	138.31	34.57	51.19	40.28	65.32	55.28	35.74
11/26/24	6022	85.39	137.59	34.65	50.96	40.04	66.56	55.13	35.68

All prices are adjusted closing prices reported by Yahoo! Finance, http://finance.yahoo.com

Terminal Growth Determinants	Rate
Nominal GDP	3.8%
Real GDP	1.7%
Highest	**3.8%**

CBO, The 2024 Long-Term Budget Outlook, p. 34

CAPM Risk-Free Rate

Date	Rate
11/27/24	4.44%
11/29/24	4.36%
12/02/24	4.36%
12/03/24	4.40%
12/04/24	4.35%
12/05/24	4.33%
12/06/24	4.34%
12/09/24	4.39%
12/10/24	4.41%
12/11/24	4.48%
12/12/24	4.55%
12/13/24	4.61%
12/16/24	4.60%
12/17/24	4.59%
12/18/24	4.65%
12/19/24	4.74%
12/20/24	4.72%
12/23/24	4.78%
12/24/24	4.76%
12/26/24	4.76%
12/27/24	4.82%
12/30/24	4.77%
12/31/24	4.78%
01/02/25	4.79%
01/03/25	4.82%
01/06/25	4.85%
01/07/25	4.91%
01/08/25	4.91%
01/09/25	4.92%
01/10/25	4.96%
Average	**4.64%**

*Daily Treasury Yield Curve Rates on 30-year T-bonds, http://www.treasury.gov/resources-center/data-chart-center/interest-rates/

CAPM - Implied Equity Risk Premium Estimate

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Year	Market Value	Operating Earnings	Dividends	Buybacks	Earnings Yield	Dividend Yield	Buyback Yield	Gross Cash Yield
2013	16,495	956	312	476	5.80%	1.89%	2.88%	4.77%
2014	18,245	1,004	350	553	5.50%	1.92%	3.03%	4.95%
2015	17,900	885	382	572	4.95%	2.14%	3.20%	5.33%
2016	19,268	920	397	536	4.77%	2.06%	2.78%	4.85%
2017	22,821	1,066	420	519	4.67%	1.84%	2.28%	4.12%
2018	21,027	1,282	456	806	6.10%	2.17%	3.84%	6.01%
2019	26,760	1,305	485	729	4.88%	1.81%	2.72%	4.54%
2020	31,659	1,019	480	520	3.22%	1.52%	1.64%	3.16%
2021	40,356	1,739	511	882	4.31%	1.27%	2.18%	3.45%
2022	32,133	1,656	565	923	5.15%	1.76%	2.87%	4.63%
2023	36,870	1,790	588	795	4.85%	1.60%	2.16%	3.75%

Cash Yield	4.50%	[9]
Growth Rate	6.47%	[10]
Risk-free Rate	4.64%	[11]
Current Index Value	5,991	[12]

	[13]	[14]	[15]	[16]	[17]
Year	1	2	3	4	5
Expected Dividends	287	306	326	347	369
Expected Terminal Value					7572
Present Value	262	254	246	239	4990
Intrinsic Index Value	5991	[18]			
Required Return on Market	9.7%	[19]			
Implied Equity Risk Premium	**5.1%**	[20]			

[1-4] S&P Quarterly Press Releases, data found at https://us.spindices.com/indices/equity/sp-500 (additional info tab) (all dollar figures are in $ billions)
[1] Market value of S&P 500
[5] = [2] / [1]
[6] = [3] / [1]
[7] = [4] / [1]
[8] = [6] + [7]
[9] = Average of [8]
[10] = Compund annual growth rate of [2] = (end value / beginning value)^ $^{1/10}$-1
[11] Risk-free rate from DJG risk-free rate exhibit
[12] 30-day average of closing index prices from DJG stock price exhibit
[13-16] Expected dividends = [9]*[12]*(1+[10])^{n} ; Present value = expected dividend / (1+[11]+[19])^{n}
[17] Expected terminal value = expected dividend * (1+[11]) / [19] ; Present value = (expected dividend + expected terminal value) / (1+[11]+[19])^{n}
[18] = Sum([13-17]) present values.
[19] = [20] + [11]
[20] Internal rate of return calculation setting [18] equal to [12] and solving for the discount rate

CAPM Equity Risk Premium Results

IESE Business School Survey	5.5%	[1]
Kroll (Duff & Phelps) Report	5.0%	[2]
Damodaran (average)	4.5%	[3]
Garrett	5.1%	[4]
Average	**5.0%**	

[1] IESE Business School Survey 2024
[2] Kroll (Duff & Phelps), 6-8-2024
[3] http://pages.stern.nyu.edu/~adamodar/ , 1-1-2025
[4] ERP estimation from Exhibit DJG-9

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 Approval of its Acquisition of the Wastewater System Assets of the City of Beaver Falls	:	Docket No. A-2022-3033138

VERIFICATION

I, David J. Garrett, hereby state that the facts above set forth in my Direct Testimony, OCA Statement 2, 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: February 14, 2025

Signature: */s/ David J. Garrett*
David J. Garrett

Address: Resolve Utility Consulting PLLC
101 Park Avenue, Suite 1125
Oklahoma City, OK 73102"

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application of Aqua Pennsylvania Wastewater, Inc. Pursuant to Sections 507, 508, 1102 and 1329 of the Public Utility Code for Approval of its Acquisition of the Wastewater System Assets of the City of Beaver Falls	: : : : :	Docket No.: A-2022-3033138

SURREBUTTAL TESTIMONY

OF

Nichoals A. DeMarco

On behalf of the

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

Date Served: March 4, 2025

Table of Contents

Introduction

Q. Please state your name and business address.

A. My name is Nicholas Anthony DeMarco. My business address is 555 Walnut Street, Forum Place, 5th Floor, Harrisburg, Pennsylvania 17101. I am currently employed as a Regulatory Analyst by the Pennsylvania Office of Consumer Advocate (OCA).

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

A. I am testifying on behalf of the OCA.

Q. Have you previously provided testimony in this case?

A. Yes, I provided direct testimony in this case that was served on February 14, 2025

Q. Have you prepared Exhibits to accompany your testimony?

A. Yes. Exhibits NAD-SR-1 are the work papers showing the difference in sewer rates between Aqua and Bever Falls at my recommended intervals, NAD-SR-2, Aqua's Exhibit D, the engineering report written by Gannett Flmmeing, and NAD-SR-3 is Beaver Falls Response to OCA-II-3 with work papers are attached to this testimony.

Purpose of Surrebuttal Testimony

Q. What is the purpose of your surrebuttal testimony in this case?

A. In my surrebuttal testimony I will respond to the rebuttal testimony by Aqua Pennsylvania (Aqua or Company) witnesses Packer 1-R, Bubel 2-R, Zach Martin 3-R, and Black 9-R, and Beaver Falls (or City) Jones 4-R and Wilkins 8-R, sponsored by Aqua.

Q. Did Aqua agree to any of your recommendations?

A. Yes. Aqua witness Packer agreed that Aqua will submit a separate COSS for the System in a similar manner as it has submitted a separate COSS for each system acquired under

Section 1329 in its 2021 Base Rate Case proceeding and 2024 Base Rate Case proceeding.[1] Aqua witness Black agreed that direct outreach to acquired system customer bases is an important component of any outreach plan as increasing awareness is the first step to encouraging participation.[2] Witness Black also said he found my reporting recommendation reasonable, which requires that Aqua will report the number of eligible customers from the Beaver Falls service area who are enrolled in Aqua's CAP to Aqua's Aqua Assistance Collaborative following the 90 day bill insert after closing is sent to discuss any trends or outreach opportunities for Beaver Falls' customers.[3] Witness Black also agreed that any unused funds from Aqua's Hardship Fund at the end of the program year should be rolled over and added to the budget of the hardship grant program in the following year(s).[4]

Q. Do you agree with any of the rebuttal testimony you reviewed?

A. Yes. I agree with Aqua witness Black's proposal that Aqua contribute an additional $30,000 a year into their Hardship Fund for three years starting where year 1 contribution amount will be within 60 days following closing, for a total of $90,000.[5]

Q. Do you have any corrections to your direct testimony?

A. Yes. I accept the slight error in my Reasonable Review Ratio (RRR) calculation pointed out by Witness Packer. This minor adjustment will be addressed later in my testimony.

I also acknowledge that Aqua's new low-income program, which was approved by the Commission in Aqua's latest base rate case on February 7, 2025[6] will provide more

[1] Aqua R-1 pg. 12 ln. 15-19.
[2] Aqua R-9 pg. 5 ln. 16-17.
[3] Aqua R-9 pg. 6 ln. 1-18.
[4] Aqua R-9 pg. 7 ln. 4-16.
[5] Aqua R-9 pg. 7 ln. 4-16.
[6] https://www.puc.pa.gov/press-release/2025/puc-approves-significantly-lower-than-requested-rate-changes-for-aqua-pa-water-and-wastewater-services-02072025

assistance to Aqua's potential Beaver Falls customers than discussed and outlined in my direct testimony.

Summary of Direct Testimony

Q. Please summarize your direct testimony.

A. In my direct testimony, I provided an analysis of whether the proposed acquisition of the Beaver Falls system at $41.25 million would provide substantial affirmative public benefits. I concluded that it does not from the perspective of both Aqua's ratepayers and Beaver Falls' ratepayers after reviewing the evidence. I also provide an analysis of the OCA's alternative recommendation regarding whether the proposed acquisition of the Beaver Falls system at the OCA adjusted and recommended price of $19.6 million would provide affirmative public benefits, as recommended by OCA witness Garrett. I relied on my review of testimony from both? Aqua and Beaver Falls, discovery responses provided by Aqua and Beaver Falls, Aqua's calculations of the revenue deficiency resulting from the $41.25 and the associated rate impact of that and Aqua's commitment to spend $10.2 million in capital improvements over the next 10 years, as well as OCA witness Garrett's recommended evaluation of $19.6 million to be accepted as the rate making rate base.

Response to Aqua Rebuttal Testimony

Q. What general comments do you have about Aqua's rebuttal testimony that addressed your direct testimony?

A. The basis of Aqua's rebuttal testimony is that making Beaver Falls operate exactly like Aqua operates its existing wastewater systems will provide affirmative benefits despite the rate impact of the $41.25 million purchase price and the $10 million of capital expenditures and an annual revenue deficiency of $4.2 million. However, the evidence in this proceeding shows that Beaver Falls is currently operating in accordance with all regulatory requirements. If acquired by Aqua, Aqua is essentially saying that Beaver Fall's operations will be brought to Aqua's level of performance. At a $41.25 million proposed ratemaking rate base, the rate impact of the change in ownership and operation could be up to a 165% increase in rates, not counting how Aqua's most recent rate increase could impact future rates of Beaver Falls customers. The additional $10 million of capital expenditures that Aqua plans to spend on the Beaver Falls system will only further increase rates over the first ten years. Those rate impacts do not include the typical Aqua rate increases that would be approved over the course of the same 10 year period. Those rate impacts also do not include the rate increases that may be shifted to former Beaver Falls customers from the acquisitions of other systems through fair market value as has happened to other former municipal system customers acquired by fair market value.

Q. Does Aqua present a false-choice scenario of municipal acquisitions that mischaracterize the OCA's position in this case?

A. Yes. Witness Packer mischaracterizes the OCA's position when he states that based on OCA's position, municipalities would have no choice but to continue providing service and that no certificate of public convenience would be granted for sale of a municipal system to an investor-owned utility.[7]

Q. How do you respond to Witness Packer?

First, Witness Packer mischaracterizes my testimony as a wholesale rejection of all municipal acquisitions by investor-owned utilities under Section 1329. However, my direct testimony addresses the specific proposal for Aqua to acquire the Beaver Falls system and whether the proposed transaction creates affirmative public benefits. I did not focus solely on the rate impact of the transaction, and my analysis was based on the facts in this proceeding. In my opinion, based on the information and data I reviewed in this proceeding ,, Aqua's proposed transaction would not provide substantial public benefits and neither Aqua nor Beaver Falls have demonstrated affirmative public benefits that outweigh the known harms to consumers that would result from this proposed acquisition as proposed by Aqua.

Additionally, I am informed by counsel that the OCA settled multiple Section 1329 acquisitions, including acquisitions by Aqua Wastewater. This and every transaction is presented to the Commission with its own set of facts related to purchase price, ratemaking rate base, impact on existing rates, operations, billing, etc. The OCA typically examines all of the information and data available in a proceeding, including the rate impact of the transaction.

[7] Aqua R-1 pg. 3 ln. 14-19.

Q. Is there consensus that between the Aqua and Beaver Falls witnesses whether or not the system is troubled?

A. Witnesses Martin and Jones seem to lean towards concluding that the system is "troubled" both operationally and financially.[8,9] However, neither witness outright claims that the system is troubled. Witness Martin goes as far to say the following regarding capital improvements in his rebuttal:

> Moreover, while OCA attempts to assert that these improvements are not required to address "imminent" issues, this assertion fails to acknowledge that the System is facing substantial issues that cannot be addressed without the acquisition.[10]

New environmental violations were introduced by witness Bubel in his rebuttal testimony.[11] Additionally, witness Bubel mentions that a full audit of the electrical and mechanical equipment was not possible during the due diligence period.[12]

Q. According to the Gannett Flemming Engineering report is the system troubled?

A. While I am not an engineer, the engineering report[13] lists all of the assets in fair to good condition. [14]The sole exception is the Anaerobic Digestion on pg. 29, which is rated as Poor to Fair condition.[15] Importantly the engineering report stated that the anaerobic digester was constructed in 1936-38. The fact that plant that is almost 100 years old is the only plant in "poor to fair" condition puts its condition into perspective in the context of Beaver Falls system.

[8] Aqua R-3 pg. 8 ln. 1-8.
[9] Aqua R-4 pg. 2-3.
[10] Aqua R-3 pg. 9 ln. 13-16
[11] Aqua R-2 pg. 3-5.
[12] Aqua R-2 pg. 6 ln. 6-8.
[13] Attached as NAD-SR- 2 (Aqua Exhibit D).
[14] Aqua Exh. D.
[15] Ibid. at 29.

The engineering report is what the UVEs rely on to appraise the system under Section 1329. The engineering report written by Gannett Fleming, which is the same firm that employs Aqua witness Walker, was used by the UVEs to place a value on the system. Despite the new evidence being introduced in supplemental direct and rebuttal showing a potentially troubled system, there has been no downward adjustment made to the UVEs' valuation of the system or Aqua's proposed ratemaking rate base.

Q. Aqua witnesses Martin and Bubel argue that you did not adequately consider deficiencies in the Beaver Falls operations and systems, and that Aqua addressing those deficiencies will result in benefits. Please respond.[16,17]

A. The fact that Beaver Fall's current operations are not perfect does not mean that Beaver Falls's current operations are deficient. Neither Aqua witnesses Martin nor Bubel took issue with the engineering report submitted as part of Aqua's application nor claimed that it failed to adequately consider deficiencies. Essentially Witness Martin and other Aqua witnesses highlight "deficiencies" and label a system as "reactive" if a smaller system like Beaver Falls does not do everything at the same level or to the same extent as a large company like Aqua. Under this approach, elevating Aqua's fitness in this way subsumes the substantial public benefits analysis and fails to meet the legal standard required of this transaction.

Q. Aqua witness Martin comments on your assessment of the security situation of the Beaver Falls system.[18] Please respond.

[16] Aqua R-3 pg. 5-16.
[17] Aqua R-2 pg. 5-9.
[18] Aqua R-3 pg. 19-23.

A. As I stated in my direct testimony, there is no evidence that Beaver Fall's situation violates any cybersecurity or physical security regulations. Aqua's proposed changes are based on making the Beaver Falls system consistent with the existing Aqua system. While that may be logical, it does not appear to be necessary from a regulatory standpoint. It also does not drive whether this transaction confers sufficient benefits to overcome the known rate harms. Beaver Fall's decision not to avail itself of available tools[19] is not a viable basis to determine that requiring Aqua's ratepayers to pay a premium for the Beaver Falls system is somehow a public benefit.

Q. What correction did Witness Packer make to your Reasonable Review Ratio (RRR) calculation.

A. Witness Packer used a different Depreciated Original Cost (DOC) value. I used the Depreciated Original Cost (DOC)of $5,003,844 provided by ScottMadden. Witness Packer used the average of the ScottMadden DOC and the Gannett Flemming DOC of $7,850,867, which is an average of $6,427,266.

Q. What is your response to this correction?

A. When the new average of $6,427,266 is multiplied by the RRR of 1.68, the result is a RRR value of $10,797,806.[20] As such, Aqua is requesting that a valuation of the Beaver Falls wastewater system value to be placed into ratemaking rate base that is 282% higher than the Commission's current RRR value. This is not reasonable.

Q. Is understanding the FSIO and RRR important in this case?

[19] In addition to PENNVEST funding availability, there are a significant number of free programs which are specifically designed to assist small- and medium-sized wastewater systems with upgrading their cybersecurity infrastructure without requiring substantial funding or technical expertise. For example, tools are available through the US Department of Homeland Security's Cybersecurity and Infrastructure Security Agency Performance Goals Checklist, USEPA and National Institute of Standards and Technology.
[20] Aqua R-1 pg. 8 ln. 1-10.

A. Yes. As stated in my direct testimony, the RRR is not a test of presumptive reasonableness or a determination that an acquisition is in the public interest, but rather one factor among many. The RRR is intended to act as a guidepost to the reasonableness of an FMV valuation. Even adhering to the Commission's RRR does not automatically guarantee that the transaction produces substantial affirmative public benefits. Nevertheless, this does not change the fact that that the $41.25 million Aqua requests to become ratemaking rate base is nearly 4x more than the $10.7 million RRR.

Q. Is understanding the rate impact an important part of this case?

A. Yes. As this application was brought under Section 1329, if approved, Aqua would be permitted to add $41.25 million to its ratemaking rate base, resulting in a rate impact as high as 165% for the Beaver Falls customers. As a Section 1329 transaction, there is no uncertainty about what will happen if this application is approved: Aqua's customers – acquired or existing or both – will be required to pay for the ratemaking rate base determined in this proceeding and the additional annual shortfalls in revenue that are added each year under Aqua's ownership. The following table shows the rate impact wastewater customers could experience at usage rates at the 5,000 gallons per month (gpm) level and at the 10,000 gpm level:[21]

[21] Aqua can request to shift some of this rate increase to its water customers using Act 11. 66 Pa. C.S. § 1311 (c).

Table: NAD-SR-1

Usage Rate of Gallons per-month	Cost at Aqua's WW Rates Pre-Recent Rate Case	Cost at Beaver Falls WW Rates	Percent Increase
4,000	$95.74	$23.22	76%
5,000	$110.65	$40.64	63%
10,000	$171.59	$75.48	56%

These rate impacts are amounts that Beaver Falls customers will be required to pay if ownership of the system is transferred to Aqua. Again, the OCA submitted a reasonable ratemaking rate base of $19.6 million, based on reasonable adjustments to the analyses of the utility valuation experts under Section 1329. This adjustment means that Aqua can still purchase the Beaver Falls system for $41.25 million if it desires to do so but it can only recover $19.6 million from customers in rate base and the $21.65 million difference between the purchase price and rate base value will be funded by Aqua's shareholders.

Q. Can you briefly reiterate the possible rate impacts if the OCA's ratemaking rate base adjustments are accepted?

A. Instead of the estimated 165% increase Beaver Falls customers could see, they may only see an estimated 60% increase with the OCA's recommended adjustments. Aqua's existing customers would also experience a much lower rate impact.[22] This would also lower the annual revenue deficiency Aqua would have just from this purchase from $4.5 million to $1.5 million.[23]

[22] OCA St. 1 pg. 23.
[23] OCA St. 1 pg. 17 ln. 12-14.

Q. If the application is denied, does that mean that Aqua necessarily cannot purchase the system?

A. No. Beaver Falls, as the seller, and Aqua, as the buyer, can structure a different transaction subject to Sections 1102/1103 and 1311(b) of the Code.

Q. Mr. Packer claims that his analysis shows that the "consolidated revenue requirement per customer has decreased".[24]

A. A review of the chart on page 11 of Mr. Packer's rebuttal testimony is key to understanding that his statement does not represent the current situation. Mr. Packer's analysis:

- showed economies of scale as projected, not actual, and failed to address how long it will take Aqua to achieve the projected economies of scale;
- failed to address cost shifting from wastewater to water customers under 66 Pa. C.S. Section 1311(c);
- did not specify whether figure R-1 includes data points at the time of acquisition or following the conclusion of Aqua's initial capital expenditures, and did not address anticipated capital expenditures impact to the weighted average cost per connection; and
- showed that costs are not being reduced for customers, both existing and acquired; however, economies of scale in theory are supposed to reduce costs and such cost reductions eventually flow through to the customer as a benefit.

Mr. Packer's analysis also failed to address that, while there may be *some* economies of scale which result in *some* amount of savings over *some* amount of time, the

[24] Aqua R-1 pg. 6 16-20 % Figure R1.

aspirational efficiencies for Beaver Falls and Aqua customers are not sufficient to overlook the known annual revenue deficiency of $4.2 million which would result from the application, as proposed. Notably, this compounding revenue deficiency calculated by Mr. Packer reflected the annual operation and maintenance expense savings that Aqua identified, ($570,000), yet still reflected a large deficiency as of closing.[25] While Aqua projected that it's weighted average revenue requirement per customer will be $1,783 per customer, it is important to note that rates for both Aqua's existing customers and Beaver Falls current customers continue to increase under Aqua's ownership. Importantly, Mr. Packer's own graph showed a slight increase in the weighted average revenue requirement per customer if the Beaver Falls system is acquired. This goes against the concept of economies of scale as a benefit in this transaction as adding the Beaver Falls system under Aqua's ownership increases the weighted average revenue requirement per customer.

Aqua response to my other recommended conditions for approval

Q. Witness Packer did not agree with your recommendation regarding modifications to the notices provided in the Section 1329 applications. Please respond.[26]

A. In my direct testimony, I recommended two modifications to the notices that Aqua and future sellers would provide as part of the Section 1329 applications.[27] Specifically, I recommended that rate impacts at 5,000 and 10,000 gallons per month be provided in addition to the average level used by Aqua, that the rate impact for other pending Aqua 1329 applications also be included to provide a full picture of what would happen to rates

[25] OCA St. 1 pg. 26.
[26] Aqua R-1 pg. 12-14 ln 21-8.
[27] There is a ratemaking rate base determination made in applications filed pursuant to Section 1329 and Section 1102 and notice is required as part of due process. *McCloskey v. Pennsylvania Public Utility Commission*, 195 A.3d 1055, 1066-1067 (Pa. Cmwlth. 2018), *appeal denied*, 207 A.3d 290 (Pa. 2019)). Notices are not always provided in applications that are filed solely pursuant to Section 1102/1103. However to the extent notices are provided, I would recommend the same modifications, as I would for notices provided in base rate cases too.

if the pending applications are approved, and that the current DSIC be included to provide a full picture of what a bill under Aqua ownership might be.[28] Witness Packer rejects the recommendations mainly because he says that they are not required by Commission regulations, although regarding my recommendation to reflect the rate impact of Aqua's pending application to acquire Beaver Falls he indicates that there was not time to include that information which implies that Aqua would have otherwise included the information.[29]

There is nothing that would prohibit Aqua from modifying its notices as I recommend. My recommendations expand the existing information in small but important ways and are not in any way inconsistent with the Commission's 1329 implementation orders. It is reasonable to show rate impacts at two more usage levels to reflect the fact that not all customers use the average amount of water each month. Providing the other pending 1329 applications would provide necessary context, especially to potential customers, to understand the cumulative impact of the applications being proposed by Aqua, and considered by the Commission, not just the one that they are served by, and finally providing information about the DSIC would provide a slightly more complete picture of what a total bill will look like.

Accurately reflecting this information is very important in this case, where Aqua has made representations at a Beaver Falls public meeting about "worst case scenario" rates that fail to account for the cumulative impact and the DSIC and are, therefore, inaccurate. Aqua's lack of disclosure on these matters deprives Beaver Falls and its customers of the ability to understand the consequences of this sale, and the ability to contest the sale should

[28] OCA St. 1 pg. 36-37.
[29] Aqua R-1 pg. 12-14 ln 21-8.

they oppose the significant rate impact they are likely to endure should the application be approved. As stated above, because this application was brought under Section 1329 means that there is no later opportunity to contest the reasonableness of the $10 million Aqua proposes to add to rate base. By not adequately informing its customers and Beaver Falls customers, Aqua is depriving them of the only forum wherein this sale can be fully contested.

Q. Witness Packer disagreed with your recommended easements conditions. Please respond.[30]

A. None of Witness Packer's claims, which rely on assumptions that Aqua will simply be able to enter upon unacquired property, when necessary, impact my recommendation. The Commission should not permit Aqua to include property (land rights) in its rate base, and then earn a return on such property, when it has not yet legally acquired such property. Land rights are important to Aqua's execution of future service obligations and not having legal access to facilities can serve as barrier to providing reasonable or safe service. Aqua should be required to acquire all easements as a condition of closing the transaction to prevent this outcome.

Q. Witness Martin disagreed with the recommendation that Aqua file an amended Long Term Infrastructure Investment Plan (LTIIP) within 90 days of closing on this transaction, if approved by the Commission. Please respond.[31]

A. While witness Martin does not directly disagree with me regarding the recommendation that Aqua file an amended Long Term Infrastructure Investment Plan (LTIIP) within 90 days of closing on this transaction, if the acquisition is approved by the Commission.

[30] Aqua R-1 pg. 14-16 ln. 16-8.
[31] Aqua R-3 pg. 2-3.

Witness Marting does disagree with the notion of this when responding to I&E witness Cline. I would like to reiterate my recommendation that Aqua file an amended Long Term Infrastructure Investment Plan (LTIIP) within 90 days of closing on this transaction, if approved by the Commission.

Response to Beaver Falls Rebuttal Testimony

Q. Beaver Falls witnesses Jones and Wilkins provide rebuttal testimony where they explain the benefits that the City considered from the sale.[32] Please comment.

A. Witnesses Jones and Wilkins express two main reasons as to why the sale will be a benefit to the City. The first reason is that the City wishes to exit the wastewater business, due to other maters which are important for the City to commit resources to and the inability to hire the necessary workforce. The second public benefit is a stabilization of the City's current financial status. This includes not being able to run the system without raising rates to above the quoted 3% and the City's alleged inability to pay Aqua for a $2 million deposit if ownership of the system is not transferred to Aqua. The first part of the deposit was $1,000,000 paid to Beaver Falls upon execution of the APA. The second part of the deposit was paid three business days after the Commission conditionally accepted the application.[33] It is important to note that the Asset Purchase Agreement shows that the deposit is related to the purchase price as opposed to the Commission's approved ratemaking rate base.

In response to this I would like to reiterate two points. This first being that the OCA provided a reasonable $19.6 million adjusted value for rate making rate base. Aqua can still purchase the system for the $41.25 million or pursue another avenue of purchase outlined

[32] Aqua R-4 & R-8.
[33] APA, Article III, Section 3.01(a)(i-ii).

earlier in my surrebuttal testimony. Secondly, as a statutory advocate, the OCA's duty is to advocate for the interest of consumers in front of the Public Utility Commission and to advocate for Commission approval/denial of utility applications in accordance with law. Here, we are directly advocating for Aqua's existing and acquired customers who will likely have to pay higher utility rates due to this acquisition. Existing Aqua wastewater customers could see an estimated 6% increase in their bills.[34] Moreover, acquired Beaver Falls existing customers will undergo significant rate increases as high as 165% if the system is acquired by Aqua at the requested $41.25 million ratemaking rate base value. Limiting the amount of the ratemaking rate base to the recommended $19.6 million value mitigates these harms.

Q. Witness Wilkins claims that the evidence you used to determine the rate increases necessary for the City to continue to own and operate the system was not entirely correct. Please respond.

A. Witness Wilkins takes issue with the 3% increases I mention in my direct testimony to indicate how much the City would need to increase rates by if it were to continue ownership of the system. Ms. Wilkins argues that this 3% increase is a number which is cited from the City's answer to OCA-II-3, was not meant to cover new debt for capital improvements and that the rate increase would be much higher.[35] Witness Wilkins does not provide any evidence that the City would have to raise rates above those which would be incurred due to the purchase and therefore would not effect existing Aqua customers. She also does not provide a calculation or estimate of what the rate increase would be under continued City ownership.

[34] Aqua August 2024 notice to customers - https://www.puc.pa.gov/pcdocs/1845847.pdf .
[35] Aqua R-8 pg.3 6-12.

Conclusion

Q. Please summarize your recommendations.

A. In summary, Aqua's fitness is the benefit of their ownership over the Beaver Falls system, but Aqua's fitness alone is not determinative of the legal standard under Sections 1102 and 1103 of the Public Utility Code. Aqua's fitness is not worth $41.25 million of additional ratemaking rate base for the Beaver Falls system. Otherwise, the discussion of the financial and technical fitness of a public utility would subsume the analysis to determine if public benefits would arise that are substantial and specific to the transaction and the approved ratemaking rate base would not be a concern.

- The OCA provided a reasonable $19.6 million adjusted value for rate making rate base. Aqua can still purchase the system for the $41.25 million or pursue another avenue of purchase. If the Commission determines to approve the application, it should do so at the OCA recommended rate making rate base of $19.6 million.
- The Commission should weigh the affirmative public benefits of all customers who will be affected by the sale of the system as a whole not just those who reside in the City of Beaver Falls.
- Lastly, if the Commission determines to approve the application, it should do so with the conditions I outline in my direct testimony[36] which should be adopted because they are reasonable and appropriate.

Q. Does this conclude your Direct Testimony?

A. Yes. However, I reserve the right to modify as necessary.

[36] OCA St. 1 pg. 38-39.

Exhibit NAD-SR-1

Work Papers of Nicholas A. DeMarco

Usage Rate of Gallons per-month	Cost at Aqua'sRates Pre-Recent Rate Case*	Cost at Beaver Falls Rates	Percent Increase
4,000	$ 95.47	$23.22	76%
5,000	$ 110.65	$40.64	63%
10,000	$ 171.59	$75.48	56%

* OCA-VI-1 Section VI, '

Aqua wastewater tariff rate zone 1	Aqua's most recent base rate case increase was not taken into account

Beaver Falls Rates	
Customer fee per month	$14.51
charger per 1,000 gallons does not take affect until after the first 3,000	$8.71

¶ 33-34 of the Amended Application.

Exhibit NAD-SR-2

Aqua's Exhibit D,

the Engineering Report Written by Gannett Flmmeing

EXHIBIT D

(Public Version)

City of Beaver Falls

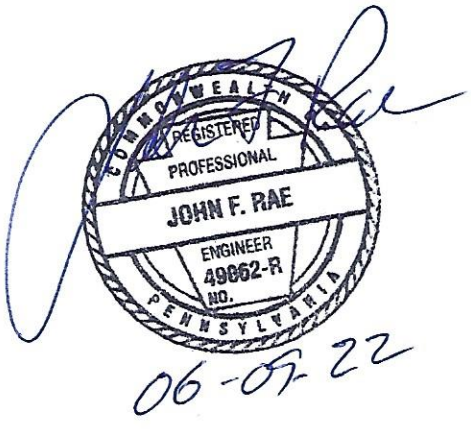
Beaver County, Pennsylvania

ENGINEERS ASSESSMENT of WASTEWATER SYSTEM ASSETS

DRAFT #1 - November 24, 2021

DRAFT #2 – February 1, 2022

FINAL – June 9, 2022



GANNETT FLEMING

Pittsburgh, Pennsylvania

Contents

1.0 Executive Summary

The City of Beaver Falls authorized Gannett Fleming, Inc. on November 5, 2021 to prepare an Act 12 Engineers Assessment Study for sale of its Wastewater System Assets to Aqua, PA. Pennsylvania Act 12 of 2016, amended Chapter 13 of the Pennsylvania Public Utility Code and the Final Implementation Order entered by the Public Utility Commission at Docket No. M-2016-2543193 (collectively, "Act 12") by adding section §1329 Valuation of acquired water and wastewater systems.

The Beaver Falls Wastewater System began initial installation in 1936-1938. The system components covered by this Study consists of gravity separate sanitary sewers and appurtenances within the City of Beaver Falls, one (1) sewage pump station in nearby Eastvale Borough, a sewage force main riding the SR0588 bridge over the Beaver River from Eastvale Borough to Beaver Falls, one (1) wastewater treatment plant (WWTP) and various plant equipment used to operate the WWTP.

An inventory of assets and a determination of original cost of installation as of 2021 is included in Appendix A. The Grand Total Original Cost, as shown on the summary of assets in Appendix A organized by the National Association of Regulatory Utility Commissioners System of Accounts for water and wastewater systems (NARUC account number) = $12,898,487.

A map of the City of Beaver Falls sewers and service area is contained in Appendix B. Photos are contained in the Report Section 5 – Condition Assessment.

2.0 List of Facilities:

Based on available records of construction and input from City staff, the following is a list of wastewater facilities:

2.1 Sanitary Sewers (See Appendix B):

- Total of 190,442 (36.1 miles) LF of PVC, VCP and CIP-Lined VCP ranging in size from 8-Inch to 24-inch diameter.
- Total of approximately 60,318 LF of service laterals from 3,351 connections.
- Total of 536 brick and 138 concrete manholes.
- Total of approximately 1,400 LF of 8-inch DIP force main connecting the Eastvale Pump Station to the City sewers.
- Total of six meter stations located at the City's boundary with adjacent municipalities along the western edge.

2.2 Eastvale Pump Station:

- Gorman-Rupp wet well mounted suction lift pumps installed over a new wet well connected to the original wet well/pump chamber.
- Prefabricated enclosure and packaged controls.
- Onsite emergency power generator (natural gas fueled).

2.3 Wastewater Treatment Plant:

- WWTP rated at 4.7 MGD Average Daily Flow (ADF) with primary settling tanks (3), biological contact oxidation towers (2), secondary settling tanks (5), chlorine disinfection tanks (2), anaerobic sludge digesters (2), belt filter press (1), grit separator (1), grease separator (1), various piping, pumps, blowers and controls. Dewatered sludge and process residuals are disposed at a regional landfill.
- Onsite emergency power generator (diesel fuel).
- Operating under NPDES Permit No. PA0026883, effective November 1, 2018 and expires October 31, 2023.

- Constructed under PADEP Part II Sewage Permit No. 0472402 as amended from time to time.

3.0 List of Projects:

Based on available records of construction and input from City staff, the following is a list of projects completed by the City:

3.1 Sanitary Sewers (See Appendix B):

- 1936-1938 Original VCP gravity sewers and brick manholes installed within the City of Beaver Falls. Sewers ranged in size from 8-inch to 15-inch diameter. Original sewer remaining in service include: 145,990 LF of 8-inch VCP; 4,000 LF of 10-inch VCP; 1,400 LF of 12-inch VCP; 4,200 LF of 15-inchVCP; and 5,100 LF of 8-inch Cured in Place (CIP) Lined VCP.
- 1990 Installed 1,800 LF of 8-inch PVC, 1,700 LF of 15-inch PVC and concrete manholes. The majority of this sewer replaced original sewers. The section from MH 60C to MH 245 eliminated a small pump station.
- 1991 Installed 4,800 LF of 12-inch PVC and concrete manholes to serve West Mayfield Borough and a portion of White Township.
- 1993 Installed 370 LF of 8-inch and 960 LF of 12-inch PVC and concrete manholes to replace original sewers.
- 1996 Replaced and upsized the East Trunk Sewer with 7,700 LF of 18-inch PVC, 11,607 LF of 24-inch PVC and concrete manholes.
- 1998 Replaced 815 LF of 8-inch VCP with 8-inch PVC and installed Cured-in-Place lining of 2,700 LF of 8-inch VCP sewer to rehabilitate and replace original sewers.
- 2008 Cured-in-Place lined 2,100 LF of 8-inch VCP sewer to rehabilitate original sewers.
- 2011 Cured-in-Place lined 300 LF of 8-inch VCP sewer to rehabilitate original sewers.

3.2 Eastvale Pump Station:

- 2006 Replacement of the original pump station along with a new force main riding the SR0588 bridge over the Beaver River.

3.3 Wastewater Treatment Plant:

- 1936-1938 Original plant consisting of Settling Tanks, Sludge Drying Beds and Anaerobic Digesters/Gas Control Building. Only the Anaerobic Digesters/Gas Control Building and a small portion of the Sludge Drying Beds from the original plant remain in service today.
- 1964 First major plant upgrade/expansion consisting of demolition of the original settling tanks and construction of the "Primary Treatment Plant" with installation of the Main Equipment Building, the Primary Settling Tanks 1-2-3 and the Outfall. All of these facilities remain in service today.
- 1974 Second major plant upgrade/expansion consisting of the construction of the "Secondary Treatment Plant" with installation of the Secondary Pump Station, Oxidation Tower #1, Final Settling Tanks 1-2, Chlorine Contact Tank, new Outfall connecting to the original outfall and the Garage (now known as the tool shop). All of these facilities remain in service today.
- 1996 Third major plant upgrade consisting of the expansion of the Secondary Plant with the installation of the Oxidation Tower #2, the Final Settling Tanks 3-4-5, the Grit Wash and Grease Separator Building, the Aerated Sludge Holding Tank, the Thickened Sludge Storage Tank, the Split Faced Block Garage/Belt Filter Press Building and upgrades to the Secondary Pump Station. All of these facilities remain in service today.
- 2010 Expansion of the Secondary Pump Station Wet Well. This facility remains in service today.
- 2010 Installed the three-bay Equipment Storage Building with Office. This facility remains in service today.

3.4 Future Plant:

- To our knowledge, there is no plant held for future use.

4.0 Cost Methodology

The Engineer met with representatives of the City of Beaver Falls, toured the WWTP and Eastvale Pump Station and retrieved various records of assets.

A list of inventory/assets was developed of the used and useful utility plant assets (including land and land rights) and any utility plant held for future use that is part of the System Assets. The assets were assigned an account number that conforms to the National Association of Regulatory Utility Commissioners (NARUC) System of Accounts for water and wastewater systems. The List of Inventory/Assets for the City of Beaver Falls wastewater system is shown in Appendix A.

The tables in Appendix A are organized to support the order of the List of Assets summary. Each table includes the following:

- The NARUC Account Number, Asset Description and year installed.
- Quantity, unit and unit price (if applicable) of each asset.
- Original Cost: Values in this column were derived from a found record of the cost at the time of installation.
- Replacement Value Today: If there was not a record of the Original Cost , the Replacement Value Today was derived from Gannett Fleming's opinion of probable cost based on our records from relevant and similar projects. The Replacement Value Today was then trended back to the year of installation using the ENR Construction Cost Index to determine an approximate Original Cost.

5.0 Condition Assessment

The Engineer met with representatives of the City of Beaver Falls, toured the WWTP and Eastvale Pump Station and assessed the condition of the assets. Conditions are noted in the section titles.

5.1 Sanitary Sewers Condition Assessment

Based on our facility tour, review of available documents and discussions with the operations staff, we offer the following condition assessments:

5.1.1 Gravity Sewers – Good Condition

The City has diligently pursued routine maintenance, repair, renewal and replacement of the collection system since 1990 as documented in section 3.1. Operations staff reports minimal I&I coming from the City sewers. Plant staff tracks boundary meter flow data and assigns that to the tributary municipalities, then compares that data to the total plant and assigns the difference to the City. The following table summarizes the flow per EDU for the tributary municipalities and the City for several months in 2021.

2021	Dec-20	JAN	FEB	MAR	APR	MAY	JUN	JUL
RAIN INCHES	2.97	1.64	2.23	2.71	2.88	4.41	3.23	4.56
EVPS	5,292,000	5,035,000	4,648,000	5,341,000	4,191,000	5,875,000	3,887,000	4,279,000
METER 1	6,314,000	5,354,000	4,193,000	5,526,000	3,801,000	4,666,000	2,297,000	7,909,000
METER 2	5,391,000	5,665,000	4,991,000	6,132,000	4,931,000	5,764,000	3,801,000	4,456,000
METER 3	3,763,000	3,407,000	3,917,000	6,690,000	3,742,000	4,363,000	3,367,000	3,779,000
METER 4	2,967,000	2,404,000	2,317,000	2,847,000	2,457,000	2,446,000	1,029,000	1,502,000
METER 5	2,421,000	2,015,000	2,533,000	3,085,000	1,936,000	2,237,000	1,586,000	2,388,000
METER 6	4,987,000	4,236,000	3,312,000	5,013,000	4,200,000	6,747,000	3,541,000	3,525,000
Trib Total Flow =	31,135,003	28,116,002	25,911,002	34,634,003	25,258,003	32,098,004	19,508,003	27,838,005
Trib EDUs (60 gpcd) =	2,732	2,732	2,732	2,732	2,732	2,732	2,732	2,732
Days/Mo =	31	31	28	31	30	31	30	31
Trib GPD/EDU =	368	332	339	409	308	379	238	329
BBMA	1,693,000	1,472,000	1,382,000	1,849,000	1,391,000	1,955,000	1,243,000	1,176,000
DALTON	1,411,600	1,957,476	1,752,309	1,655,059	1,448,200	1,795,277	1,430,887	1,332,854
VAL. WASTE	15,953	12,485	15,953	15,953	13,178	11,791	15,953	13,178
TOTAL	34,255,556	31,557,963	29,061,264	38,154,015	28,110,381	35,860,072	22,197,843	30,360,037
PLANT FLOW	65,290,000	67,540,000	57,940,000	73,750,000	57,910,000	80,280,000	47,660,000	53,410,000
CITY OF B.F.	31,034,444	35,982,037	28,878,736	35,595,985	29,799,619	44,419,928	25,462,157	23,049,963
City EDUs (60 gpcd) =	3,553	3,553	3,553	3,553	3,553	3,553	3,553	3,553
Days/Mo =	31	31	28	31	30	31	30	31
City GPD/EDU =	282	327	290	323	280	403	239	209

5.1.2 Service Sewers – Fair Condition

Per City Ordinance 4044, the customer is responsible for maintenance from their structure to the curb line and the City is responsible for maintenance from the curb line to the main. The City has occasionally assisted customers with issues, such as backwater preventers to stop basement backups.

5.1.3 Manholes – Fair Condition

Of the 674 manholes in the City, approximately 80% are brick and 20% are concrete. Operations staff reports minimal I&I from manholes, which indicates they are intact and structurally sound.

5.1.4 Meter Stations – Good Condition

The City owns and maintains six (6) boundary meters along the western edge of the City collection system. These meters measure flows contributed by the tributary municipalities. The meters are routinely visited and serviced as needed.

5.1.5 Force Main – Good Condition

The City owns and maintains the 8-inch force main from the Eastvale Pump Station, which rides the SR0588 Bridge over the Beaver River and discharges to MH 91. The force main was installed in 2006. There are no known or reported issues with the operation or integrity of the force main.

FIGURE 5.1-1: EASTVALE PUMP STATION FORCE MAIN RIDING THE SR0588 BRIDGE

5.2 Eastvale Pump Station Condition Assessment

Based on our facility tour, review of available documents and discussions with the operations staff, we offer the following condition assessments:

5.2.1 Wet Well – Fair Condition

The Eastvale pump station was upgraded in 2006. The wet well is the original wet well from circa 1993, was determined to be suitable for the expected life of the facility and was not replaced.

5.2.2 Pumps and Controls – Good Condition

New wet well mounted, suction lift pumps were installed with the 2006 upgrade. The City routinely checks the pump station and services the pumps as necessary.

5.2.3 Enclosure – Good Condition

During the 2006 upgrade, a new enclosure was provided as part of the Gorman-Rupp prepackaged pump station. All electrical and HVAC components are functioning properly.

5.2.5 Emergency Power – Good Condition

The emergency generator is natural gas powered. The City performs routine preventative maintenance to keep the generator functioning reliably.

5.2.6 Facility Photos

FIGURE 5.2-1: EASTVALE PUMP STATION VICINITY AND SECURITY FENCING

FIGURE 5.2-2: EASTVALE PUMP STATION SITE

FIGURE 5.2-3: EASTVALE PUMP STATION SUCTION LIFT PUMPS

FIGURE 5.2-4: EASTVALE PUMP STATION PUMP CONTROLS

FIGURE 5.2-5: EASTVALE PUMP STATION NATURAL GAS POWERED EMERGENCY GENERATOR

5.3 Wastewater Treatment Plant Condition Assessment

Based on our facility tour, review of available documents and discussions with the operations staff, we offer the following condition assessments:

5.3.1 Headworks-Preliminary Treatment – Fair Condition

The Headworks facility was constructed with the 1964 upgrade. The screening equipment is original, has been maintained and is serving its intended function. The raw sewage / primary settling pumps and electrical were replaced with the 1996 upgrade.

FIGURE 5.3 - 1: HEADWORKS-PRELIMINARY TREATMENT BUILDING

FIGURE 5.3 - 2: MANUAL BAR SCREEN

FIGURE 5.3 - 3: MECHANICAL BAR SCREEN

FIGURE 5.3 - 4: RAW SEWAGE PUMPS

5.3.2 Process Pumps and Blowers – Good Condition

The secondary pumps and the process air blowers were replaced with the 1996 upgrade and remain in service today.

FIGURE 5.3 - 5: SECONDARY/PRIMARY EFFLUENT PUMPS

FIGURE 5.3 - 6: PROCESS BLOWERS

5.3.3 Primary Settling – Fair Condition

The primary settling tanks were installed with the 1964 upgrade and remain in service today. While there is some evidence of minor seepage along the tank walls, the tanks appear to be providing the intended treatment.

FIGURE 5.3 - 7: PRIMARY SETTLING TANKS-TOP VIEW

FIGURE 5.3 - 8: PRIMARY SETTLING TANKS-SIDE VIEW

5.3.4 Secondary Aeration / Oxidation Towers – Good Condition

Oxidation Tower #1 with the brick façade was installed as part of the 1974 upgrade/expansion when the secondary treatment train was added and remains in service today. Oxidation Tower #2 with the bolted steel tank was installed as part of the 1996 expansion and remains in service today.

FIGURE 5.3 - 9: OXIDATION TOWER-TOP VIEW

5.3.5 Secondary Settling Tanks – Good Condition

Secondary settling tanks 1 and 2 were installed as part of the 1974 upgrade/expansion when the secondary treatment train was added and remain in service today. Secondary settling tanks 3-4-5 were installed as part of the 1996 expansion and remain in service today.

FIGURE 5.3 - 10: SECONDARY SETTLING TANKS AND OXIDATION TOWERS

5.3.6 Chlorine Disinfection System and Tanks – Good Condition

The chlorine disinfection system, chlorinator and chlorine contact tanks were installed as part of the 1974 upgrade/expansion and remain in service today.

FIGURE 5.3 - 11: CHLORINE SCALES

FIGURE 5.3 - 12: CHLORINATOR

FIGURE 5.3 - 13: CHLORINE CONTACT TANKS-TOP VIEW

5.3.7 Aerated Sludge Thickener – Good Condition

The aerated sludge thickening tank was installed as part of the 1996 upgrade/expansion and remains in service today.

FIGURE 5.3 - 14: SLUDGE THICKENING TANK

5.3.8 Thickened Sludge Holding Tank– Good Condition

The thickened sludge holding tank was installed as part of the 1996 upgrade/expansion and remains in service today. The air scrubber system shown in Figure 5.3-15 remains in service today.

FIGURE 5.3 - 15: THICKENED SLUDGE TANK AND AIR SCRIBBER - TOP VIEW

5.3.9 Sludge Dewatering Building and Belt Filter Press – Good Condition

The sludge dewatering building and belt filter press used for sludge dewatering were installed as part of the 1996 upgrade/expansion and remain in service today.

FIGURE 5.3 - 16: SLUDGE DEWATERING BUILDING AND SLUDGE CAKE ROLLOFF BOX

FIGURE 5.3 - 17: BELT FILTER PRESS

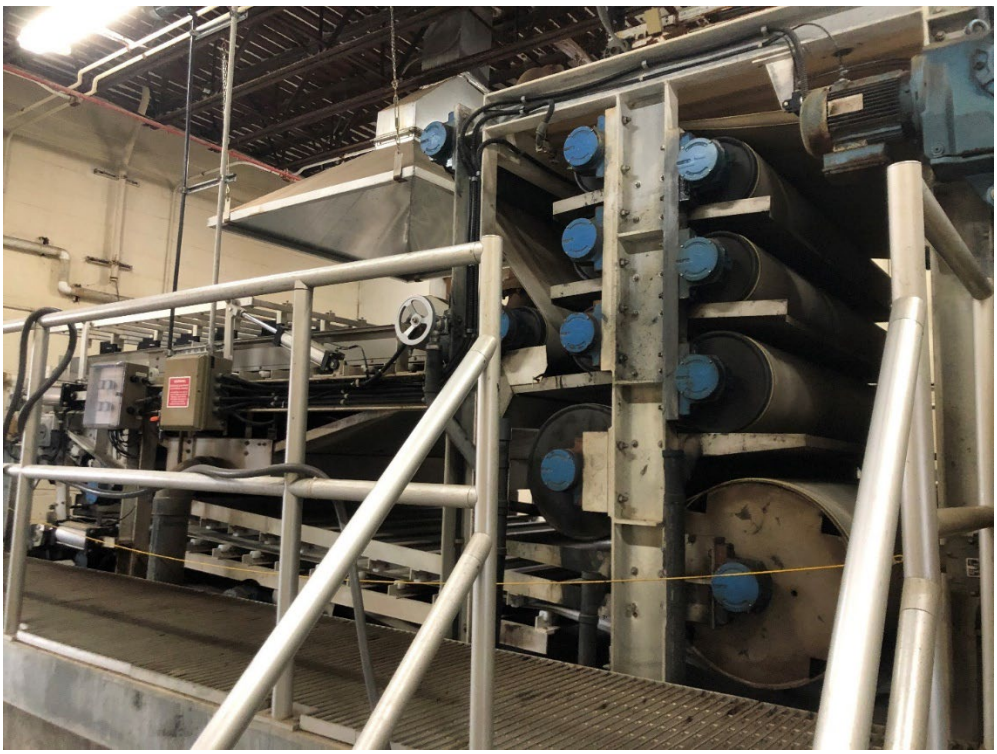


FIGURE 5.3 - 18: BELT FILTER PRESS

5.3.10 Residuals Handling, Grit Separator, Oil/Grease Separator – Good Condition

The residuals handling building, grit separator and oil & grease separator equipment were installed as part of the 1996 upgrade/expansion and remain in service today.

FIGURE 5.3 - 19: RESIDUALS HANDLING BUILDING

FIGURE 5.3 - 20: GRIT SEPARATOR EQUIPMENT

FIGURE 5.3 - 21: OIL & GREASE SEPARATOR

5.3.11 Anaerobic Digestion – Poor to Fair Condition

The anaerobic digesters, control building and sludge drying beds (4) were installed as part of the original plant constructed in 1936-1938. The digesters and control building remain in service today. Two of the sludge drying beds were demolished in 2010 to make room for the three-bay garage. Two of the sludge drying beds remain but are not necessarily used as part of normal plant operations. Operators report that the beds are only used to store excessive grit received after a heavy rain fall. They then use their front loader to scoop a little bit out at a time and put it in the roll off dumpster. Operators report they do not routinely use the beds for anything else and are not sure if they can draw sludge from the digesters into the bed. New gas meters and heat exchanger were installed as part of the 1996 upgrade.

FIGURE 5.3 - 22: ANAEROBIC DIGESTER – TOP VIEW - FLOATING COVER

FIGURE 5.3 - 23: ANAEROBIC DIGESTER TANKS - SIDE VIEW

FIGURE 5.3 - 24: DIGESTER BUILDING

FIGURE 5.3 - 25: DIGESTER WASTE GAS BURNER

FIGURE 5.3 - 26: REMAINING SLUDGE DRYING BED

FIGURE 5.3 - 27: ANAEROBIC DIGESTER PIPING AND EQUIPMENT

FIGURE 5.3 - 28: ANAEROBIC DIGESTER WASTE GAS METER

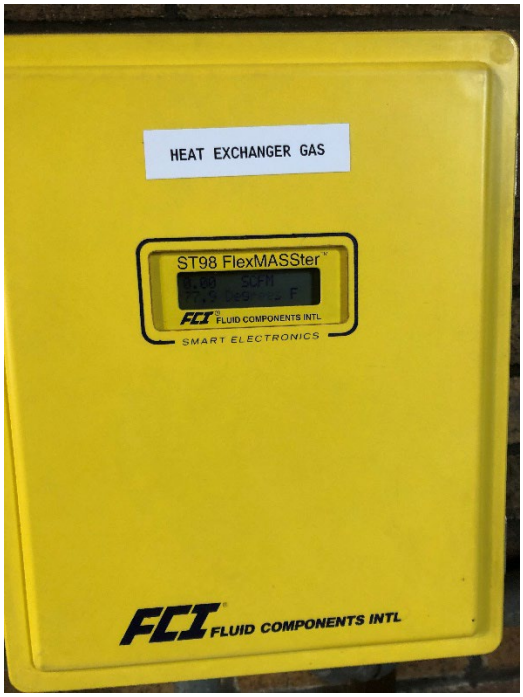


FIGURE 5.3 - 29: ANAEROBIC DIGESTER HEAT EXCHANGER GAS METER

5.3.12 Process and Inter-Unit Piping – Good Condition

Process piping was installed during the respective upgrades/expansions and remains in service. Likewise, inter-unit piping that runs between the facilities was installed during the respective upgrades/expansions and remains in service. Inter-unit piping is buried, could not be viewed so condition is assumed good based on discussions with operations staff.

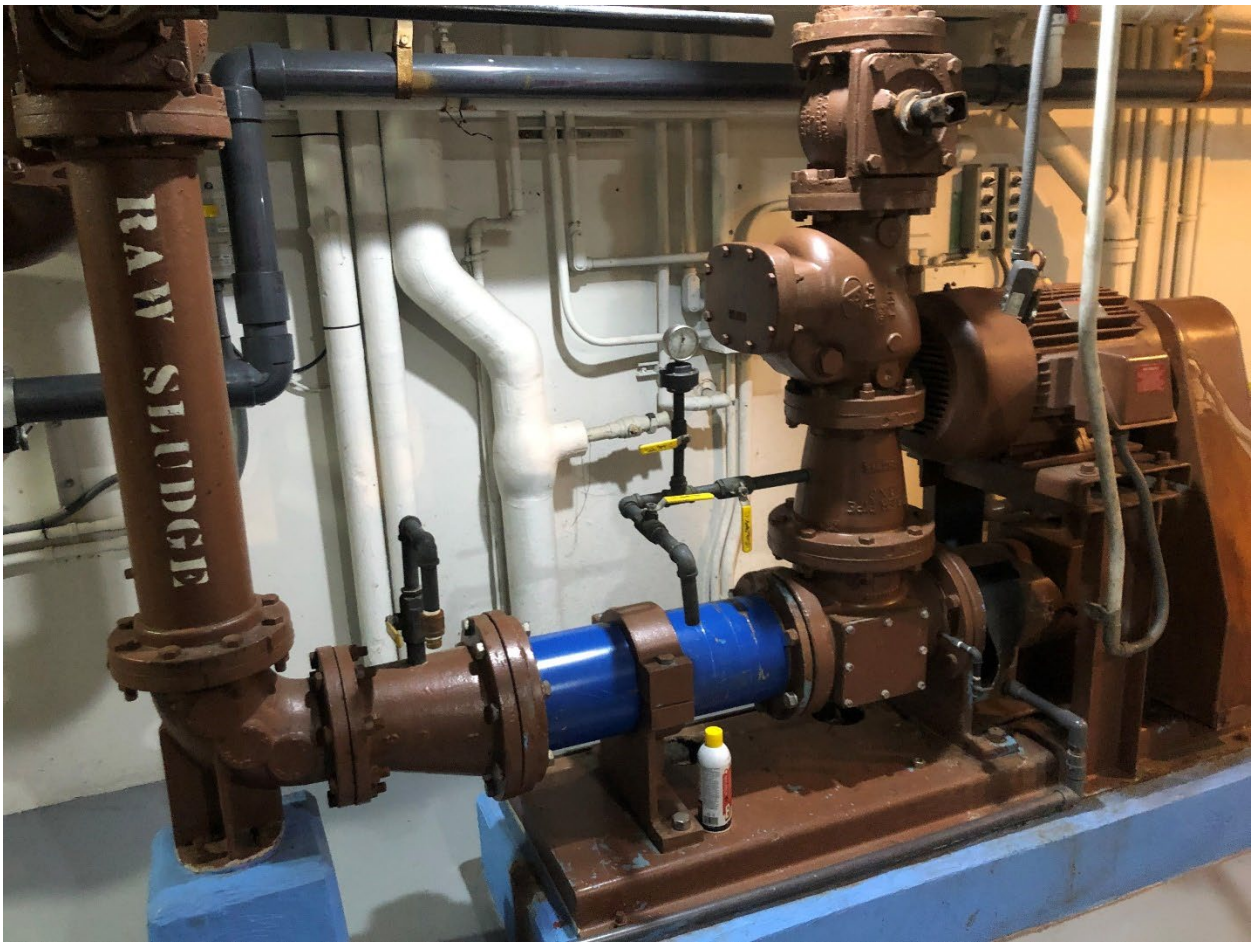


FIGURE 5.3 - 30: SLUDGE TRANSFER PUMPS

FIGURE 5.3 - 31: PRIMARY TANK FEED PIPING

5.3.13 Laboratory Equipment – Good Condition

The onsite lab consist of commercial quality casework installed as part of the 1996 upgrade and is used primarily for process control.

FIGURE 5.3 - 32: LAB FUME HOOD

FIGURE 5.3 - 33: LAB CASEWORK AND FUME HOOD

5.3.14 Electrical & Instrumentation Facilities – Good Condition

Motor Control Centers, distribution panels, lighting panels, duct banks etc were installed as part of each plant upgrade/expansion to service buildings and equipment being installed with each project.

FIGURE 5.3 - 34: MOTOR CONTROL CENTERS

FIGURE 5.3 - 35: AUTOMATIC TRANSFER SWITCH

FIGURE 5.3 - 36: MOTOR CONTROL CENTER

FIGURE 5.3 - 37: EMERGENCY GENERATOR

FIGURE 5.3 - 38: PLANT FLOW METER

5.3.15 HVAC Facilities – Good Condition

Heating, ventilation and air conditioning systems are a combination of electric unit heaters, gas fired unit heaters, roof top AC units, portable AC units, window AC units and a combination heat/AC unit.

FIGURE 5.3 - 39: ELECTRIC UNIT HEATER-GRIT BUILDING

FIGURE 5.3 - 40: ELECTRIC UNIT HEATER OFFICE AREA

FIGURE 5.3 - 41: GAS FIRED UNIT HEATER GARAGE AREA

FIGURE 5.3 - 42: PORTABLE AC UNIT

FIGURE 5.3 - 43: ROOF TOP AC UNIT OFFICE AREA

FIGURE 5.3 - 44: COMBO HEAT-AC UNIT

5.3.16 Three Bay Garage – Good Condition

The three bay garage was installed in 2010 as a stand alone project. This building is used to store the various plant vehicle and equipment and includes a climate controlled office space for operations staff.

FIGURE 5.3 - 45: PEMB VEHICLE AND EQUIPMENT STORAGE BUILDING

FIGURE 5.3 - 46: OFFICE SPACE INSIDE THREE BAY GARAGE

FIGURE 5.3 - 47: WORK STATION IN THREE BAY GARAGE OFFICE SPACE

FIGURE 5.3 - 48: WORK STATION INSIDE GARAGE OFFICE SPACE

FIGURE 5.3 - 49: WORK STATION INSIDE GARAGE OFFICE SPACE

FIGURE 5.3 - 50: WORK STATION INSIDE GARAGE OFFICE SPACE

5.3.17 Maintenance Garage – Fair Condition

The maintenance garage was installed as part of the 1964 upgrade/expansion and is used to house various tools, welding equipment and machining equipment, all of which remain in service today.

FIGURE 5.3 - 51: MAINTENANCE GARAGE AND TOOL SHOP BUILDING

FIGURE 5.3 - 52: MAINTENANCE TOOLS

FIGURE 5.3 - 53: MAINTENANCE TOOLS

FIGURE 5.3 - 54: MAINTENANCE TOOLS

FIGURE 5.3 - 55: MAINTENANCE TOOLS

5.3.18 Vehicles and Garage Equipment – Good Condition

The following photos show equipment typically stored in the three-bay garage and available for use by the operations staff. This equipment is listed in Tables 8 and 10 of the List of Assets.

FIGURE 5.3 - 56: MOWERS AND BOBCAT SKID STEER

FIGURE 5.3 - 57: PORTABLE PUMP

FIGURE 5.3 - 58: BACKHOE

FIGURE 5.3 - 59: 1992 F350 1-TON DUMP

FIGURE 5.3 - 60: 2020 F250 4X4

FIGURE 5.3 - 61: 2014 F150 4X4

5.3.19 Miscellaneous Equipment and Tools

The following photos show equipment and tools stored in the three-bay garage and available for use by the operations staff. This equipment is listed in Table 10 of the List of Assets.

FIGURE 5.3 - 62: SHOP EQUIPMENT

FIGURE 5.3 - 63: SHOP EQUIPMENT AND TOOL CHEST

FIGURE 5.3 - 64: SHOP SUPPLIES

6.0 Engineering Support

The Engineer will respond to RFIs on this Study from the buyers and seller's UVE consultants as well as RFIs / questions from the PUC process reviews (BI&E, OCA, etc).

END OF REPORT

APPENDIX A

Original Cost of Inventory/Assets

ORGANIZED BY ACCOUNT NUMBER

ACCOUNT	PROPERTY DESCRIPTION	REFERENCE TABLE	ORIGINAL COST	COMMENTS
353 - Land and Land Rights				
353.2	Land & ROW - Collection Sewers	4	$ 109.00	109 Easements at $1 each
353.3	Land & ROW - Pumping Station (Eastvale)	2	$ 1.00	1 Easement at $1 each
353.4	Land & ROW - Treatment Plant	1	$ 36,900.00	Several lots combined on same deeds
			$ 37,010.00	
354 - Structures and Improvements				
354.3	Structures & Imp. - Pumping Station (Eastvale)	2	$ 133,168.00	
354.4	Structures & Imp. - WWTP	1	$ 4,519,461.75	
			$ 4,652,629.75	
355 - Power Generation Equipment				
355.3	Power Gen. Equip. - Pumping Station	2	$ 4,972.78	
355.4	Power Gen. Equip. - WWTP	1	$ 87,502.00	
			$ 92,474.78	
360 - Collection Sewers - Force				
		3	**234,542.22**	
361 - Collection Sewers - Gravity				
		4	**$ 3,804,748.05**	
363 - Services to Customers				
		5	**$ 170,292.73**	
364 - Flow Measuring Devices				
		6	**$ 57,104.19**	
371 - Pumping Equipment				
371.3	Pumping Equip. - Pumping Station	2	$ 236,966.95	
371.4	Pumping Equip. - WWTP	1	$ 350,796.01	
371.4	Pumping Equip. - WWTP Raw Influent Pumping Station	1	$ 142,799.00	
			$ 730,561.96	
380 - Treatment and Disposal Equipment				
380.4	Treatment & Disp. - WWTP	1	**$ 1,928,800.48**	
381 - Plant Sewers				
381.4	Plant Sewers - WWTP	1	**$ 721,765.15**	

ORGANIZED BY ACCOUNT NUMBER

ACCOUNT	PROPERTY DESCRIPTION	REFERENCE TABLE	ORIGINAL COST	COMMENTS
382 - Outfall Sewer Lines				
382.4	Outfall Sewer Lines - WWTP	1	$ 70,212.80	
389 - Other Plant and Misc Equipment				
389.4	Other Plant & Misc. Equip. - WWTP	1	$ 27,490.27	
390 - Office Furniture and Equipment				
390.7	Office Furniture & Equip. - General Plant	7	8,606.74	
391 - Transportation Equipment				
391.7	Transportation Equip. - General Plant	8	175,120.82	
392 - Stores Equipment				
392.7	Stores Equip. - General Plant	9	$ 14,999.28	
393 - Tools, Shop, and Garage Equipment				
393.7	Tools, Shop, & Garage Equip. - General Plant	10	104,839.62	
394 - Laboratory Equipment				
394	Laboratory Equip. - General Plant	11	$ 53,688.11	
395 - Power Operated Equipment				
395.7	Power Operated Equip. - General Plant	12	-	
396 - Communication Equipment				
396.7	Communication Equip. - General Plant	13	11,600.00	
397 - Miscellaneous Equipment				
397.7	Misc. Equip. - General Plant	14	2,000.00	

GRAND TOTAL ORIGINAL COST = $ 12,898,486.94

Check **$ 12,898,486.94**

(1) See Reference Tables for project cost break down and corresponding account numbers per pay item.

TABLE 1 - WASTEWATER TREATMENT PLANT

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
353.4	**Land & ROW - Treatment Plant**					
353.4	Parcel 01-001-0100.002	1930	1	EA		
353.4	Parcel 01-001-0100.003	1930	1	EA		
353.4	Parcel 01-001-0100.004 - DBV 865, pg 279	1964	1	EA	$ 10,800.00	
353.4	Parcel 01-001-0100.001- DBV 1005, pg 137	1973	1	EA	$ 26,100.00	
353.4	Parcel 01-001-0100.007- DBV 1005, pg 137	1973	1	EA		
353.4	Parcel 01-001-0111.000 - DBV 1005, pg 137	1973	1	EA		
353.4	Parcel 01-002-0100.001 - DBV 1005, pg 137	1973	1	EA		
353.4	Parcel 01-002-0101.000 - DBV 1005, pg 137	1973	1	EA		
				SUBTOTAL	**$ 36,900.00**	
			Subtotal	**Used**		
354.4	**Structures & Imp. - WWTP**					
354.4	Architect's plans and specifications	1974	1	LS	$ 150,878.66	
354.4	Legal	1974	1	LS	$ 10,000.00	
354.4	Adminstration	1974	1	LS	$ 3,000.00	
354.4	Indirect Costs	1974	1	LS	$ 8,000.00	
354.4	Site	1974	1	LS	$ 25,000.00	
354.4	Architect's plans and specifications	1996	1	LS	$ 487,083.25	
354.4	Legal	1996	1	LS	$ 26,460.48	
354.4	Permits	1996	1	LS	$ 20,500.00	
354.4	Land	1996	1	LS	$ 10,737.50	
354.4	Erosion Control	1996	1	LS	$ 5,800.00	
354.4	Landscaping/Final Grade	1996	1	LS	$ 14,600.00	
354.4	Paving/Subbase	1996	1	LS	$ 36,000.00	
354.4	Ongrade Slab/Sidewalk	1996	1	LS	$ 17,800.00	
354.4	Fences	1996	1	LS	$ 11,600.00	
354.4	Main Equipment Building Original Remaining in Service-Above Grade	1964	1	LS	$ 30,586.12	$ 391,800.00
354.4	Main Equipment Building Original Remaining in Service-Below Grade	1964	1	LS	$ 36,456.65	$ 467,000.00
354.4	Power Feed Mains	1964	1	LS	$ 7,416.24	$ 95,000.00
354.4	Grit Chamber Rebuild CO#1	1996	1	LS	$ 5,791.10	

TABLE 1 - WASTEWATER TREATMENT PLANT

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
354.4	Grit Chamber Painting CO#1	1996	1	LS	$ 1,412.82	
354.4	Replace Roof Over Existing Bldg CO#3	1996	1	LS	$ 39,768.12	
354.4	Roof Improvements CO#5	1996	1	LS	$ 20,000.00	
354.4	Ex. Primary Settling Tank Mech Mods.	1996	1	LS	$ 11,000.00	
354.4	Primary Settling Tanks 1, 2,3 original Remaining in Service	1964	1	LS	$ 32,006.91	$ 410,000.00
354.4	Ex. Primary Settling Tank General Mods.	1996	1	LS	$ 20,000.00	
354.4	Electrical - Primary Settling Tanks	1996	1	LS	$ 5,020.00	
354.4	Ex Prim Eff Pump Station Gratings/Supports	1996	1	LS	$ 6,000.00	
354.4	Ex Pump Stations Grating & Supports	1996	1	LS	$ 1,000.00	
354.4	Expansion of existing Secondary Pump Station wetwell	2010	1	LS	$ 146,773.41	$ 200,000.00
354.4	Oxidation Tower 1 - Remaining in Service	1996	1	LS	$ 136,300.00	
354.4	Oxidation Tower 1 - Modification/EPDM	1996	1	LS	$ 12,095.00	
354.4	Oxidation Tower 1 -Brick/Mortar Work	1996	1	LS	$ 4,800.00	
354.4	Ex Ox Tower Stairs/Railings	1996	1	LS	$ 14,200.00	
354.4	Oxidation Tower 2 - Excavate	1996	1	LS	$ 5,600.00	
354.4	Oxidation Tower 2 - Reinforce Steel	1996	1	LS	$ 26,900.00	
354.4	Oxidation Tower 2 - Pipe Encase & Fottomg	1996	1	LS	$ 8,200.00	
354.4	Oxidation Tower 2 - Trough Pour	1996	1	LS	$ 7,600.00	
354.4	Oxidation Tower 2 - Sub-base	1996	1	LS	$ 6,300.00	
354.4	Oxidation Tower 2 - Base slab	1996	1	LS	$ 41,100.00	
354.4	Oxidation Tower 2 - Ring Wall	1996	1	LS	$ 16,600.00	
354.4	Oxidation Tower 2 - Beams	1996	1	LS	$ 12,600.00	
354.4	Oxidation Tower 2 - Vent Walls	1996	1	LS	$ 5,200.00	
354.4	Oxidation Tower 2 - Grout	1996	1	LS	$ 1,600.00	
354.4	Oxidation Tower 2 - Anchor bolts/Tank Plate	1996	1	LS	$ 4,600.00	
354.4	Oxidation Tower 2 - Stair System Piers/Excavate/Reinforce/Pour	1996	1	LS	$ 8,400.00	
354.4	New Ox Tower#2 Grating/frames/ Stairs/Railings	1996	1	LS	$ 17,500.00	
354.4	Ladders Ox Tower CO#3	1996	1	LS	$ 1,741.30	
354.4	Electrical - Oxidation Towers 1 and 2	1996	1	LS	$ 3,220.00	
354.4	Recirculation/Distribution Structure	1996	1	LS	$ 19,000.00	
354.4	Manhole "A"	1996	1	LS	$ 3,700.00	
354.4	Recirc/Dist STR. Grating & Supports	1996	1	LS	$ 4,800.00	

TABLE 1 - WASTEWATER TREATMENT PLANT

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
354.4	Fin. Settling Tanks - Excavate	1996	1	LS	$ 9,600.00	
354.4	Fin. Settling Tanks - Gravel Base	1996	1	LS	$ 5,600.00	
354.4	Fin. Settling Tanks - Slab Reinforcement	1996	1	LS	$ 21,000.00	
354.4	Fin. Settling Tanks - Slab Form & Pour	1996	1	LS	$ 62,600.00	
354.4	Fin. Settling Tanks - Hoppers/Reinforcement	1996	1	LS	$ 13,000.00	
354.4	Fin. Settling Tanks - Hoppers/Form & Pour	1996	1	LS	$ 21,600.00	
354.4	Fin. Settling Tanks - Walls/Reinforcement	1996	1	LS	$ 24,000.00	
354.4	Fin. Settling Tanks - Walls/Form & Pour	1996	1	LS	$ 74,000.00	
354.4	Fin. Settling Tanks - Grout	1996	1	LS	$ 9,600.00	
354.4	Fin. Settling Tanks - Walkways/Form & Pour Embedded Items	1996	1	LS	$ 13,600.00	
354.4	Fin. Settling Tanks - Embedded Items	1996	1	LS	$ 3,600.00	
354.4	Fin. Settling Tanks - Offsite Dirt Handling - All	1996	1	LS	$ 22,000.00	
354.4	Final Sed Tanks-Grating/ Frames/Stairs/Railings	1996	1	LS	$ 34,000.00	
354.4	Ground Stabilization at Final Tanks CO#1	1996	1	LS	$ 10,343.30	
354.4	Electrical - Final Settling Tanks	1996	1	LS	$ 9,551.00	
354.4	Electrical - Settling Tank Lighting	1996	1	LS	$ 8,611.00	
354.4	Utility Water from Chlorine Tanks to Belt Press Bldg.	1996	1	LS	$ 13,400.00	
354.4	Electrical - Sampler	1996	1	LS	$ 9,465.00	
354.4	Grit Washer/ScumConcentrator/Stairs,Platforms, Railing	1996	1	LS	$ 4,200.00	
354.4	Electrical - Grit Washer	1996	1	LS	$ 2,265.00	
354.4	Aerated Sludge Holding Tank - Excavation	1996	1	LS	$ 17,600.00	
354.4	Aerated Sludge Holding Tank - Gravel Base	1996	1	LS	$ 9,900.00	
354.4	Aerated Sludge Holding Tank - Slab Reinforcement	1996	1	LS	$ 39,000.00	
354.4	Aerated Sludge Holding Tank - Slab Form & Pour	1996	1	LS	$ 49,600.00	
354.4	Aerated Sludge Holding Tank - Wall Reinforcement	1996	1	LS	$ 31,000.00	
354.4	Aerated Sludge Holding Tank - Wall Form & Pour	1996	1	LS	$ 77,000.00	
354.4	Aerated Sludge Holding Tank - Footer Drainage	1996	1	LS	$ 6,000.00	
354.4	Aerated Sludge Holding Tank - Grout	1996	1	LS	$ 11,000.00	
354.4	Thickened Sludge/Belt Press - Reinforcement	1996	1	LS	$ 12,900.00	
354.4	Thickened Sludge/Belt Press - Form & Pour	1996	1	LS	$ 36,800.00	
354.4	Thickened Sludge/Belt Press - Slab on Decking	1996	1	LS	$ 12,600.00	
354.4	Thickened Sludge/Belt Press - Excavation	1996	1	LS	$ 6,800.00	

TABLE 1 - WASTEWATER TREATMENT PLANT

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
354.4	Thickened Sludge/Belt Press - Gravel Base	1996	1	LS	$ 2,800.00	
354.4	Thickened Sludge/Belt Press - Slab Reinforcement	1996	1	LS	$ 18,000.00	
354.4	Thickened Sludge/Belt Press - Form & Pour	1996	1	LS	$ 38,600.00	
354.4	Thickened Sludge/Belt Press - Sump/Reinforce/Pour	1996	1	LS	$ 3,100.00	
354.4	Thickened Sludge/Belt Press - Wall Reinforcement	1996	1	LS	$ 12,900.00	
354.4	Thickened Sludge/Belt Press - Wall Form & Pour	1996	1	LS	$ 22,000.00	
354.4	Anerobic Digesters 1 & 2 Original Remaining in Service	1936-1938	1	LS	$ 5,648.47	$ 300,105.00
354.4	Remove Sludge from Digestor #2 CO#3	1996	1	LS	$ 29,447.05	
354.4	Add Clean/Patch/Paint Interior Wall s of Digestor #2 CO#3	1996	1	LS	$ 7,746.40	
354.4	Sludge Drying Bed (one) Remaining in Service	1936-1938	1	LS	$ 2,823.25	$ 150,000.00
354.4	Digester Control Building Remaining in Service	1936-1938	1	LS	$ 2,992.64	$ 159,000.00
354.4	Belt Press Bldg - Doors & Windows	1996	1	LS	$ 21,265.00	
354.4	Belt Press Bldg- Access Hatch	1996	1	LS	$ 4,600.00	
354.4	Belt Press Bldg - Ceiling	1996	1	LS	$ 2,600.00	
354.4	Belt Press Bldg - HVAC & Gas Lines	1996	1	LS	$ 26,300.00	
354.4	Belt Press Bldg - Roof/Flr Drains and Plumbing	1996	1	LS	$ 19,400.00	
354.4	Belt Prss Bldg - Carpet Paint/Finishers	1996	1	LS	$ 12,000.00	
354.4	Belt Press Bldg - pipe encasement	1996	1	LS	$ 5,800.00	
354.4	Belt Press Bldg - Roof/Flash	1996	1	LS	$ 34,000.00	
354.4	Belt Press Bldg - Concrete Masonry Unit	1996	1	LS	$ 48,000.00	
354.4	Belt Press Bldg - Insulation	1996	1	LS	$ 4,000.00	
354.4	Belt Filter Press Bldg- Walkways/Railings/Support	1996	1	LS	$ 79,000.00	
354.4	Electrical - Belt Filter Press	1996	1	LS	$ 15,220.00	
354.4	Utility Water Booster System	1996	1	LS	$ 57,800.00	
354.4	Electrical - BFP/Garge, Misc.	1996	1	LS	$ 12,658.00	
354.4	Laboratory/Garage - Excavate & Pour	1996	1	LS	$ 6,600.00	
354.4	Laboratory/Garage - Slab Complete	1996	1	LS	$ 13,600.00	
354.4	Electrical - Lab Office	1996	1	LS	$ 4,177.00	
354.4	Electrical - Garage	1996	1	LS	$ 4,177.00	
354.4	Painting	1996	1	LS	$ 94,600.00	
354.4	Electrical Lighting	1996	1	LS	$ 7,703.00	
354.4	Electrical - Entrance Area Lighting	1996	1	LS	$ 6,931.00	

TABLE 1 - WASTEWATER TREATMENT PLANT

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
354.4	Road Between Existing Bldg & Primary Tanks CO#3	1996	1	LS	$ 2,384.32	
354.4	Replace Existing Handrail CO#3	1996	1	LS	$ 36,563.98	
354.4	Additional Fence CO#5	1996	1	LS	$ 24,926.85	
354.4	Electrical - Panel MCP	1996	1	LS	$ 66,306.00	
354.4	Electrical - Blowers	1996	1	LS	$ 2,975.00	
354.4	Electrical - Breaker Panels - 2	1996	1	LS	$ 4,175.00	
354.4	Electrical - Transformers	1996	1	LS	$ 1,555.00	
354.4	Electrical - Panel DP-2	1996	1	LS	$ 66,306.00	
354.4	Electrical - Square D Breakers - 2	1996	1	LS	$ 3,998.00	
354.4	Electrical - Main Pump Building Misc.	1996	1	LS	$ 12,058.00	
354.4	Electrical - Panel DP-1	1996	1	LS	$ 66,306.00	
354.4	Electrical - Westinghouse Breaker	1996	1	LS	$ 1,999.00	
354.4	Electrical - Duct Banks	1996	1	LS	$ 11,369.00	
354.4	Electrical - ESP System	1996	1	LS	$ 24,710.00	
354.4	Electrical - Interlink RTU	1996	1	LS	$ 11,097.00	
354.4	Electrical Secondary Pump Station Power Feed Mains	2020	1	LS	$ 69,810.20	$ 73,000.00
354.4	Secondary Pump Station, Garage, Oxidation Tower, Final Settling Tanks 1 & 2 and Chlorine Contact Tanks 1 & 2 original to remain in service	1974	1	LS	$ 874,793.45	
354.4	Three-Bay Metal Vehicle and Equipment Storgae Building with Interior Office Space	2010	1	LS	$ 376,657.27	$ 513,250.00
			Subtotal	**SUBTOTAL**	**$ 4,519,461.75**	
355.4	**Power Gen. Equip. - WWTP**					
355.4	Electrical - Generator	1996	1	LS	$ 87,502.00	
			Subtotal	**SUBTOTAL**	**$ 87,502.00**	

TABLE 1 - WASTEWATER TREATMENT PLANT

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
371.3	**Pumping Equip. - WWTP**					
371.3	Mission - Grit Pump	1996	1	EA	$ 10,700.00	
371.3	Electrical - Grit Pump	1996	1	LS	$ 1,910.00	
371.3	Flygt Model CT3300 Centrifugal Primary Effluent Pumps	1996	4	EA	$ 88,000.00	
371.3	Ex. Primary Eff. Pump Mods/Control Valve/Mtrs	1996	1	LS	$ 14,100.00	
371.3	Electrical - Primary Pumps	1996	1	LS	$ 7,641.00	
371.3	Install Sewage Sump Simplex system	1996	1	LS	$ 12,400.00	
371.3	Install Sewage Sump Duplex system Zoeller Model #282	1996	1	LS	$ 18,900.00	
371.3	Electrical - Sump Pumps	1996	1	LS	$ 1,430.00	
371.3	Digester Recirculation Pumps	1996	2	EA	$ 27,000.00	
371.3	Moyno Progressive Cavity Pump, 2000 Series, Model 1G090G1CDQAAA, #AS4702896A, 200GPM, 25', 235RPM, Single Stage, 8 X 8, 7.5HP AC Totally Enclosed Fan Cooled Motor, 1200RPM, Extreme Duty, Unit Base Steel, Complete with piping, connections, wiring and controls.	2020	1	LS	$ 6,694.13	$ 7,000.00
371.3	PIONEER Self-Priming Pump, Model SBHCP3F-0036DD, #2462, 4 X 4, 3HP with wiring, conrols, piping and connections	2020	1	LS	$ 2,868.91	$ 3,000.00
371.3	Yale 2-ton capacity spur geared chain hoist with 4 wheel trolley and rail	2020	1	LS	$ 860.67	$ 900.00
371.3	Moyno Progressive Cavity Primary Sludge Pumps, Model #IHII5GI, 15 HP	1996	2	EA	$ 32,000.00	
371.3	Electrical - Primary Sludge Pumps	1996	1	LS	$ 3,820.00	
371.3	Mission - 4" x 3" x 13" Secondary Sludge Pumps	1996	2	EA	$ 30,300.00	
371.3	Electrical - Secondary Pumps	1996	1	LS	$ 3,820.00	
371.3	Moyno Model #IHII5GICDQAAA - Gravity Belt Thickener Pumps	1996	2	EA	$ 15,600.00	
371.3	Moyno Model IG065GICDQAAA Thickened Sludge Pumps	1996	2	EA	$ 29,100.00	
371.3	Electrical - Sludge Pumps (4)	1996	1	LS	$ 11,902.00	
371.3	Monorail Crane With coffing electric chain hoist and crane rail	2020	1	LS	$ 1,912.61	$ 2,000.00
371.3	Monorail Crane, 2 ton capacity with Little Mule 2 Ton Capacity Electric Chain Hoist, 4 wheel trolley & 6' tank lift beam	2020	1	LS	$ 2,677.65	$ 2,800.00
371.3	Wright Safeway 2 Ton Capacity Spur Geared Chain Hoist on 4 Wheel Trolley, complete with Rail and Yale Electric Chain Hoist.	2020	1	LS	$ 3,251.43	$ 3,400.00
371.3	Flygt Submersible Sewage Pump, Model 3201.180-131011, 3201.180-0380	2020	1	LS	$ 23,907.60	$ 25,000.00
			Subtotal	**SUBTOTAL**	**$ 350,796.01**	
371.3	**Raw Sewage Pump Station**					

TABLE 1 - WASTEWATER TREATMENT PLANT

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
371.3	Flygt dry pit submersible pumps - Raw	1996	4	EA	$ 112,400.00	
371.3	Concrete Pump Supports Raw Sewage and Prime Sludge Pump	1996	1	LS	$ 3,900.00	
371.3	Core holes and install water seal for pumps	1996	1	LS	$ 3,600.00	
371.3	Chain Hoist filler Plates	1996	1	LS	$ 3,200.00	
371.3	Electrical - Pump Station Misc.	1996	1	LS	$ 12,058.00	
371.3	Electrical - Raw Sewage Pumps	1996	1	LS	$ 7,641.00	
			Subtotal	**SUBTOTAL**	**$ 142,799.00**	
380.4	**Treatment & Disp. - WWTP**					
380.4	**Preliminary Treatment Building**					
380.4	Fine Screen #1 Remaining in Service	1964	1	EA	$ 42,311.58	$ 542,000.00
380.4	Fine Screen #2 Remaining in Service	1964	1	EA	$ 42,311.58	$ 542,000.00
380.4	Install Self Cleaning Wiese-Flo Mechanical Bar Screen & Compactor	1996	1	LS	$ 56,000.00	
380.4	Install Auxiliary Auger for Bar Screen CO#3	1996	1	LS	$ 41,342.37	
380.4	Install Grit Chamber Equipment	1996	1	LS	$ 36,000.00	
380.4	Worthington Air Compressor	2020	1	LS	$ 430.34	$ 450.00
380.4	Manning Sampler, Model 6901-DC, #980213AA690102 with refrigerated cabinet base	2020	1	LS	$ 1,147.56	$ 1,200.00
380.4	Chlorine Gas Monitoring System - Siemens W&T Acute 35 with wiring and controls	2020	1	LS	$ 3,442.69	$ 3,600.00
380.4	Chlorination System - 2 chlorinators/regulators, 1-Halogen Valve System, 2 - Chlorinators and wiring and controls	2020	1	LS	$ 6,694.13	$ 7,000.00
380.4	Exhaust Fan, Thru-Wall, 1/3 HP complete with conduit and wiring	2020	1	LS	$ 143.45	$ 150.00
380.4	ROOTS Connerville Blower, Type FF-Size 610	2020	1	LS	$ 1,434.46	$ 1,500.00
380.4	**Primary Settling Tanks 1,2 & 3**		3	EA		
380.4	Install Weir/Troughs Ex Prim	1996	1	LS	$ 36,500.00	
380.4	**Oxidation Towers 1**					
380.4	Install Media EX tower	1974	1	LS	$ 155,974.50	
380.4	Rotary Distributors	1974	1	LS	$ 23,907.00	
380.4	Install Oxidation Tower Recycle Control Valve	1974	1	LS	$ 2,875.44	$ 17,067.49

TABLE 1 - WASTEWATER TREATMENT PLANT

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
380.4	**Oxidation Towers 2**					
380.4	Install Syn Media New Tower	1996	1	LS	$ 205,000.00	
380.4	Rotary Distributors	1996	1	LS	$ 65,400.00	
380.4	Install Oxidation Tower Recycle Control Valve	1996	1	LS	$ 8,000.00	
380.4	**Final Settling Tanks 1 and 2**					
380.4	Equipment for Final Settling Tanks 1 & 2	1974	1	LS	$ 92,435.00	
380.4	**Final Settling Tanks 3, 4 &5**					
380.4	Install Fiberglass Troughs/Weirs	1996	1	LS	$ 36,500.00	
380.4	Install Elec and Manual Telescoping Valves	1996	1	LS	$ 18,000.00	
380.4	Sluice Gates	1996	1	LS	$ 19,000.00	
380.4	Install Collectors Final Clarifiers piping	1996	1	LS	$ 120,000.00	
380.4	**Chlorine Contact Tanks 1 & 2 Remaining in Service**		2	EA		
380.4	1-ton cylinder/scale - Remaining in Service	1996	1	EA	$ 1,640.55	$ 3,500.00
380.4	150# cylinders and scale - Remaining in Service	1996	4	EA	$ 1,171.82	$ 2,500.00
380.4	**Anaerobic Digesters 1&2**		2	EA		
380.4	Install Digester Meters	1996	1	LS	$ 11,000.00	
380.4	Install Comp Heater & Heat Exchanger (Envirex)	1996	1	LS	$ 76,000.00	
380.4	Duo Deck Conversion	1996	1	LS	$ 110,000.00	
380.4	Install Digester Mixer	1996	1	LS	$ 48,000.00	
380.4	Polytron 2XP Digital Meter	1996	1	LS	$ 117.18	$ 250.00
380.4	Polysonic Hydra SX40 DFD Flowmeter, Digital Readout	1996	1	LS	$ 1,218.69	$ 2,600.00
380.4	Siemens Hydra Ranger 200 Flow meter, Digital Readout	1996	1	LS	$ 890.58	$ 1,900.00
380.4	Maxus Air Compressor, Model EX840100AJ, #10/16/06-00340, 3.2 HP, 60 Gallon Capacity Vertical Tank With Wiring and Controls	1996	1	LS	$ 257.80	$ 550.00
380.4	**Sludge Holding Tank**					
380.4	Sludge Holding Tank aeration system	1996	1	LS	$ 28,500.00	
380.4	Install Blower System	1996	1	LS	$ 33,600.00	
380.4	**Belt Filter Press Building**					
380.4	1.2 meter Roediger Belt Filter Press	1996	1	LS	$ 165,000.00	
380.4	Install Belt Filter Press Conveyors	1996	1	LS	$ 67,000.00	
380.4	Kent Taylor Mag Master Flow Meter, Digital Readout	1996			$ 374.98	$ 800.00
380.4	Install Polymer Feed & Chlorination Equipment	1996	1	LS	$ 63,800.00	

TABLE 1 - WASTEWATER TREATMENT PLANT

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
380.4	Floor Drains - Grit Washer	1996	1	LS	$ 1,500.00	
380.4	Install Scum & Grease Floatation/Removal System	1996	1	LS	$ 47,600.00	
380.4	Install Grit Separation Classification System	1996	1	LS	$ 52,000.00	
380.4	Install Sewage Sump Simplex system	1996	1	LS	$ 12,400.00	
380.4	Install Sewage Sump Duplex system	1996	1	LS	$ 18,900.00	
380.4	Install Trickling Filter Tank	1996	1	LS	$ 89,000.00	
380.4	Install submersible Mixer	1996	1	LS	$ 20,000.00	
380.4	Install Odor Control Scrubber System	1996	1	LS	$ 28,500.00	
380.4	Scrubber at Sludge Storage Tank	1996	1	LS	$ 2,600.00	
380.4	Exhaust Hood CO#5	1996	1	LS	$ 1,843.84	
380.4	PFT Gas Burner	1996	1	EA	$ 1,124.95	$ 2,400.00
380.4	Equipment for Secondary Pumping Station	1974	1	LS	$ 29,910.00	
			Subtotal	**SUBTOTAL**	**$ 1,928,800.48**	
381.4	**Plant Sewers - WWTP**					
381.4	6" Thickened Sludge Line	1996	1	LS	$ 1,400.00	
381.4	24" DIP Oxidation Tower 2 FM	1996	1	LS	$ 33,500.00	
381.4	24" & 30" DIP Oxidation Tower Effluent	1996	1	LS	$ 37,100.00	
381.4	16" DIP Oxidation Tower Recirculation	1996	1	LS	$ 11,000.00	
381.4	24" DIP Overflow	1996	1	LS	$ 9,700.00	
381.4	24" DIP Final Sed. Tank 3,4&5 Effluent	1996	1	LS	$ 4,300.00	
381.4	30" DIP Final Sed. Tank Effluent	1996	1	LS	$ 26,000.00	
381.4	6" Scum Drain/Final Settling Tanks	1996	1	LS	$ 1,300.00	
381.4	6" DIP Primary Sludge to Sludge Holding Tank	1996	1	LS	$ 5,200.00	
381.4	6" DIP Primary Sludge from aerated S1 to digesters	1996	1	LS	$ 7,700.00	
381.4	6" DIP Primary Sludge Well Decant	1996	1	LS	$ 1,900.00	
381.4	6" DIP Primary Sludge Pump Suction	1996	1	LS	$ 2,600.00	
381.4	6" DIP Primary Sludge pump Discharge	1996	1	LS	$ 4,200.00	
381.4	6" DIP Secondary Sludge Discharge	1996	1	LS	$ 6,300.00	
381.4	8" DIP Secondary Sludge Suction	1996	1	LS	$ 8,300.00	
381.4	Ex. 8" DIP Tank Drain	1996	1	LS	$ 9,000.00	
381.4	8" DIP Tank Drain	1996	1	LS	$ 11,100.00	

TABLE 1 - WASTEWATER TREATMENT PLANT

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
381.4	6" & 4" DIP Oxidation Tower FM drain	1996	1	LS	$ 3,400.00	
381.4	4" DIP Grit Slurry Discharge	1996	1	LS	$ 1,900.00	
381.4	8" DIP Utility Water Service	1996	1	LS	$ 3,300.00	
381.4	Scum Concentrator/Grit Washer Drains	1996	1	LS	$ 4,750.00	
381.4	Scum Concentrator frm existing line	1996	1	LS	$ 2,106.00	
381.4	8" PVC Storm Sewer	1996	1	LS	$ 4,400.00	
381.4	6" PVC Storm Sewer	1996	1	LS	$ 2,700.00	
381.4	4" , 3", 2" PVC Utility Water	1996	1	LS	$ 8,600.00	
381.4	2" PVC Potable Water	1996	1	LS	$ 1,500.00	
381.4	Scum Drain to Final Tank Drain	1996	1	LS	$ 2,000.00	
381.4	Belt Filter Press Feed Pump Suction	1996	1	LS	$ 7,700.00	
381.4	Belt Filter Press Feed Discharge	1996	1	LS	$ 6,000.00	
381.4	Belt Filter Press Filtrate	1996	1	LS	$ 3,100.00	
381.4	Thickened Sludge Pump suction	1996	1	LS	$ 1,450.00	
381.4	Drain, 6" DIP Primary Sludge tank drain & 10" DIP drain	1996	1	LS	$ 9,500.00	
381.4	Digester Sludge frm Ex to Belt Press Pumps	1996	1	LS	$ 3,700.00	
381.4	Grit Pump Suction/Discharge	1996	1	LS	$ 2,800.00	
381.4	Grit Washer Overflow	1996	1	LS	$ 1,600.00	
381.4	Scum Conc. Influent	1996	1	LS	$ 1,400.00	
381.4	Scum Conc. Drain	1996	1	LS	$ 1,200.00	
381.4	Scum Conc. Effluent	1996	1	LS	$ 1,200.00	
381.4	Replacement Drain	1996	1	LS	$ 1,600.00	
381.4	Secondary Sludge to Sludge Holding Tank	1996	1	LS	$ 2,200.00	
381.4	Primary Effluent Pump Suction	1996	1	LS	$ 9,100.00	
381.4	Primary Effluent Pump Discharge	1996	1	LS	$ 16,000.00	
381.4	Manhole A	1996	1	LS	$ 3,300.00	
381.4	Sludge Recirc Pumps Suction	1996	1	LS	$ 1,800.00	
381.4	Sludge Recirc Pumps Discharge	1996	1	LS	$ 2,900.00	
381.4	Thickened/Primary Sludge (Dwg 53)	1996	1	LS	$ 1,400.00	
381.4	Aerated Sludge Blowers Intakes	1996	1	LS	$ 7,300.00	
381.4	Aerated Sludge Blowers Discharge	1996	1	LS	$ 3,600.00	
381.4	16 yard Hydrants and Gate Valves	1996	1	LS	$ 19,800.00	

TABLE 1 - WASTEWATER TREATMENT PLANT

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
381.4	27-inch VCP Plant Infl Sewer	1974	300	LF	$ 10,108.50	$ 60,000.00
381.4	24-inch DIP Primary Sedimentation Tank Effluent	1974	92	LF	$ 3,099.94	$ 18,400.00
381.4	18-inch DIP Oxidation Tower Force Main	1974	178	LF	$ 5,997.71	$ 35,600.00
381.4	24-inch DIP Oxidation Tower Effluent	1974	20	LF	$ 673.90	$ 4,000.00
381.4	24-inch DIP Overflow	1974	26	LF	$ 876.07	$ 5,200.00
381.4	24-inch DIP Final Sedimentation Tanks Effluent	1974	20	LF	$ 673.90	$ 4,000.00
381.4	24-inch DIP Chlorine Contact Tank Effluent	1974	266	LF	$ 8,962.87	$ 53,200.00
381.4	24-inch DIP Chlorine Contact Tank Effluent Overflow	1974	30	LF	$ 1,010.85	$ 6,000.00
381.4	6-inch DIP Primary Sludge Decant	1974	25	LF	$ 631.78	$ 3,750.00
381.4	8-inch DIP Secondary Sludge Suction	1974	8	LF	$ 202.17	$ 1,200.00
381.4	8-inch DIP Scum Suction	1974	56	LF	$ 1,415.19	$ 8,400.00
381.4	8-inch DIP Tank Drain	1974	88	LF	$ 2,223.87	$ 13,200.00
381.4	4-inch DIP Force Main Drain	1974	22	LF	$ 555.97	$ 3,300.00
381.4	8-inch DIP Digested Sludge Discharge	1974	195	LF	$ 4,927.89	$ 29,250.00
381.4	6-inch DIP Scum Discharge	1974	61	LF	$ 1,541.55	$ 9,150.00
381.4	2.5-inch PVC Chlorine Solution Discharge	1974	114	LF	$ 1,920.61	$ 11,400.00
381.4	10-inch DIP Sewer from Digester Building and Drying Beds	1936-1938	29	LF	$ 81.87	$ 4,350.00
381.4	8-inch DIP Sewer from Digester Building and Drying Beds	1936-1938	51	LF	$ 143.99	$ 7,650.00
381.4	8-inch DIP Digester Supernatant Drain	1936-1938	5	LF	$ 14.12	$ 750.00
381.4	4-inch DIP Sanitary Drain	1936-1938	7	LF	$ 19.76	$ 1,050.00
381.4	8-inch DIP Sludge Drying Bed Drain	1936-1938	73	LF	$ 206.10	$ 10,950.00
381.4	8-inch DIP Potable Water Main	1974	107	LF	$ 2,704.02	$ 16,050.00
381.4	6-inch Potable Water Main	1974	262	LF	$ 6,621.07	$ 39,300.00
381.4	4-inch Potable Water Main to Main Equipment Building	1974	110	LF	$ 2,779.84	$ 16,500.00
381.4	4-inch Potable Water Main to Primary Effluent Pump Station	1974	301	LF	$ 7,606.65	$ 45,150.00
381.4	24-inch DIP Plant Bypass	1974	45	LF	$ 1,516.27	$ 9,000.00
381.4	24-inch Primary Tank Bypass	1974	26	LF	$ 876.07	$ 5,200.00
381.4	24-inch Abandoned Plant Effluent	1974	19	LF	$ 640.20	$ 3,800.00
381.4	24-inch DIP Plant/Primary Tank Bypass	1974	67	LF	$ 2,257.56	$ 13,400.00
381.4	24-inch Storm Sewer Line	1974	42	LF	$ 1,238.29	$ 7,350.00
381.4	18-inch Storm Sewer Line	1974	18	LF	$ 454.88	$ 2,700.00
381.4	8-inch Storm Sewer Line	1974	25	LF	$ 421.19	$ 2,500.00

TABLE 1 - WASTEWATER TREATMENT PLANT

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
381.4	**Plug Valves**					
381.4	Raw Sewage Pump Suction	1996	1	LS	$ 4,500.00	
381.4	Raw Pump Sewage Discharge	1996	1	LS	$ 3,500.00	
381.4	Primary Sludge Pump	1996	1	LS	$ 2,700.00	
381.4	Primary Sludge Pump Header	1996	1	LS	$ 1,500.00	
381.4	Primary Sludge Pump Drain	1996	1	LS	$ 2,200.00	
381.4	Primary Sludge Pump Holding Tank	1996	1	LS	$ 2,400.00	
381.4	Primary/Secondary Sludge Connection	1996	1	LS	$ 1,700.00	
381.4	Grit Pump (6")	1996	1	LS	$ 1,500.00	
381.4	Grit Pump (3")	1996	1	LS	$ 1,200.00	
381.4	Scum/Ex Concentrator Feed	1996	1	LS	$ 2,800.00	
381.4	Scum/Drain	1996	1	LS	$ 1,600.00	
381.4	Scum Cone/Influent	1996	1	LS	$ 1,500.00	
381.4	Scum Cone/Drain	1996	1	LS	$ 1,200.00	
381.4	Secondary Sludge Pump	1996	1	LS	$ 2,800.00	
381.4	Secondary Sludge/Header	1996	1	LS	$ 1,600.00	
381.4	Secondary Sludge/Line	1996	1	LS	$ 2,200.00	
381.4	Effluent Pump/Suction	1996	1	LS	$ 12,000.00	
381.4	Effluent Pump/Discharge	1996	1	LS	$ 8,000.00	
381.4	Oxidation Twr Force Mn	1996	1	LS	$ 9,000.00	
381.4	Ox Twr Force Main Drain	1996	1	LS	$ 2,200.00	
381.4	Final Tank Drain-off	1996	1	LS	$ 8,500.00	
381.4	Utility Water	1996	1	LS	$ 1,500.00	
381.4	Belt Press Pumps	1996	1	LS	$ 3,700.00	
381.4	Belt Press Feed Header	1996	1	LS	$ 2,600.00	
381.4	Heat Exchanger Sludge Recirc	1996	1	LS	$ 3,500.00	
381.4	Overflow Supernatent at Digester	1996	1	LS	$ 12,000.00	
381.4	Digested Sludge (8")	1996	1	LS	$ 2,100.00	
381.4	Digested Sludge (6")	1996	1	LS	$ 1,800.00	
381.4	Pumping Station: 14-inch DIP eccentric plug valve	1974	1	EA	$ 842.37	$ 5,000.00
381.4	**Check Valves**					
381.4	Raw Sewage Pump Discharge	1996	1	LS	$ 4,700.00	

TABLE 1 - WASTEWATER TREATMENT PLANT

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
381.4	Primary Sludge Pump Discharge	1996	1	LS	$ 2,300.00	
381.4	Secondary Sludge Pumps	1996	1	LS	$ 2,300.00	
381.4	Primary Effluent Pumps	1996	1	LS	$ 12,000.00	
381.4	Belt Press Pumps	1996	1	LS	$ 2,300.00	
381.4	Thickened Sludge Pumps	1996	1	LS	$ 2,300.00	
381.4	Recirculated Pumps	1996	1	LS	$ 1,900.00	
381.4	Air Cushioned Check Valves	1974	1	LS	$ 2,228.00	
381.4	**Air Check Valves**					
381.4	Blower Discharges	1996	1	LS	$ 2,500.00	
381.4	**Mud Valves**					
381.4	Final Tank Scum Box	1996	1	LS	$ 2,000.00	
381.4	Chlorine Tank Drains	1996	1	LS	$ 3,500.00	
381.4	Utility Water	1996	1	LS	$ 2,000.00	
381.4	Aeration Sludge Hldg Tank	1996	1	LS	$ 4,500.00	
381.4	**Butterfly Valves**					
381.4	Ox Twr Recycle Line	1996	1	LS	$ 6,200.00	
381.4	**Hydrostatic PRV's**					
381.4	Final Tanks	1996	1	LS	$ 2,800.00	
381.4	**Gate Valves**					
381.4	Final Tank Drains	1996	1	LS	$ 3,300.00	
381.4	Sludge Drain-Off From Final Tanks	1996	1	LS	$ 4,200.00	
	Pumping Station- Gate Valve	1974	1	EA	$ 842.37	$ 5,000.00
381.4	**Butterfly Air Line Valves**					
381.4	Blower Intakes	1996	1	LS	$ 2,100.00	
381.4	Blower Discharge	1996	1	LS	$ 1,400.00	
381.4	Air Header at Sludge Tank	1996	1	LS	$ 1,500.00	
381.4	Reinsulate pipe at Digester Control Bldg CO#1	1996	1	LS	$ 4,092.50	
381.4	Gas Line CO#2	1996	1	LS	$ 6,367.59	
381.4	Water Line CO#2	1996	1	LS	$ 5,827.66	
381.4	Decant Line CO#2	1996	1	LS	$ 1,940.27	
381.4	Replace 24" Pipe From Primary Tanks CO#3	1996	1	LS	$ 11,429.52	
381.4	Piping to Provide Water for Mech Screen CO#3	1996	1	LS	$ 9,544.15	

TABLE 1 - WASTEWATER TREATMENT PLANT

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
381.4	Sampler Valves CO#5	1996	1	LS	$ 8,933.43	
381.4	Pumping Station: 20-inch DIP	1974	11	LF	$ 148.26	$ 880.00
381.4	Pumping Station: 18-inch C.I.	1974	3	LF	$ 37.91	$ 225.00
381.4	Pumping Station: 14-inch DIP	1974	2	LF	$ 23.59	$ 140.00
381.4	Control Building: 4-inch sludge feed line	1974	1	LF	$ 8.42	$ 50.00
381.4	Primary Sedimentation Tank: 2.5-inch chlorine feed line	1974	67	LF	$ 282.20	$ 1,675.00
381.4	Chlorine Contact Tank: 8-inch DIP drain	1974	18	LF	$ 303.25	$ 1,800.00
381.4	Secondary Pump Station Process Piping, Chlorine Tanks, Final Settling Tanks 1 & 2, Oxidation Tower No. 1 Exterior Piping	1974	1	LS	$ 71,673.00	
381.4	Sluice Gates	1974	1	LS	$ 21,995.00	
381.4	Misc. Sewage Treatment Plant Equipment	1974	1	LS	$ 13,335.00	
			Subtotal	**SUBTOTAL**	**$ 721,765.15**	
382.4	**Outfall Sewer Lines - WWTP**					
382.4	24-inch DIP	1936-38	827	LF	$ 70,212.80	$ 149,794.51
			Subtotal	**SUBTOTAL**	**$ 70,212.80**	
389.4	**Other Plant & Misc. Equip. - WWTP**					
389.4	Asbestos Abatement	1996	1	LS	$ 12,490.27	
389.4	Asbestos Abatement	2021	1	LS	$ 15,000.00	
			Subtotal	**SUBTOTAL**	**$ 27,490.27**	

Column Total = Column Totals = $ 7,885,727.46

TABLE 2 - PUMPING STATION

NARUC Account	Description	Year	Quantity	Unit	Unit Price	Original Cost	Replacement Value Today
353.3	**Land & ROW**						
353.3	Land & ROW - Pumping Station		1	EA	$ 1.00	$ 1.00	
354.3	**Structures & Imp. - Pumping Station**						
354.3	Trash Basket and Hoist Assembly	2006	1	LS	$ 6,468.00	$ 6,468.00	
354.3	12-inch Drain in front of PS	2006	1	LS	$ 6,125.00	$ 6,125.00	
354.3	Pump Station Pit Conversion	2006	1	LS	$ 4,500.00	$ 4,500.00	
354.3	Sandblasting/Painting of Pump Station Wet Well	2006	1	LS	$ 18,200.00	$ 18,200.00	
354.3	16" SDR 35 PVC	2006	10	LF	$ 300.00	$ 3,000.00	
354.3	16" SDR 35 PVC 45° elbow	2006	1	EA	$ 650.00	$ 650.00	
354.3	1" Copper Tube	2006	100	LF	$ 17.00	$ 1,700.00	
354.3	Water Service Connection	2006	1	LS	$ 1,000.00	$ 1,000.00	
354.3	Yard Hydrants, Lockable	2006	1	EA	$ 375.00	$ 375.00	
354.3	Natural Gas Service	2006	1	LS	$ 1,000.00	$ 1,000.00	
354.3	1-1/2 " Gas Line	2006	100	LF	$ 25.00	$ 2,500.00	
354.3	Fencing	2006	150	LF	$ 75.00	$ 11,250.00	
354.3	Site Preparation	2006	1	LS	$ 5,000.00	$ 5,000.00	
354.3	Bituminous Pavement/Driveway Restoration	2006	60	LF	$ 55.00	$ 3,300.00	
354.3	Final Seeding, grading, mulching	2006	1	LS	$ 2,500.00	$ 2,500.00	
354.3	Portable Bypass Pump System	2006	1	LS	$ 42,000.00	$ 42,000.00	
354.3	Bypass pumping	2006	60	Days	$ 325.00	$ 19,500.00	
354.3	Erosion and Sedimentation Control	2006	1	LS	$ 4,100.00	$ 4,100.00	
				Subtotal		**$ 133,168.00**	**$ -**
355.3	**Power Gen. Equip. - Pumping Station**						
355.3	Kohler Generator 7KW with transfer switch	2020	1	EA		$ 4,972.78	$ 5,200.00
				Subtotal		**$ 4,972.78**	

TABLE 2 - PUMPING STATION

NARUC Account	Description	Year	Quantity	Unit	Unit Price	Original Cost	Replacement Value Today
371.3	**Pumping Equip. - Pumping Station**						
371.3	Gorman Rupp Package Pump Unt consisting of 2-self priming pumps, model T6A3s-B/WWS, #1355279, 15 Hp, belt dirven, backup natural gas engine, 4 cylinder with cntrols, related piping and 1 control panel model D4-11174, JPP No. GR-8103-1, #06-990-AR4	2006	1	LS		$ 221,670.00	
371.3	Electrical Service	2006	1	LS		$ 12,000.00	
371.3	Hach Sigma 950 rain gauge/controller monitor with wiring	2006	1	LS		$ 1,680.80	$ 2,600.00
371.3	Mission RTU Unit	2006	1	EA		$ 1,292.92	$ 2,000.00
371.3	Stainless Steel Davit Crane	2006	1	EA		$ 323.23	$ 500.00
				Subtotal		**$ 236,966.95**	
					Column Total =	**$375,108.73**	

TABLE 3 - Collection Sewers - Force

NARUC Account	Description	Year	Quantity	Unit	Unit Price	Original Cost	Replacement Value Today
360	8" Ductile Iron Pipe	2006	600	LF	$ 44.00	$ 26,400.00	
360	8" DIP 90 Degree Long Radius Bends	2006	2	EA	$ 500.00	$ 1,000.00	
360	8" DIP 45 Degree Bends	2006	4	EA	$ 480.00	$ 1,920.00	
360	8" DIP 22.5 Degree Bends	2006	2	EA	$ 490.00	$ 980.00	
360	8" DIP 11.25 Degree Bends	2006	2	EA	$ 490.00	$ 980.00	
360	8" DI Pipe (with mc-urethane primer)	2006	800	LF	$ 130.00	$ 104,000.00	
360	8"x 6" DIP Tee (with mc-urethane primer)	2006	1	EA	$ 1,500.00	$ 1,500.00	
360	8"x 8" Cross Fittings (with mc-urethane primer)	2006	2	EA	$ 1,750.00	$ 3,500.00	
360	Concrete Pedestals	2006	2	EA	$ 2,800.00	$ 5,600.00	
360	Manhole Connection	2006	1	EA	$ 1,000.00	$ 1,000.00	
360	Expansion Joints	2006	2	EA	$ 3,500.00	$ 7,000.00	
360	Pipe Guide Hangers	2006	150	EA	$ 175.00	$ 26,250.00	
360	Pipe Insulation Assembly	2006	40	LF	$ 50.00	$ 2,000.00	
360	Painting DIP	2006	1	LS	$ 37,000.00	$ 37,000.00	
360	Air/Vacuum Breaker Valves	2006	3	EA	$ 2,600.00	$ 7,800.00	
360	Additional Cost for Deep Bury for Force Main	2006	1	LS		$ 7,612.22	
					Column Total =	**$ 234,542.22**	

TABLE 3-FM

TABLE 4 - Collection Sewers - Gravity

NARUC Account	Description	Year	Quantity	Unit	Replacement Cost Per Unit	Original Cost	Replacement Value Today
353.2	Land & ROW: Parcel 10010100006	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 10010101000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 10020200000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 10030203000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 10030303000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20020102000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20020105000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20020713000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20020800000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20030101000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20030200000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20030313000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20030314000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20030315000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20030317000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20030318000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20030416000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20030417000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20030419000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20030431000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20050107000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20060200000	1936-38	1	EA	$ 1.00	$ 1.00	

TABLE 4 - Collection Sewers - Gravity

NARUC Account	Description	Year	Quantity	Unit	Replacement Cost Per Unit	Original Cost	Replacement Value Today
353.2	Land & ROW: Parcel 20060300000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20060301000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20060302000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20060303000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20060305000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20060600000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20060700000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20060702000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20060902000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 20060923000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 40020600000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 40030104000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 40030109000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 40040103000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 50010100001	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 05001010000E	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 50040200000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 50040308000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 50040400000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 50040604000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 50050100002	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 50050200000	1936-38	1	EA	$ 1.00	$ 1.00	

TABLE 4 - Collection Sewers - Gravity

NARUC Account	Description	Year	Quantity	Unit	Replacement Cost Per Unit	Original Cost	Replacement Value Today
353.2	Land & ROW: Parcel 50050314000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 05006010000E	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 60020301000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 60030702000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 60050100000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 06005040000E	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 60060901000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 60061402000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 60061901000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 60070601000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 60070602000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70010202000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70010300000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70021510001	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70021510002	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70021600000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70021610000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70022000000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70022002000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70022100001	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70022101000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70022102000	1936-38	1	EA	$ 1.00	$ 1.00	

TABLE 4 - Collection Sewers - Gravity

NARUC Account	Description	Year	Quantity	Unit	Replacement Cost Per Unit	Original Cost	Replacement Value Today
353.2	Land & ROW: Parcel 70022102001	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70022102002	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70022102003	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 07002220000E	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030101000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030101001	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030103000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030105000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030108000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030112000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030115000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030123000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030124000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030125000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030126000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030137000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030138000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030250000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030251000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030252000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030253000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030254000	1936-38	1	EA	$ 1.00	$ 1.00	

TABLE 4 - Collection Sewers - Gravity

NARUC Account	Description	Year	Quantity	Unit	Replacement Cost Per Unit	Original Cost	Replacement Value Today
353.2	Land & ROW: Parcel 70030255000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030256000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030257000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030258000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030259000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030260000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030261000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70030262000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70041400000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70041900000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70042000000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70042009000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 07004230000E	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70050200000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70050201000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70050203000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70050208000	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70050209001	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70050209002	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70050209003	1936-38	1	EA	$ 1.00	$ 1.00	
353.2	Land & ROW: Parcel 70050500000	1936-38	1	EA	$ 1.00	$ 1.00	
					Subtotal	**$ 109.00**	

TABLE 4-GRAVITY

TABLE 4 - Collection Sewers - Gravity

NARUC Account	Description	Year	Quantity	Unit	Replacement Cost Per Unit	Original Cost	Replacement Value Today
361	8-inch VCP Sewer	1936-38	145,990	LF	$ 165.00	$ 453,382.71	$ 24,088,350.00
361	8-inch PVC Sewer	1990	1,800	LF	$ 165.00	$ 117,215.56	$ 297,000.00
361	8-inch PVC Sewer	1993	370	LF	$ 165.00	$ 26,528.18	$ 61,050.00
361	8-inch PVC Sewer	1998	815	LF	$ 165.00	$ 66,396.83	$ 134,475.00
361	8-inch CIP Sewer	1998	2,700	LF	$ 165.00	$ 219,964.95	$ 445,500.00
361	8-inch CIP Sewer	2008	2,100	LF	$ 165.00	$ 240,153.18	$ 346,500.00
361	8-inch CIP Sewer	2011	300	LF	$ 165.00	$ 37,445.24	$ 49,500.00
361	10-inch VCP Sewer	1936-38	4,000	LF	$ 180.00	$ 13,551.59	$ 720,000.00
361	12-inch VCP Sewer	1936-38	1,400	LF	$ 195.00	$ 5,138.31	$ 273,000.00
361	12-inch PVC Sewer	1991	4,800	LF	$ 195.00	$ 377,447.37	$ 936,000.00
361	12-inch PVC Sewer	1993	960	LF	$ 195.00	$ 81,344.40	$ 187,200.00
361	15-inch VCP Sewer	1936-38	4,200	LF	$ 225.00	$ 17,786.47	$ 945,000.00
361	15-inch PVC Sewer	1990	1,700	LF	$ 225.00	$ 150,959.43	$ 382,500.00
361	18-inch SDR 35 PVC Sewer	1996	7,700	LF		$ 638,937.00	
361	24-inch SDR 35 PVC Sewer	1996	11,607	LF		$ 1,036,038.00	
361	Brick Manholes	1936-38	536	EA	$ 5,100.00	$ 51,450.89	$ 2,733,600.00
361	Concrete Manholes	1936-38	138	EA	$ 5,100.00	$ 13,246.68	$ 703,800.00
361	Project Development	1996	1	LS		$ 257,761.25	
					Subtotal	**$ 3,804,748.05**	
			190,442		**Column Total =**	**$ 3,804,857.05**	

TABLE 4-GRAVITY

TABLE 5 - Service to Customers

NARUC Account	Description	Year	Quantity	Unit	Replacement Cost Per Unit	Original Cost	Replacement Value Today
363	6-inch Sanitary Service Laterals	1936-38	60,318	LF	$ 150.00	$ 170,292.73	$ 9,047,700.00
				Column Total =		$ 170,292.73	

TABLE 5-SERVICE LATERALS

TABLE 6 - Flow Measuring Device

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
364.3	Chart Recorder for Flow Meters (Secondary PS)	2012	1	EA	$ 2,738.00	
364.3	Healy-Ruff Co. Depthin feet indicator, #45279-1 with steel tape unit	2020	1	EA	$ 95.63	$ 100.00
364.3	Endress+Hauser Flow Rate Meter	2020	1	EA	$ 2,868.91	$ 3,000.00
364.3	Analog Level Meter with Tape	2020	1	EA	$ 95.63	$ 100.00
364.3	Seimens Sitrans LUT400 Flow Meter Digital Readout	2020	1	EA	$ 4,494.63	$ 4,700.00
364.3	Echo Flow Hunter II flow and level indicator with Transducer and Wiring	2020	1	EA	$ 2,486.39	$ 2,600.00
364.4	Electrical Flow Meter	1996	1	LS	$ 1,555.00	
364.4	Electrical Flow Meters - 2	1996	1	LS	$ 10,070.00	
364.4	Electrical Level Transmitter	1996	1	LS	$ 4,315.00	
364.4	Electrical Flow Meters - 2	1996	1	LS	$ 10,070.00	
364.4	Electrical Level Transmitter	1998	1	LS	$ 4,315.00	
364.4	Eastvale PS Flow Meters and Chart Recorder	2006	1	LS	$ 14,000.00	
				Column Total =	**$ 57,104.19**	

TABLE 7 - Office Equipment

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
390.7	Office Furniture and fixtures - workstations	2020	1	LS	$ 2,390.76	$ 2,500.00
390.7	Computers, laptops, printers, etc.	2020	1	LS	$ 4,781.52	$ 5,000.00
390.7	Miscellaneous EDP Equipment, computers, printers	2020	1	LS	$ 1,434.46	$ 1,500.00
				Column Total =	**$ 8,606.74**	

TABLE 8 - Transportation Equipment

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
391.7	Ford F250 4x4 Truck, 1,466 miles.	2020	EA	1	$ 42,707.00	
391.7	Ford F150 4x4 Truck, VIN NO. 1FTMF1EM4EKG07810, 36,779 Miles	2014	EA	1	$ 25,656.00	
391.7	Ford F350 1-ton Dump Truck YEAR 1992, VIN No. 1FDKF37GXNNA08298, 90,687Miles, Manual Transmission	1992	EA	1	$ 29,103.64	$ 70,000.00
391.7	Case Backhoe/Loader Model 580 SUPER L EXTEND-A-HOE, #JJG0195825, 5,828 Hrs, 4 X 4	1998	EA	1	$ 49,374.85	$ 100,000.00
391.7	Bobcat Skid Steer Loader, Model 553 C Series, #513012370, 864 Hrs.	1999	EA	1	$ 20,213.66	$ 40,000.00
391.7	Car Mate Trailer VIN NO. 5A3Y510S12L003959, 5 X 10, 13" Sidewalls	2002	EA	1	$ 3,217.22	$ 5,900.00
391.7	Mansfield Flatbed Trailer, VIN NO. 1M9BU142X6M620139, 6 X 10 Diamond Plate Deck, Tandem Axle	2006	EA	1	$ 4,848.45	$ 7,500.00
				Column Total =	**$ 175,120.82**	

TABLE 9 - Stores Equipment

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
392.7	Misc	1996	1	LS	$ 2,343.64	$ 5,000.00
392.7	Chlorine Scales	1996	2	LS	$ 7,030.91	$ 15,000.00
392.6	Lockers	1996	3	LS	$ 937.45	$ 2,000.00
392.8	Shelving	1996	4	LS	$ 2,343.64	$ 5,000.00
392.9	Storage bins	1996	5	LS	$ 2,343.64	$ 5,000.00
				Column Total =	**$ 14,999.28**	

TABLE 10 - Tools, Shop and Garage Equipment

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
393.7	Gorman-Rupp Trailer Mounted Pump	2020	1	EA	$ 17,213.47	$ 18,000.00
393.7	Cub Cadet Zero Turn Mower	2020	1	EA	$ 4,781.52	$ 5,000.00
393.7	Lawn Tractor, Toro Wheel Horse Model 73542, #000000111, Hydrostatic, 1071 HRS	2020	1	EA	$ 10,136.82	$ 10,600.00
393.7	Capital Equipment TP300 Industrial Trash Pump, 3", Gas 208 CC Engine	2020	1	EA	$ 1,912.61	$ 2,000.00
	Industrial Plus Industrial Trash Pump, 3", 8HP, Gas Fired	2020	1	EA	$ 1,912.61	$ 2,000.00
393.7	Drill Press DELTA ModelL 17-900, #8810	2020	1	EA	$ 1,434.46	$ 1,500.00
393.7	Miller MIG Welder, Multimatic 220	2020	1	EA	$ 2,868.91	$ 3,000.00
393.7	Lincoln Welder, Gas Fired	2020	1	EA	$ 1,147.56	$ 1,200.00
393.7	Capital Equipment PW3000 Industrial Pressure Washer	2020	1	EA	$ 956.30	$ 1,000.00
393.7	Stihl TS800 Cutoff Saw with 16-inch wheel	2020	1	EA	$ 1,625.72	$ 1,700.00
393.7	Toro CCR3650 Snow blower 6Hp	2020	1	EA	$ 1,625.72	$ 1,700.00
393.7	I-R Air Compressor, Gas Fired T10 Series	2020	1	EA	$ 669.41	$ 700.00
393.7	Capital Equipment 7500D Portable Generator, Diesel Fired, 10 Hrs	2020	1	EA	$ 2,103.87	$ 2,200.00
393.7	I-R Portable Air Compressor, Gas Fired, T10 SERIES	2020	1	EA	$ 286.89	$ 300.00
393.7	Porter Cable Portable Air Compressor, Jet Stream Series, Model CPL55GH810, 55HP Gas Engine, 8 Gallon Tank	2020	1	EA	$ 812.86	$ 850.00
393.7	BOSCH Brute Electric Demolition Jackhammer with hand truck and tooling	2020	1	EA	$ 908.49	$ 950.00
393.7	HONDA Portable Generator, 8HP, 4000 Watt	2020	1	EA	$ 1,625.72	$ 1,700.00
393.7	Ridgid KOLLMANN K1500 Sectional Sewer Cleaning Machine	2020	1	EA	$ 2,486.39	$ 2,600.00

TABLE 10 - Tools, Shop and Garage Equipment

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
393.7	WEN Construction Zone Series Plate Compactor, 212 CC Gas Engine	2020	1	EA	$ 669.41	$ 700.00
393.7	I-R Air Compressor, Model TS5, #NAR10524662, 5HP, Vertical Tank With Wiring, Control and Hose Reel	2020	1	EA	$ 1,912.61	$ 2,000.00
393.7	Shop Crane	2020	1	EA	$ 239.08	$ 250.00
393.7	VENTUR Electric Truck Bed	2020	1	EA	$ 286.89	$ 300.00
393.7	Rotary Automotive Lift, Model DP10AN100BBL, #NEP11E0057, 10,000# Capacity with Wiring and Controls	2020	1	EA	$ 3,538.33	$ 3,700.00
393.7	Western Snowplow Model ProPlow$60390, 8' with mount	2020	1	EA	$ 3,442.69	$ 3,600.00
393.7	Minor Equipment - shelves, fire ext., time clock, vacuum, floor machine, valet, spare motors, lockers, fans, etc.	2020	1	LS	$ 4,781.52	$ 5,000.00
393.7	Minor Equipment	2020	1	LS	$ 114.76	$ 120.00
393.7	Fairbanks Morse, No. 27 Platform Scale, Twin Beams, 4 x 5 Platform with Mettler Toledo Digital Readout	2020	1	LS	$ 1,147.56	$ 1,200.00
393.7	Minor Equipment consisting of fire extinguisher and shelving	2020	1	LS	$ 382.52	$ 400.00
393.7	Minor Equipment - Fire extinguisher , ladder, etc.	2020	1	LS	$ 143.45	$ 150.00
393.7	Minor Equipment - Trucks, chairs, Fire extinguisher , etc.	2020	1	LS	$ 248.64	$ 260.00
393.7	Minor Equipment	2020	1	LS	$ 114.76	$ 120.00
393.7	Minor Equipment yard tools, cabinets, vacuum, shelf/Cabinet, respirators	2020	1	LS	$ 1,530.09	$ 1,600.00
393.7	Confined Space Set complete with tripod and lift	2020	1	LS	$ 1,912.61	$ 2,000.00

TABLE 10 - Tools, Shop and Garage Equipment

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
393.7	Kellogg-America Air Compressor, single stage, 5HP with vertical 60 gallong capacity Tank, complete with piping, connectins, wiring and controls	2020	1	LS	$ 765.04	$ 800.00
393.7	Continental Shop Press Model HV100, #10776, 30 ton capacity, hydraulic	2020	1	LS	$ 478.15	$ 500.00
393.7	Minor equipment consisting of hand tools, power tools, jack, racks, fire extinguisher, etc.	2020	1	LS	$ 2,773.28	$ 2,900.00
393.7	Rigid 535 Pipe Threader with tooling	2020	1	LS	$ 2,295.13	$ 2,400.00
393.7	Steel shop table, 8 x 5 with Jib Crane, Vise and Pipe Vise	2020	1	LS	$ 765.04	$ 800.00
393.7	Proto tool chest, 4x2x5 1/2 with hand tools	2020	1	LS	$ 6,694.13	$ 7,000.00
393.7	Lincoln Idealarc 250 Welder	2020	1	LS	$ 765.04	$ 800.00
393.7	Jet Drill Press Model JDP-20MF, #14046692	2020	1	LS	$ 812.86	$ 850.00
393.7	Jet Horizontal Band Saw, Model HBS-916W, #414468	2020	1	LS	$ 2,773.28	$ 2,900.00
393.7	Minor Equipment - Fire extinguisher , fan, pump, etc.	2020	1	LS	$ 286.89	$ 300.00
393.7	Minor Equipment - Desk, Chair, File, Bookcase, Vaccum, Fire extinguisher , air conditioner, etc.	2020	1	LS	$ 1,721.35	$ 1,800.00
393.7	Minor equipment consisting of ladder, yard tools and fire extinguisher, etc.	2020	1	LS	$ 172.13	$ 180.00
393.7	Minor equipment consisting of life ring, floatation Devicefor Primary Settling Tanks	2020	1	LS	$ 573.78	$ 600.00
393.7	Minor equipment consisting of life ring, floatation Device ffor Final Settling Tanks 1 & 2	2020	1	LS	$ 382.52	$ 400.00
393.7	Minor equipment consisting of life ring, floatation Device for Final Settling Tanks 3, 4 and 5	2020	1	LS	$ 573.78	$ 600.00
393.7	Minor equipment consisting of life ring, floatation Device for chlorine tanks	2020	1	LS	$ 382.52	$ 400.00

TABLE 10 - Tools, Shop and Garage Equipment

						Replacement
NARUC					Original	Value
Account	Description	Year	Quantity	Unit	Cost	Today
393.7	Minor equipment consisting of battery chargers. Drum pumps, airless painter, counters, sprayers, ladders, pressure washer, space heaters, air compressor, hand and power tools, hand trucks, fire extinguishers, shop lights, jacks, refrigerators, chain saw, leaf blowers, string trimmers, utility cart, sandblaster, yard tools, files credenza, chairs, vacuum, safety cabinets	2020	1	LS	$ 7,650.43	$ 8,000.00
				Column Total =	**$ 104,839.62**	

TABLE 11 - Laboratory Equipment

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
394	Orio Ph/ RDO/DO meter	1996	1	LS	$ 1,171.82	$ 2,500.00
394	Glassware	1996	1	LS	$ 937.45	$ 2,000.00
394	Refrigerator	1996	1	LS	$ 468.73	$ 1,000.00
394	Manning effluent composite sampler	2021	1	LS	$ 6,581.00	$ 6,581.00
394	Process Control Equipment	1996	1	LS	$ 4,687.27	$ 10,000.00
394	Lab Equip & Furniture	1996	1	LS	$ 39,841.83	$ 85,000.00
				Column Total =	**$ 53,688.11**	

TABLE 12 - Power Operated Equipment

NARUC Account	Description	Year	Quantity	Unit	Original Cost	Replacement Value Today
395.7	See Table 10					
			Column Total =		$ -	

TABLE 13 - Communication Equipment

							Replacement
NARUC					Unit	Original	Value
Account	Description	Year	Quantity	Unit	Cost	Cost	Today
396.7	iPhone XR's	2021	2	EA	$ 500.00	$ 1,000.00	
396.7	iPads (4G)	2021	5	EA	$ 400.00	$ 2,000.00	
396.7	NEC Master Telephone System With PA, Amplifier and phones	2020	1	LS	$ 8,600.00	$ 8,600.00	
				Column Total =		$ 11,600.00	

TABLE 14 - Misc. Equipment

						Replacement
NARUC					Original	Value
Account	Description	Year	Quantity	Unit	Cost	Today
397.9	Surveillance System - 4-cameras, 2-monitor, 1-controller	2020	1	LS	$ 1,400.00	
397.9	DVR Recorder	2018	2	LS	$ 600.00	
			Column Total =		**$ 2,000.00**	

APPENDIX B

Appendix B – City of Beaver Falls Sewer Maps

(No Public version)

Exhibit NAD-SR-3

Beaver Falls Response to OCA-II-3 with Work Papers

Respondent: Charles R. Jones, Jr.
Date: 12/23/2024

APPLICATION OF AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2022-3033138

OFFICE OF CONSUMER ADVOCATE

SET II INTERROGATORIES

OCA-II-3 Please provide any and all calculations/ worksheets showing that if the Beaver Falls wastewater system is not sold, it would need to increase customer rates. Please provide in native format.

RESPONSE

Please see OCA-II-3 Attachment 1 prepared by PFM Financial Advisors, LLC.

	Current		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Net Operating Surplus (Deficit) After Capital & Debt			**158,243**	**27,902**	**1,098,834**	**867,689**	**1,014,453**	**513,649**	**527,822**	**343,787**	**150,533**	**295,502**
As % of Total Expenses			*5.19%*	*0.88%*	*33.63%*	*25.65%*	*28.96%*	*14.16%*	*14.05%*	*8.84%*	*3.74%*	*7.08%*
Fund Balance Buildup			**-**	**-**	**-**	**867,689**	**1,882,142**	**2,395,791**	**2,923,613**	**3,267,400**	**3,417,933**	**3,713,435**
Average Monthly Bill												
In City - Keep System (Estimated - 4,000 Gal Month)	**$41**		**$55**	**$60**	**$60**	**$60**	**$60**	**$60**	**$60**	**$60**	**$63**	**$63**
% Change			**35%**	**10%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**5%**	**0%**
			158,243	**27,902**	**1,098,834**	**867,689**	**1,014,453**	**513,649**	**527,822**	**343,787**	**150,533**	**295,502**
	2022 Audit		2025	2026	2027	2028	2029	2030	2031	2032	2033	2033
Operating Revenues												
Sewage Charges	3,148,123		4,249,966	4,674,963	4,674,963	4,674,963	4,674,963	4,674,963	4,674,963	4,674,963	4,908,711	4,908,711
% Increase			**35.00%**	**10.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**5.00%**	**0.00%**
Tap-In Fees	4,500	**2.50%**	4,613	4,728	4,846	4,967	5,091	5,219	5,349	5,483	5,620	5,760
Misc. Revenues	2,449	**2.50%**	2,510	2,573	2,637	2,703	2,771	2,840	2,911	2,984	3,058	3,135
Subtotal - Operating Revenues	3,155,072		4,257,089	4,682,263	4,682,446	4,682,633	4,682,825	4,683,021	4,683,223	4,683,429	4,917,389	4,917,606
Operating Expenses												
Contractual Services	712,562	**3.00%**	733,939	755,957	778,636	801,995	826,055	850,836	876,361	902,652	929,732	957,624
Wages & Benefits	813,193	**4.00%**	845,721	879,550	914,732	951,321	989,374	1,028,949	1,070,107	1,112,911	1,157,427	1,203,724
Administrative	330,000	**4.00%**	343,200	356,928	371,205	386,053	401,495	417,555	434,257	451,628	469,693	488,481
Office	5,573	**3.00%**	5,740	5,912	6,090	6,272	6,461	6,654	6,854	7,060	7,272	7,490
Repair & Maintenance	287,892	**3.00%**	296,529	305,425	314,587	324,025	333,746	343,758	354,071	364,693	375,634	386,903
Billing Expense	20,226	**3.00%**	20,833	21,458	22,101	22,765	23,447	24,151	24,875	25,622	26,390	27,182
Depreciation	248,097			-	-	-	-	-	-	-	-	-
Engineering	59,844	**3.00%**	61,639	63,488	65,393	67,355	69,376	71,457	73,601	75,809	78,083	80,425
Utilities	166,412	**5.00%**	174,733	183,469	192,643	202,275	212,389	223,008	234,158	245,866	258,160	271,068
Chemicals/Chlorine	42,934	**5.00%**	45,081	47,335	49,701	52,187	54,796	57,536	60,412	63,433	66,605	69,935
Sludge/Grit removal	108,355	**3.00%**	111,606	114,954	118,402	121,955	125,613	129,382	133,263	137,261	141,379	145,620
Janitorial Services	1,394	**3.00%**	1,436	1,479	1,523	1,569	1,616	1,665	1,714	1,766	1,819	1,873
Gas & Oil	4,278	**5.00%**	4,492	4,716	4,952	5,200	5,460	5,733	6,020	6,321	6,637	6,968
Equipment	3,766	**3.00%**	3,879	3,995	4,115	4,239	4,366	4,497	4,632	4,771	4,914	5,061
Operating Supplies	344	**3.00%**	354	365	376	387	399	411	423	436	449	462
Uniforms	2,995	**3.00%**	3,085	3,177	3,273	3,371	3,472	3,576	3,683	3,794	3,908	4,025
Permits & Testing	21,823	**3.00%**	22,478	23,152	23,847	24,562	25,299	26,058	26,840	27,645	28,474	29,328
Certification & Training	858	**3.00%**	884	910	938	966	995	1,024	1,055	1,087	1,119	1,153
Small Tools	3,821	**3.00%**	3,936	4,054	4,175	4,301	4,430	4,562	4,699	4,840	4,986	5,135
Insurance	30,273	**3.00%**	31,181	32,117	33,080	34,073	35,095	36,148	37,232	38,349	39,499	40,684
Misc. Expenses	1,213	**3.00%**	1,249	1,287	1,325	1,365	1,406	1,448	1,492	1,537	1,583	1,630
Property Damage	26,232	**3.00%**	27,019	27,830	28,664	29,524	30,410	31,322	32,262	33,230	34,227	35,254
Line Rental Expense	100,000	**3.00%**	103,000	106,090	109,273	112,551	115,927	119,405	122,987	126,677	130,477	134,392
Sewer-Line Reimbursement	200,000	**3.00%**	206,000	212,180	218,545	225,102	231,855	238,810	245,975	253,354	260,955	268,783
Subtotal - Operating Expenses	3,192,085		3,048,012	3,155,828	3,267,578	3,383,410	3,503,480	3,627,946	3,756,975	3,890,739	4,029,419	4,173,201
Net Operating Surplus (Deficit)	**(37,013)**		**1,209,077**	**1,526,436**	**1,414,868**	**1,299,223**	**1,179,345**	**1,055,076**	**926,248**	**792,690**	**887,970**	**744,405**
Capital												
Pay-Go Capital Expenses			1,050,834	1,498,534	316,034	431,534	-	376,534	233,534	-	288,534	-
Debt Serivce			-	-	-	-	164,892	164,892	164,892	448,903	448,903	448,903
Subtotal - Capital	-		1,050,834	1,498,534	316,034	431,534	164,892	541,426	398,426	448,903	737,437	448,903
Net Operating Surplus (Deficit) After Capital & Debt	**(37,013)**		**158,243**	**27,902**	**1,098,834**	**867,689**	**1,014,453**	**513,649**	**527,822**	**343,787**	**150,533**	**295,502**

GOAL	
Total Aqua Capital	10,236,644
Pay Go	4,195,538
Remaining To Be Financed	6,041,106

Financing 1	2,219,034
Rate	4.25%
Term	20
Financing 2	3,822,068
Rate	4.25%
Term	20

Aqua Capital Plan	**1,050,834**	**1,498,534**	**316,034**	**431,534**	**2,219,034**	**376,534**	**233,534**	**2,626,034**	**288,534**	**1,196,034**

Financing 1 New Debt Service	164,892	164,892	164,892	164,892	164,892	164,892
Financing 2 New Debt Service				284,011	284,011	284,011

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 Approval of its Acquisition of the Wastewater System Assets of the City of Beaver Falls	:	Docket No. A-2022-3033138

VERIFICATION

I, Nicholas A. DeMarco, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement 1SR, 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: March 4, 2025

Signature: */s/ Nicholas A. DeMarco*
Nicholas A. DeMarco

Address: 555 Walnut Street
Fifth Floor, Forum Place
Harrisburg, PA 17101

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application of Aqua Pennsylvania Wastewater, Inc. pursuant to Sections 1102 and 1329 of the Public Utility Code for:	:	
	:	Docket No. A-2022-3033138
(1) approval of the acquisition of Aqua of the wastewater system assets of the City of Beaver Falls situated within City of Beaver Falls Eastvale Borough, and West Mayfield Borough, Beaver County, Pennsylvania;	:	
(2) approval of the right of Aqua to begin to offer, render, furnish and supply wastewater service to the public in the City of Beaver Falls, Beaver County, Pennsylvania; and	:	
(3) an order approving the acquisition that includes the ratemaking rate base of the City of Beaver Falls wastewater system assets pursuant to Section 1329(c)(2) of the Public Utility Code.	:	
Request for Approval of Contracts, including Assignments of Contracts, between Aqua and the City of Beaver Falls, Pursuant to Section 507 of the Public Utility Code	:	
Request for Approval to Modify Agreements with Municipal Corporations to be assigned by Aqua Upon Closing of the Acquisition by Aqua of the Wastewater System Assets of Beaver Falls, to the extent such modifications are necessary, Pursuant to Section 508 of the Public Utility Code	:	

SURREBUTTAL TESTIMONY
OF
DAVID J. GARRETT

ON BEHALF OF
THE PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

March 4, 2025

TABLE OF CONTENTS

I. INTRODUCTION

Q. State your name and occupation.

A. My name is David J. Garrett. I am a consultant specializing in public utility regulation. I am the managing member of Resolve Utility Consulting, PLLC. My business address is 101 Park Avenue, Suite 1125, Oklahoma City, Oklahoma 73102.

Q. Have you previously filed testimony in this proceeding?

A. Yes. I provided direct testimony in OCA Statement 1 on February 14, 2025, on behalf of the Pennsylvania Office of Consumer Advocate ("OCA"). A summary of my qualifications is included in my direct testimony. My direct testimony addressed the fair market value ("FMV") appraisals included in the application filed by Aqua Pennsylvania Wastewater, Inc. ("Aqua" or the "Company") for the acquisition of the wastewater system assets of the City of Beaver Falls ("Beaver Falls" or the "City").

Q. What is the purpose of your surrebuttal testimony?

A. My surrebuttal testimony responds to the rebuttal testimonies of Harold Walker, III of Gannett Fleming, who sponsors the FMV appraisal commissioned by the City, and the testimony of Dylan W. D'Ascendis, of ScottMadden, who sponsors the appraisal commissioned by Aqua.

Q. Did any of the arguments raised by Mr. Walker or Mr. D'Ascendis in their rebuttal testimonies persuade you to change your opinions as stated in your direct testimony?

A. No. In addition, to the extent I do not address a particular statement or position raised in the rebuttal testimonies does not constitute my agreement with the same.

II. VALUATION APPROACH WEIGHTING

Q. Please summarize the testimonies of Mr. D'Ascendis and Mr. Walker regarding the weightings you applied to each valuation approach.

A. As discussed in my direct testimony, I applied equal (1/3) weightings to each of the three valuation approaches. Both Mr. D'Ascendis and Mr. Walker disagree with my approach. Mr. D'Ascendis continues to assert the value of the system as represented by the Cost Approach does not reflect the value of Beaver Falls system, as approximately half of its current and future revenues are not derived from its assets.[1] Mr. Walker argues that I did not justify the weightings I applied to the valuation approaches, and that an appraisal is an opinion of FMV and is not a "mechanical" process.[2]

Q. Are you persuaded by the arguments Mr. D'Ascendis and Mr. Walker presented in their rebuttal testimonies regarding the approach weightings?

A. No. I suspect that the weightings applied by both Mr. D'Ascendis and Mr. Walker are upwardly biased. The reason for my suspicion is based on prior experience in Section 1329 cases. I cannot recall a case in which an appraiser applied an unequal weighting to the three valuation approaches that did not result in a higher overall valuation than had equal weightings been applied. This pattern continues in this case. Each UVE applied the lowest weighting to the lowest valuation result, and the overall indicated valuation for each UVE would have been higher had they applied equal weightings, as demonstrated in my direct testimony. I could conceptually agree with Mr. Walker that the weighting process (or any other aspect of an appraisal) need not be mechanical, and that judgment could be applied

[1] Rebuttal Testimony of Dylan W. D'Ascendis, p. 8, lines 12-18.

[2] Rebuttal Testimony of Harold Walker, III, p. 29, lines 1-10.

on a case-by-case basis. However, when that judgment appears to be consistently one-sided in favor of higher valuations, I think it raises a presumption of bias. The Commission should consider this when determining the most appropriate weightings to apply.

III. MARKET APPROACH

A. Response to Mr. Walker's Market Approach Rebuttal Testimony

Q. Please summarize Mr. Walker's rebuttal testimony regarding your proposed adjustments to his Market Approach valuation.

A. Mr. Walker also disagrees with my adjustments to his selected transactions method as part of his Market Approach. Mr. Walker states that Gannett Fleming relied primarily on the integrated systems (excluding wholesale) transactions, while I used the collection/distribution assets selected transactions, the integrated systems (excluding wholesale) transactions, and the integrated systems with wholesale transactions.[3]

Q. Did Mr. Walker's criticisms of your proposal to use the ratemaking rate base values approved by the Commission instead of the purchase prices for each transaction persuade you to change your opinion?

A. No. First, a primary purpose of Section 1329 proceedings is to establish a ratemaking rate base using the lower of the purchase price or fair market value as defined in 1329. By establishing a ratemaking rate base based on fair market value that is lower than the winning bid / purchase price in any particular case, the Commission is essentially determining that the winning bid does not comport with the fair market value of a particular transaction. For example, the purchase price in the Limerick transaction was $75.1 million; however, the ratemaking rate base based on fair market value, as determined by the

[3] Rebuttal Testimony of Harold Walker, III, p. 18, lines 13-16.

Commission, was $64.4 million. Suppose the winning bid had been even higher at $90 million – even further divergent from the fair market value. Yet this is still the figure Mr. Walker would have presumably relied on in his selected transaction analysis, despite the fact that it would be grossly excessive relative to the Commission's ultimate determination. We are using the selected transactions method (and all other models in the case) for the sole purpose of helping the Commission determine the fair market value in this proceeding. It only makes sense that we would incorporate that same figure from comparable transactions as part of the selected transactions method to help the Commission determine the fair market value in this proceeding.

Q. Did Mr. Walker's criticisms of your approach persuade you to change your opinion?

A. No. As discussed in my direct testimony, I believe Mr. Walker's market approach methodology is upwardly biased. For example, using the demographic statistics (customers and population) under the selected transactions method indicates a higher value than using the capital statistics (capital, PP&E, etc.). Mr. Walker applied a 75% weighting to the higher demographic statistics, and only a 25% weighting to the capital statistics, and he did not have a persuasive reason for doing so. If all of these transactions are considered, and an equal weighting is applied to each transaction without any upwardly biased decisions or assumptions, the indicated valuation using Mr. Walker's own transactions and metrics is significantly less than his ultimate proposed valuation under the market approach, as detailed in my direct testimony.

Q. Mr. Walker also criticizes the fact that you relied on an averages of the indicated values under the selected transactions method, rather than calculating the median. What is your response?

A. Mr. Walker does not provide any evidence as to why it would be unreasonable to use the average rather than median calculation for the selected transaction method. Moreover, if I had relied on the median calculations, it would have resulted in a notably lower indicated valuation. Specifically, instead of an indicated valuation of $24.1 million using the average results, the median results would have indicated a valuation of only $16.5 million.[4] In that regard, I could conceptually agree with Mr. Walker that relying on the median calculations in this case is not an unreasonable approach.

Q. Mr. Walker also criticizes the fact that you relied on ex ante data rather than ex post data. What is your response?

A. While I do not necessarily disagree with Mr. Walker that also considering ex post data in the selected transaction method is not necessarily unreasonable, it is not a material issue in this case. In fact (similar to the average vs median issue discussed above), if I had used the ex post data and held all other factors constant, it would have resulted in a lower indicated valuation under the selected transaction method (about $22.7 million instead of $24.1 million). If anything, Mr. Walker's rebuttal testimony on these issues is actually suggesting that I may have *overestimated* my adjusted valuation under the market approach. These issues further highlight the overall reasonableness of my recommendations as outlined in my direct testimony.

[4] *See* OCA Exhibit DJG-3 (using median calculations of indicated valuations of investor capital, gross PP&E, net PP&E, customers, and population, and taking the median of those five results).

B. Response to Mr. D'Ascendis's Market Approach Rebuttal Testimony

Q. Please summarize Mr. D'Ascendis's rebuttal testimony regarding your proposed adjustments to his Market Approach valuation.

A. Mr. D'Ascendis disagrees with my statements that capital statistics are arguably more relevant than demographic statistics when assessing a fair valuation under the market approach.

Q. What is your response to Mr. D'Ascendis in this issue?

A. While I do not agree with Mr. D'Ascendis on this point, I should reiterate here that I applied equal weightings to the capital and demographic statistics. As discussed in my direct testimony, had I applied more weight to the capital statistics than the demographic statistics (arguably a reasonable approach), it would have resulted in an even *lower* indicated valuation under the market approach. Thus, while I conceptually disagree with Mr. D'Ascendis regarding the importance of capital statistics, his arguments are effectively moot under the circumstances.

IV. INCOME APPROACH

A. Response to Mr. Walker's Income Approach Rebuttal Testimony

Q. Please summarize Mr. Walker's rebuttal testimony regarding your Income Approach adjustments.

A. Mr. Walker claims that my proposed adjustments to his income approach estimates are "in direct violation of Section 1329."[5] He also criticizes the inputs and assumptions I used in my Discounted Cash Flow ("DCF") Model and cost of equity models.

[5] Rebuttal Testimony of Harold Walker, III, p. 9, lines 14-15.

Q. Do you agree with Mr. Walker's criticisms of your use of a constant growth DCF Model in your income approach adjustment?

A. No. When using the DCF Model for mature, low-growth firms such as utility companies, whether in cost of equity derivations or valuation estimates, it is reasonable to assume a constant growth rate based on the cash-flow or dividends from the current period. In contrast, younger firms with high growth opportunities may require the use of varying cash flows and growth rates over different periods. The vast majority of DCF Models used to estimate cost of equity in utility rate proceedings are some variation of a constant-growth DCF Model, consistent with the DCF Model I used in this case. For example, Mr. Walker and I both used a constant-growth DCF Models before the Commission in Docket No. R-2020-3020256 (City of Bethlehem) as part of our cost of equity estimates. In that case, we are not assuming a different amount of cash flows (or dividends) in future years (other than growing each year by a constant growth rate). In contrast, Mr. Walker states in this case that he does not believe it is appropriate to use the cash flow from a single year in the DCF Model as it relates to the income approach valuation. I am not suggesting it is necessarily wrong to assume different levels of cash flow or growth rates in different periods in a DCF Model; however, I believe it is not necessary in this case. The primary reason for this is that with each subsequent period, or "stage" in a multi-state DCF model, a separate assumption will have to be made by the analyst regarding after-tax cash flows to the firm. This allows multiple opportunities for potential biases or unreasonable assumptions to impact the accuracy of the final estimate.

Q. Mr. Walker also criticizes your approach as a "capitalization of earnings." Do you have a response?

A. Yes. Mr. Walker appears to be is referring to the fact that my adjustment to his income approach valuation involves discounting projected cash flows (free cash flow from operations) based on a single period, rather than attempting to project up to 20 years of cash flow data based on new ownership, as is contemplated under Mr. Walker's approach. In my view, the value of an asset is primarily based on its present value. I am not suggesting that projecting future cash flows should entirely ignore future ownership, however, the various and numerous assumptions Mr. Walker has made in his discounted cash flow model indicate a much different (and higher) value than if the analysis is based on a reasonable projected growth (and discount) of known cash flow metrics under current ownership.

Q. Mr. Walker also makes several criticisms about the discount rate you used in your discounted cash flow analysis. Do you have a response to these criticisms?

A. Mr. Walker raises five criticisms regarding my estimated discount rate. First, Mr. Walker claims that I have calculated my discount rate in a manner similar to witnesses who provide testimony in rate proceedings and that "discount rates used in the Income Approach to valuation under a standard of value of fair market value are not calculated in this manner".[6] Perhaps what Mr. Walker means is that *he* does not take the same approach as I have in this case with regard to estimating the cost of equity. As discussed above, Mr. Walker uses multi-state DCF approach, which requires separate inputs, estimates and assumptions for each year into the future for the duration of the model. In contrast, I am using known data

[6] Rebuttal Testimony of Harold Walker, III, p. 15, lines 11-12.

regarding cash flow and applying a reasonable, constant growth rate to those cash flows. This is a perfectly acceptable approach to valuation, despite that Mr. Walker has apparently not yet proposed it in a 1329 proceeding.

Second, Mr. Walker claims that my discount rate should be more reflective of the municipality, rather than the potential buyer.[7] I disagree. A buyer attempting to value an asset would conduct a cash flow analysis based upon the buyer's after-tax cash-flow and cost of equity, not the seller's. For example, if the buyer of a rental property were conducting an income-approach valuation, and the seller currently had in place a family member that was paying rent far below market value, the buyer would not conduct a cash flow analysis based upon the seller's unique tenant, but rather a tenant paying market value after the transaction is completed. This also applies to the cost of equity, which is especially true under these circumstances because the cost of capital for the buyer (a non-municipality) will be quite different than a municipality's cost of capital.

Third, Mr. Walker criticizes the capital structure used in my cost of equity analysis, claiming instead that I should have used the municipality's capital structure.[8] For the same reasons discussed above regarding cash flow and the cost of equity, it would not make sense for a buyer to conduct a discounted cash flow analysis using the hurdle rate (or discount rate) of another entity, whether it be the seller or another party. Since we used a proxy group to assess the market-based cost of equity of a non-municipal buyer, it makes sense to use the capital structures of the same proxy group. This is because the indicated

[7] *Id*. at pp. 15-16.

[8] *Id*. at p. 16.

cost of equity derived from a DCF and CAPM analysis of the proxy group's metrics cannot be disassociated with the proxy group's capital structures; they are interrelated.

Fourth, Mr. Walker criticizes my cost of debt input because it was not the municipality's cost of debt.[9] As with the cash flow, cost of equity, and capital structure issues discussed above, it is not appropriate to use the seller's metrics when conducting a valuation model, especially when the seller is a municipality. Any buyer's cost of debt is not equivalent to municipal revenue bond.

Finally, Mr. Walker claims that my cost of equity was not "determined at the valuation date." Most analysts use various periods of time to develop averages for certain metrics of a cost of equity model. For example, a company will have a daily closing stock price, but most analysts take an average of closing stock prices (typically ranging from 30-90 days) to arrive at a single price to represent the "current" price, rather than relying on the input of a single day, which might be abnormally high or low depending on the circumstances.

B. Response to Mr. D'Ascendis's Income Approach Rebuttal Testimony

Q. Please summarize Mr. D'Ascendis's rebuttal testimony regarding your Income Approach adjustments.

A. Similar to Mr. Walker, Mr. D'Ascendis disagrees with my use of the "capitalized earnings method."[10]

[9] *Id*. at p. 16.

[10] Rebuttal Testimony of Dylan W. D'Ascendis, p.

Q. Do you agree with Mr. D'Ascendis's criticisms of your income approach?

A. No. As discussed above in my response to Mr. Walker's testimony, I believe it is reasonable to conduct a constant growth (i.e., capitalized earnings) method of cash flow analysis is reasonable. Projecting figures for multiple future periods allows multiple opportunities for unreasonable, incorrect, or upwardly biased assumptions.

Q. Does this conclude your surrebuttal testimony?

A. Yes. To the extent I did not specifically address a particular issue does not constitute my agreement with such issue. I reserve the right to modify or supplement my testimony if additional information is received.

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 Approval of its Acquisition of the Wastewater System Assets of the City of Beaver Falls	:	Docket No. A-2022-3033138

VERIFICATION

I, David J. Garrett, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement 2SR, 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: March 4, 2025

Signature: */s/ David J. Garrett*
David J. Garrett

Address: Resolve Utility Consulting PLLC
101 Park Avenue, Suite 1125
Oklahoma City, OK 73102"