

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

APPLICATION OF PENNSYLVANIA-AMERICAN WATER COMPANY

DOCKET NO. A-2017-2606103

**REBUTTAL TESTIMONY
OF ADRIENNE M. VICARI, P.E.
MUNICIPAL AUTHORITY OF THE CITY OF MCKEESPORT**

Date: July 26, 2017

Adrienne M. Vicari, P.E. Statement No. 1R

1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

2 A. My name is Adrienne M. Vicari. My business mailing address is:
3 369 East Park Drive, Harrisburg, Pennsylvania 17111
4

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

6 A. I am employed by Herbert, Rowland & Grubic, Inc. ("HRG") as the Practice Area Leader for the
7 Financial Services Group.
8

9 Q. HAVE YOU SUPPLIED DIRECT TESTIMONY IN THIS CASE?

10 A. Yes, I provided direct testimony on July 17, 2017.
11

12 SCOPE OF TESTIMONY

13 Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

14 A. My rebuttal testimony addresses criticisms of the HRG appraisal presented in the direct
15 testimonies of Office of Consumer Advocate OCA witnesses Ashley E. Everette and Glenn A.
16 Watkins relating to the Fair Market Value of the McKeesport wastewater collection and treatment
17 system.
18

19 RESPONSE TO TESTIMONY OF ASHLEY E. EVERETTE

20 Q. WHAT WAS THE NATURE OF MS. EVERETTE'S CRITICISM?

21 A. Essentially, she has recommended several downward adjustments to HRG's recommendation of
22 the Fair Market Value for the MACM system by adjusting the inputs to our Market Value and
23 Cost approaches.
24

25 Q. DID ANY OF MS. EVERETTE'S CRITICISM RESULT IN AN UPWARD
26 ADJUSTMENT?

27 A. No, all her adjustments recommended downward adjustment reduced the Fair Market Value
28 recommended in our report.
29

30 Q. IN YOUR OPINION, WAS MS EVERETTE'S CRITICISM JUSTIFIED?

31 A. No. The UVE is required to perform an appraisal in accordance with the Uniform Standards of
32 Professional Appraisal Practice (USPAP) to arrive at the Fair Market Value (FMV) of the
33 McKeesport System.

1 In accordance with Act 12 and the Final Implementation Order (FIO), HRG considered three
2 separate valuation approaches; Cost, Income, and Market Value as described in our report, AMV
3 Statement 1 and OCA Statement 1 does not consider the USPAP standards.
4

5 **Q. PAGE 20, LINE 23: MS. EVERETTE SUGGESTS THAT THE FIVE ACQUISITIONS**
6 **USED TO CALCULATE THE MARKET VALUE OF A CUSTOMER ARE NOT**
7 **REPRESENTATIVE BECAUSE SOME DATE BACK TO DECEMBER 2013. DO YOU**
8 **AGREE WITH MS. EVERETT'S INTERPRETATION OF INFORMATION YOU**
9 **PROVIDED IN OCA-III-8 THAT HRG SOUGHT TO FIND TRANSACTIONS THAT**
10 **WERE COMPLETED AFTER THE PASSAGE OF ACT 12 OF 2016 OR THAT**
11 **ANTICIPATED ITS PASSAGE?**

12 **A.** No, I do not agree with Ms. Everette. The use of comparable sales is a basic appraisal tool. The
13 sample we used does include transactions prior to the enactment of Act 12 and to that extent, may
14 understate the FMV. There has only been one application approved and this is only the second or
15 third application submitted under Section 1329. By necessity, our sample had to include relevant
16 transactions that occurred before the passage of Act 12. Prior to Act 12, the average price per
17 customer was in the range of \$7,000 to \$8,000 while the price per customer for the New Garden
18 Township system was nearly double that to \$14,008. It is clear from our Schedule J – Market
19 Comps, included in our working papers that the average cost per user increased significantly after
20 the passage of Act 12 of 2016.

21 Our intent was to include transactions that were either completed under Act 12 or could have
22 been in anticipation of the passage of Act 12, but the only identifiable Act 12 transaction was the
23 New Garden Township sale. Although Act 12 was not enacted until March of 2016, it had been
24 discussed and evaluated by the Pennsylvania Municipal Authorities Association (PMAA) at least
25 a year earlier. The use of appraisal values instead of depreciated original cost suggested that the
26 value of municipal water and wastewater systems would increase due to their extensive use of
27 grant funds and contributed property.
28

29 **Q. ON PAGE 20 LINE 27 MS EVERETTE CLAIMS THAT MACM HAS ONLY 12,780**
30 **CUSTOMERS NOT 21,953 CUSTOMERS USED IN YOUR MARKET VALUE**
31 **CALCULATION, DO YOU AGREE WITH HER?**

32 **A.** No, I do not. The 21,953 customers that we used for our calculation of Market Value was based
33 on an analysis by MACM that provided the number of customers by service area. This included
34 8,500 customers in tributary municipalities whose wastewater is treated by MACM. We verified

1 this information by reviewing the annual report submitted by MACM to the PA Department of
2 Environmental Protection (DEP), known as the Chapter 94 Report. The 2015 report is publically
3 available from DEP and provides a breakdown of customers by service area totaling 20,140.
4 While not an exact match, it was reasonably close and we accepted the information provided by
5 MACM. It is interesting to note that while Ms. Everette disagrees with the customer count of
6 21,953, she uses that number in OCA Statement 1 on page 22, line 4.

7
8 **Q. ON PAGE 22 LINE 4, AND ON EXHIBIT AEE-2 MS EVERETT RECALCULATES THE**
9 **MARKET VALUE BASED ON ADJUSTING THE AVERAGE MARKET VALUE OF**
10 **THE ACQUISITIONS USED BY HRG RESULTING IN A REDUCTION FROM \$190**
11 **MILLION TO \$160 MILLION, DO YOU AGREE WITH THIS ADJUSTMENT?**

12 **A.** I do not. Ms. Everette's expresses concern over the use of transactions that pre-dated the
13 enactment of Act 12 on Page Line 23, then adjusts these transactions to arrive at a reduced
14 Market Value. Assuming that the only valid transaction to be considered was the New Garden
15 acquisition the value per customer would be \$14,008. Even if this were applied to the number of
16 customers by Ms. Everette on Page 20, Line 27 of 12,780, the resulting Market Value would be at
17 least \$179,022,240. Based on our understanding of USPAP standards to consider all relevant
18 information, we believe that our Market Value of \$190,130,000 is correct.

19
20 **Q. ON PAGE 21 LINE 13, MS EVERETT BELIEVES THAT THE COST PER CUSTOMER**
21 **IS NOT CORRECTLY CALCULATED BECAUSE THE CAPITAL EXPENDITURES**
22 **RELATED TO THE SYSTEM WERE NOT SUBTRACTED, SHOULD PLANNED**
23 **CAPITAL EXPENDITUES HAVE BEEN DEDUCTED?**

24 **A.** All wastewater systems require capital reinvestments and MACM had provided a 5 year capital
25 plan that showed estimated expenditures totaling \$23,674,000. The majority of these
26 expenditures (over \$21 million of the \$23.7) related to the decommissioning of two satellite
27 treatment plants. While these may be economically justified or related to environmental
28 compliance, they are integral to the operation of the system. Also, they may or may not be
29 undertaken since the system is fully functioning now and future expenditures would only be
30 deducted based on their present value. Finally, these expenditures were anticipated in our Income
31 Approach.

32
33 **Q. ON PAGE 21 LINE 13 MS EVERETT STATES THAT THE PAWC ANTICIPATES**
34 **CAPITAL EXPENDITURES TOTALING \$62.7 MILLION.**

1 A. HRG performed an independent valuation. I neither sought nor was provided any information
2 from PAWC relating to planned capital expenditures or any other details of this transaction. We
3 have no way of knowing what improvements they plan or the cost of those improvements.
4

5 **Q. ON PAGE 22 LINE 8 MS EVERETT STATES THAT HRG MADE SEVERAL**
6 **ADJUSTMENTS TO THE ENR INDEX WHEN CALCULATING REPRODUCTION**
7 **COST. DID YOU MAKE SEVERAL ADJUSTMENTS TO THE ENR INDEX WHEN**
8 **CALCULATING REPRODUCTION COST?**

9 A. No, the ENR index was used exclusively to calculate the Reproduction Cost for the nearly 300
10 assets used in our Cost Approach with the exception of 3 Collection System items, sewer mains,
11 NARUC Account 361. For this account, we prepared our own Reproduction Cost estimate by
12 using current construction costs in western Pennsylvania.
13

14 **Q. REFERRING TO ON PAGE 22 LINES 20-23 HOW MANY NARUC ACCOUNTS WERE**
15 **ADJUSTED OTHER THAN BY USE OF THE ENR INDEX?**

16 A. Only 3 out of approximately 300 individual assets. The other 297 were all calculated using the
17 ENR Index values. These are shown on each line next to the asset.
18

19 **Q. REFERRING TO ON PAGE 23 LINES 1-10, WAS THE ACCMULATATED**
20 **DEPRECIATION ON PLANT SHOWN AS 20%?**

21 A. Only for Account 361- Collection System. The accumulated depreciation for all other assets was
22 based on expected service lives and age. It should be noted, that based on informal discovery,
23 HRG has revised its calculation of the expected useful life of the collection system assets and the
24 corresponding accumulated depreciation. Based on an 85 year estimated service life for sewer
25 mains and manholes and their age, we have recalculated the accumulated depreciation and
26 determined that it should be 51% of the cost of the assets. Documentation supporting this
27 adjustment was provided to OCA in response to OCA-V Data Requests.
28

29 **Q. DID THE ADJUSTMENT OF THE SERVICE LIFE, AGE, COST, ACCUMULATED**
30 **DEPRECIATION, ANNUAL DEPREICATION, AND REPRODUCTION COST, AFFECT**
31 **YOUR CALCULATION OF THE FAIR MARKET VALUE.**

32 A. Yes, as described in my Direct Testimony, once the miscalculation was identified, I traced the
33 source of the inaccurate data, and undertook a complete review of all elements of Account 361
34 assets. The result was a lowering of our Cost Approach Value from \$202,410,000 to

1 \$170,040,000. The changes in the annual depreciation amount, had an effect on our Income
2 Approach as well, reducing that value from \$228,480,000 to \$212,360,000. There was no change
3 to our Market Approach. Overall, the changes to Account 361 assets, resulted in a lowering of
4 our Fair Market Value from \$207,010,000 to \$190,840,000.

5 We have made the appropriate adjustments to our UVE Model and supplied the model and
6 revised Schedules C, D, E, F, G, and H to the parties along with additional information to OCA in
7 response to OCA-V Data Requests.

8
9 **Q. REFERRING TO ON PAGE 23 LINES 12-21 AND PAGE 24 LINES 1-2 MS EVERETTE**
10 **HAS CONCLUDED THAT THE SERVICE LIFE OF THE COLLECTION SYSTEM IS**
11 **ONLY 70 YEARS AND THAT IT IS 66% DEPRECIATED. IS THIS CORRECT?**

12 **A.** No, we have provided information to OCA in response to their Data Request OCA-V-5 that
13 establishes at least an 85 year life of the collection system assets (Account 361) based on the
14 materials. Ms. Everette's calculation of the 66% depreciation is, in part, based on her assumption
15 of the reduced service life and, in part, to some faulty information contained in the third party
16 engineer's report that listed the year of installation for the manholes as 1911. Based on
17 information we received from MACM, there may be a few of those manholes still in use but they
18 were mostly replaced by the interceptor sewers and all manholes on the collections system
19 constructed in 1959 were installed in the same year as the collection system piping. We believe
20 that our estimate of a 51% depreciation for these assets is correct.

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RESPONSE TO TESTIMONY OF GLEN A. WATKINS

Q. ON PAGE 8, LINES 8 – 26; PAGE 9, LINES 1-25 AND PAGE 10, LINES 1-21; MR WATKINS DISCUSSES HIS DISCOUNTED CASH FLOW ANALYSIS FROM THE SELLER’S POINT OF VIEW AND COMPARES HIS ANALYSIS, GAW-2, WITH YOUR DCF VALUE OF \$194,970,000 ON SCHEDULE L. DID YOU PREPARE A DCF ANALYSIS FROM THE SELLERS POINT OF VIEW?

A. No, I did not prepare a DCF from the Seller’s point of view and, therefore, not included in our FMV calculation. I’m not sure why this was evaluated because the result produced a higher income value than what we included in our report. In addition, we disagree with his assumption that a municipal owner will seek a return on equity. From my experience, many, if not most, municipally owned systems have a negative equity because their rates are set to generate sufficient cash income while their audited financial statements accrue depreciation expense; so in many instances, the depreciation offsets the principal payment on their debt included in the rates producing an accounting loss. But even if there was positive equity, including a rate of return on that equity for rate purposes would be rare.

Q. ON PAGE 10. LINE 11, MR. WATKINS CALCULATES A RATE OF RETUREN FOR A MUNICIPAL SYSTEM OF 5.700%. DO YOU AGREE WITH THAT RATE?

A. No, to the extent that municipal systems include a rate of return either explicitly or implicitly, it would be related to the interest rate on their debt. Mr. Watkins calculates this at 3.79% in the case of McKeesport.

Q. ON PAGE 11. LINES 8 - 20, MR. WATKINS INDICATES THAT THERE ARE NUMEROUS TAX EXPENSE INACCURACIES. DO YOU AGREE WITH HIM?

1 A. No, his principal argument is that taxes should be calculated using incremental tax rates. My
2 analysis uses the same Federal incremental tax rate as Mr. Watkins, 35%. Our only difference is
3 the State tax rate. He prefers 9.9%, the PA incremental rate, while we have used 6.0%. But in
4 fact, we could not find the payment of any state tax on PAWC's annual report to the PUC for
5 2015. We believe this may be due to the fact that PAWC operates in many states and has a tax
6 strategy that minimizes state income taxes. We did not have access to PAWC's tax returns or tax
7 policies and used our best judgement in estimating taxes.

8
9 **Q. ON PAGE 11, LINE 17, MR. WATKINS NOTES THAT YOU DID NOT TAKE INTO**
10 **CONSIDERATION DEPRECIATION, INTEREST EXPENSE AS A TAX DEDUCTION**
11 **BUT DEDUCTED CAPITAL EXPENDITURES. HOW DOES THIS IMPACT YOUR**
12 **FAIR MARKET VALUE?**

13 A. Mr. Watkins is partially correct in that we did not separate the various tax deductible items;
14 however, the items that he notes, depreciation and interest expense are simply the result of capital
15 acquisitions. Also, it is sometimes difficult to distinguish between a capital item and a
16 maintenance expense for tax purposes. Despite his use of a higher incremental tax rates and his
17 opinion that our approach is not reasonably accurate, total taxes on his Table GAW-4 total only
18 \$132,504,599 while we reduce our Income Approach by \$168,374,689 for taxes which lowers our
19 FMV.

20
21 **Q. ON PAGE 6, LINE 30 AND ON PAGE 12, LINES 7 -18 OF HIS ANALYSIS, MR.**
22 **WATKINS TAKES ISSUE WITH THE DISCOUNT RATE USED TO DISCOUNT THE**
23 **CASH FLOW IN THE DCF ANALYSIS. HOW WAS THIS FACTOR DETERMINED?**

24 A. The USPAP standards allow the use of rates we deemed appropriate for the purpose. We took
25 into consideration the long term investment rate an investor could receive on an investment in 20
26 year treasury securities. We also took into consideration the after tax interest rate a borrower
27 would pay on debt to finance this transaction. Accordingly, using an effective consolidated tax
28 rate of 38.9%. In other words, the 2.5 discount rate is equivalent to a 4.10 market rate of interest.

29
30 **Q. DO YOU AGREE WITH MR. WATKINS ELIMINATION OF THE "ADD-ONS" FOR**
31 **GOING VALUE AS DISCUSSED ON PAGE 13, LINE 3 THROUGH PAGE 17, LINE 12?**

32 A. No. Mr. Watkins states that the "add-ons" for going value and erosion of cash flow are illogical.
33 In this regard, Mr. Watkins misses the point. Going value is separate and distinct from the

1 calculated income value and cost values. Income and cost calculations are based on the
2 circumstances as they currently exist.

3 Going value is an estimate to reflect the real cost for a start-up business that is not captured in the
4 value of the assets or reflected in the income but for which a seller should receive compensation.
5 Granted, the calculation is based on assumptions and estimates of the capital needed to get the
6 entity to a point where it is operational without loss, as is the case with any business. The
7 calculation on Schedule O is an attempt to estimate this value.

8 The underlying assumption is that a certain level of expense will be incurred that exceeds the
9 revenue growth. A five year time frame was assumed with cumulative losses during the first four
10 years. The utility must have provision to cover these losses that capital need is characterized as
11 going value for purposes of the analysis.

12 The going value is unrelated to PAWC Wastewater operations, it represents the costs incurred by
13 MACM when MACM began operations and should be included as a consideration of the fair
14 market value. The term of 5 years to achieve a positive net income is based on an expectation of
15 new connections identified during the planning for the system.

16 The calculation of net income derived on HRG's Schedule O is an attempt to recognize the costs.
17 In order to provide service, certain "fixed costs" are necessary. As new areas are served, fixed
18 costs increase, but not in a linear relation such as is the case for variable costs. Mr. Watkins may
19 disagree with the time frame and assumptions, but the logic of calculating net income by
20 subtracting revenues from expenses is sound.

21 With regard to Mr. Watkins comment about going value double counting, there is no double
22 counting. For example, in 2017, it is assumed that only 10% of the initial variable expense is
23 incurred. In 2018, variable expenses consist of expenses for 2017 plus expenses for 2018 and so
24 on. To offset the initial years of negative income, the utility would need to have sufficient funds
25 of at least \$17,300,000 discounted to a 2017 price level. As a result of changes to the
26 depreciation accrual, cost and useful life of the collection system assets, the going value has
27 adjusted automatically based on these inputs.

28
29 **Q. DO YOU AGREE WITH MR. WATKINS CONCLUSION REGARDING MS. VICARI'S**
30 **DCF VALUATION ANALYSIS?**

31 **A.** No. As previously stated, I believe that Mr. Watkins has overstated the discount rate in that it
32 fails to reflect changes in utility plant additions and other changes that have occurred since the
33 prior rate filing. In effect, these changes, if reflected, would result in a lower rate of return and a
34 lower discount factor. Obviously the discount factor should be based on conditions that currently

1 prevail for MACM, not a cost of equity found by the Commission in the recent City of Dubois –
2 Bureau of Water rate case. (Watkins Direct Testimony P. 9 Line 13)

3 Furthermore and fundamental to the FMV process, Mr. Watkins incorrectly and contrary to the
4 intent of Section 1329 has used Original Cost and associated depreciation. On Page 19 of Mr.
5 Watkins' testimony, he states that "annual revenue requirements are established based on original
6 costs and not the hypothetical cost of reproducing a new system at current construction costs." It
7 is agreed that traditional rate making is based on original cost. However, Section 1329 of the
8 Public Utility Code clearly deviates from "traditional" rate making practice. The Code states "a
9 fair market valuation is not tied to the original cost of construction minus accumulated
10 depreciation." This provision has been enacted by the legislature to apply to the valuation of a
11 municipality or authority owned water or wastewater utility.

12 HRG used reproduction cost and corresponding accumulative depreciation for purposes of
13 determining the cost measure as provided for by the Code. Mr. Watkins misstates the purpose
14 and intent of Section 1329 and his comments concerning using original cost and accumulating
15 depreciation and depreciation expense on Page 21 of his testimony should be ignored for FMV
16 purposes and for that reason, his rate base/rate of return should not be given any consideration.

17
18 **Q. DO YOU AGREE WITH MR. WATKINS OPINION ON PAGE 19, LINE 10 THAT**
19 **TRADITIONAL RATEMAKING PROCESS BASED ON ORIGINAL COST AND**
20 **ASSOCIATED ANNUAL DEPRECIATION SHOULD BE USED IN THE RATE BASE /**
21 **RATE OF RETURN ANALYSIS?**

22 **A.** No, I do not agree. Mr. Watkins proposes that the income valuation under investor ownership
23 should be calculated on the traditional ratemaking measure of value based on Original Cost and
24 associated annual depreciation. This is clearly inconsistent with the FIO and underlying authority
25 of Section 1329 of the Public Utility Code that departs from traditional ratemaking. It is apparent
26 that FIO is not specific and appropriately leaves decisions to the judgement of the UVE. The FIO
27 states on Page 2, "Section 1329 establishes an alternative process for valuing certain water and
28 wastewater systems for ratemaking purposes." Mr. Watkins deviates from the provisions of
29 Section 1329 and the FIO.

30
31 **Q. DO YOU AGREE WITH THE DISCOUNT RATE MR. WATKINS USES IN HIS**
32 **ANALYSIS?**

1 A. No, not entirely. Mr. Watkins proposed an adjustment to the discount rate for future cash flows.
2 The equity rate is a component of the discount rate calculated by Mr. Watkins. As the equity rate
3 of return decreases, the discount rate will also decrease.
4 The equity rate that should be used for FMV purposes should reflect current conditions, that is,
5 the rate that PAWC Wastewater is currently earning from operations, not a theoretically fair rate
6 of return that could be achieved in a general rate increase.

7

8 **Q. DOES THIS COMPLETE YOUR TESTIMONY?**

9 A. Yes.