

**DIRECT TESTIMONY
OF
JOHN R. COX**

**WITH REGARD TO
PENNSYLVANIA-AMERICAN WATER COMPANY
COATESVILLE WASTEWATER OPERATION'S
RATE BASE
DEPRECIATION & AMORTIZATION
O&M EXPENSES
AND
TAXES, OTHER THAN INCOME**

DOCKET NO. R-2008-2032689

DATE: April 28, 2008

DIRECT TESTIMONY OF JOHN R. COX

I. INTRODUCTION

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1. Q. What is your name and business address?

A. My name is John R. Cox. My business address is 800 West Hershey Park Drive, Hershey, Pennsylvania 17033.

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

A. I am employed by American Water Works Service Company (“Service Company”) as a Manager of Rates and Regulation for the Southeast Region.

3. Q. Please summarize your educational background and professional experience.

A. I am a 1985 graduate of Shippensburg University of Pennsylvania with a Bachelor of Science degree in Business Administration, with a major in accounting. In 1999, I received my Masters Degree in Business Management from Lebanon Valley College. I have also completed the continuing education program sponsored by the National Association of Regulatory Utility Commissioners (NARUC) and the University of Utah.

I have been employed by the Service Company or Pennsylvania-American Water Company (“PAWC” or the “Company”) since June 1986. From 1986 through June 1988 I served as a staff accountant in the Accounting Department. In July 1988 I was transferred to the Rate Department and in July 1989 I was promoted to Senior Rate Analyst. In 1991 I was promoted to accounting supervisor and held that position until

1 December 2000 when I was promoted to Fleet and Materials Management
2 Superintendent. In July 2004 I was promoted to the position of Senior Financial
3 Analyst assigned to the Finance Department. In 2007, I was promoted to my current
4 position of Manager of Rates and Regulation.

5 **4. Q. What are your duties as Manager of Rates and Regulation?**

6 **A.** My duties include the preparation and presentation of rate applications for PAWC,
7 Maryland-American Water Company (“MAWC”) and Virginia-American Water
8 Company (“VAWC”). In addition, I am responsible for certain aspects of the
9 financial, budgeting and regulatory functions for these three companies.

10 **5. Q. Have you previously submitted testimony before the Pennsylvania Public Utility
11 Commission?**

12 **A.** Yes. I have previously presented testimony on accounting and rate matters before this
13 Commission. I have also prepared water rate applications presented before the
14 Maryland Public Service Commission and the Virginia State Corporation
15 Commission.

16 **6. Q. What is the purpose of your testimony?**

17 **A.** The purpose of my testimony is to explain the portions of Exhibit No. 3-A that I am
18 sponsoring, which relate to the Company’s claims for rate base, operating expenses
19 and taxes other than income taxes.

1 II. RATE BASE

2 7. Q. What is the Company's rate base claim in this proceeding?

3 A. The Company's claim is \$18,977,265, which reflects its projected rate base as of
4 December 31, 2008, and is shown on page 11 of Exhibit No. 3-A.

5 8. Q. What are the elements of the Company's rate base claim?

6 A. Rate base consists of several elements. The first and largest element is the
7 depreciated original cost of net plant in service. To this amount three items are added
8 (materials and supplies, cash working capital and accrued taxes net of prepaid taxes)
9 and two items are deducted (a net offset against cash working capital requirements for
10 accrued interest and preferred dividends prior to payout and deferred taxes).

11 9. Q. Please explain how the depreciated original cost of net plant at December 31,
12 2008 was determined.

13 A. Net plant is total plant in service less contributions-in-aid-of-construction ("CIAC"),
14 customer advances for construction ("CAC") and excluded property. Depreciated
15 original cost is original cost less accrued depreciation. The original cost of net utility
16 plant in service at December 31, 2008 is the amount recorded in PAWC's plant
17 accounts at December 31, 2007 plus projected additions net of retirements, less CIAC
18 and CAC. The original cost of plant in service at December 31, 2007 and the original
19 cost of claimed additions and retirements, shown by detailed plant account, are set
20 forth in Exhibit No. 3-B. Mr. Kaufman discusses the more significant plant additions
21 in his testimony. The accrued depreciation at December 31, 2008 related to net plant

1 in service was determined by the Company's depreciation consultant, John J. Spanos,
2 and is shown in Exhibit No. 3-A at page 11, line 9.

3 **10. Q. Do the continuing property records, as maintained by the Company, accurately**
4 **reflect additions and retirements to plant?**

5 **A.** Yes, they do.

6 **11. Q. Are the data shown on the Company's continuing property records an accurate**
7 **basis for developing the original cost of property?**

8 **A.** Yes, they are.

9 **12. Q. Has the Company made any adjustments to its historic test year end CIAC and**
10 **CAC balances?**

11 **A.** Yes, it has. The December 31, 2007 CIAC balance has been increased to reflect
12 \$3,263,944 of additional contributions projected to be received during the future test
13 year and early 2009. The \$3,263,944 consists of: (1) \$1,469,944 of developer funded
14 projects that were completed prior to the end of the historic test year, but recorded in
15 the first quarter of 2008; (2) a contribution of \$77,175 from Sadsbury Township for
16 capacity fees recorded in the first quarter of 2008; (3) capacity fee contributions of
17 \$105,000 associated with projected customer additions; and (4) capacity fees and a
18 trunk line contribution from Caln Township, which is anticipated to be received either
19 by year end or early 2009 in the amount of \$1,611,825. No customer advances are
20 anticipated during the future test year.

1 13. Q. Please explain the addition to rate base for materials and supplies.

2 A. In accordance with procedures approved by the Commission, the Company's
3 materials and supplies claim was determined by averaging the monthly balances of
4 the materials and supplies account for the thirteen months ended December 31, 2007.
5 The calculation of the materials and supplies allowance is shown on page 14 of
6 Exhibit No. 3-A.

7 14. Q. Please explain the Company's claim for cash working capital.

8 A. The cash working capital requirement is calculated by multiplying the net lag days
9 (revenue lag days less expense lag days) by the average operating expenses per day
10 (total operating expenses / 365 days). All calculations have been made to one decimal
11 place. In accordance with Commission policy, uncollectible accounts expense was
12 subtracted from total operating expenses before making the calculation. The
13 calculation of the gross cash working capital requirement is shown in Exhibit No. 3-A
14 at page 15.

15 15. Q. Please describe how the revenue and expense lags were determined.

16 A. Revenue and expense lags were determined based on a lead-lag study submitted in the
17 Company's 2007 water rate filing at Docket No. R-00072229. Given the recent
18 nature of that study and the absence of any changes in the collection or payment
19 process, I believe the lag days are appropriate for calculating CWC in this case.
20
21

1 The revenue lag consists of three components: (1) the lag from the midpoint of the
2 service period to the end of the service period, i.e., the meter-read date; (2) the time
3 required for bill preparation and mailing; and (3) the lag in receipt of payment. The
4 first component is calculated as follows: the number of days in the year (365) are first
5 divided by the customer billings per year of 12. That figure is divided by 2 to
6 determine the interval from the midpoint to the end of the service period. The final
7 result of 15.2 days is the service period lag.

8
9 The second component is billing lag. The billing lag of 4 days used for this
10 calculation was approved in the final Order in the Company's rate proceeding at
11 Docket No. R-932670.

12
13 The third component requires a further calculation to determine the average length of
14 time that revenues are outstanding before payment. This calculation was performed
15 as follows: (1) daily accounts receivable were summed and the total divided by 365
16 days to determine the average accounts receivable balance per day; (2) the Company's
17 total revenue from water sales was divided by 365 days to determine the average
18 revenue billed per day; and (3) the average accounts receivable balance per day was
19 divided by the average revenue billed per day. The result of the division in (3), above,
20 yields the number of days on average that billed revenue was outstanding prior to
21 receipt of payment. This is a standard calculation that is used by other utilities in
22 Pennsylvania.

1 The expense lag was based upon a comprehensive lag study. Using procedures
2 approved by the Commission in prior proceedings and data obtained from the
3 Company's centralized accounts payable system, samples of expense vouchers for
4 each category of expense were analyzed to determine the lag between the receipt of
5 goods or services and the applicable payment due date. A summary of expense lags
6 by category is shown on page 16 of Exhibit No. 3-A.

7 **16. Q. Please explain the addition to rate base for accrued and prepaid taxes.**

8 **A.** This addition to rate base reflects the fact that, on balance, taxes are paid in advance.
9 The lead/lag in payment of Pennsylvania corporate net income tax is based on four
10 equal payments throughout the year. Property taxes and the General Assessments
11 were calculated based upon actual payment dates in 2007. The lead/lag day
12 calculation for the payment of federal income tax was based upon statutory payment
13 schedules. Page 18 of Exhibit No. 3-A sets forth the calculation of the lead/lag days
14 for all of the aforementioned taxes. The net lead/lag days for each tax are then
15 applied to the pro forma tax amounts, as shown on page 17 of Exhibit No. 3-A, to
16 calculate the overall working capital effect which, in this instance, is positive. Thus,
17 the average net lead in payment of these taxes constitutes an addition to cash working
18 capital requirements and, therefore is reflected as a rate base addition.

19 **17. Q. Please explain the items that were deducted from rate base.**

20 **A.** The first deduction, which offsets cash working capital requirements, relates to the
21 average net lag in payment of interest on long-term debt and dividends on preferred

1 stock. It was calculated using procedures previously approved by the Commission and
2 is set forth in Exhibit No. 3-A on page 19.

3
4 The second deduction from rate base is for accumulated deferred taxes related to the
5 normalization of the federal income tax effect and is sponsored by Mr. Klick.

6 **18. Q. Do the adjustments explained above constitute all of the adjustments necessary**
7 **to establish the Company's rate base?**

8 **A.** Yes, they do.

9 **III. DEPRECIATION & AMORTIZATION EXPENSE**

10 **19. Q. Have adjustments been made to annual depreciation expense?**

11 **A.** Yes. Adjustments to booked amounts were made to reflect the annual depreciation
12 accrual for the Company's plant in service as of December 31, 2008. The annual
13 accrual was determined largely on a Straight-Line Average Remaining Life basis. The
14 adjustments to reflect the annual accrual for depreciation related to plant in service at
15 December 31, 2008 are shown in Exhibit No. 3-A at page 33 and, as noted previously,
16 are explained and sponsored by Mr. Spanos.

17 **20. Q. Please explain the negative entry for "Amortizations" that appears on page 1 of**
18 **Exhibit No. 3-A.**

19 **A.** When it acquired the Coatesville Wastewater system in March 2001, PAWC recorded
20 a negative utility plant acquisition adjustment in the amount of \$5,069,813. In 2001

1 the Company began amortizing this acquisition adjustment over 10 years. The annual
2 negative amortization is \$506,981 and serves to reduce the Company's claimed
3 revenue requirement by that amount.

4 IV. OPERATING AND MAINTENANCE EXPENSES

5 21. Q. Please explain the development of pro forma operating and maintenance (O&M)
6 expenses as set forth in Exhibit No. 3-A.

7 A. Pro forma O&M expenses have been developed in a manner consistent with previous
8 filings. In general, booked data for the historic test year was used as a starting point
9 and were then adjusted to reflect the effects of changes which have occurred or will
10 occur by December 31, 2008.

11
12 The development of pro forma O&M expenses begins on pages 21 and 22 of Exhibit
13 No. 3-A with a two page summary by account. The first column of the summary
14 shows the per books amounts for the HTY ending December 31, 2007. The second
15 column shows the pro forma expenses for the HTY including ratemaking adjustments.
16 The third column shows pro forma expenses for the FTY ending December 31, 2008
17 as adjusted for ratemaking purposes. All adjustments made in developing pro forma
18 expenses are summarized on page 23 of Exhibit No. 3-A. Following the summary
19 page, on separate pages by adjustment, are the details of each specific adjustment.

1 **A. Salaries and Wages**

2 **22. Q. Please explain the Salaries and Wages adjustment.**

3 **A.** The adjustment to salary and wage expense shown on page 24 of Exhibit No. 3-A was
4 made to reflect the Company’s projected complement of unionized and salaried
5 employees as of the end of the future test year and to annualize the impact of salary
6 and wage rate increases, including annual incentive pay, to be granted through June
7 30, 2009. The annualization of salary and wage rate increases for a period of six
8 months beyond the future test year was approved by the Commission in its Orders at
9 Docket Nos. R-00943231, R-00016339 and R-00038304. The details of these
10 calculations are set forth in Exhibit No 3-B.

11 **23. Q. What was the basis for the increases in wages and salaries used in developing the**
12 **Company’s claim?**

13 **A.** For the Company’s unionized employees, the future test year claim for wage expense
14 is based on the actual wage rates set forth in collective bargaining agreements,
15 including changes in hourly rates that will become effective, in accordance with such
16 agreements, between January 1 and June 30, 2009. For non-union hourly employees
17 and salaried employees, actual increases granted as of April 2008 were utilized. In
18 addition, an increase of 4% was projected to become effective in April 2009 for
19 salaried employees.

20 **24. Q. Why has the Company claimed the costs associated with its Annual Incentive**
21 **Pay (AIP) program as part of the overall salaries and wage expense?**

1 A. The Company relies on the AIP to help attract, retain, motivate and recognize the
2 personnel required to achieve required operational and customer service excellence.
3 The future test year claim for AIP was based on the average payout over the last 3
4 years for the applicable employees.

5 **25. Q. How did the Company determine the portion of total wages and salaries to be**
6 **charged to expense?**

7 A. Labor costs are charged directly to the appropriate account based on actual hours
8 worked. Labor costs can be charged to investment, retirement, jobbing or O&M
9 expense accounts. During the year ended December 31, 2007, 10.73% of direct labor
10 costs were not charged to O&M expense accounts. This same relationship was
11 assumed in developing the Company's future test year claims.

12 **B. Group Insurance and Other Payroll-Related Expenses**

13 **26. Q. Please explain the development of the adjustment for group insurance shown on**
14 **page 25 of Exhibit No. 3-A.**

15 A. Group insurance expense for the twelve months ended December 31, 2008 was
16 calculated by first determining the annualized group insurance cost per employee at
17 March 31, 2008. That amount was then multiplied by the future test year complement
18 of 12 employees, and an amount representing the employee contribution for
19 healthcare coverage was subtracted. Since group insurance is an employee cost, it is
20 charged to O&M expense in proportion to direct labor charges. Because 10.73% of
21 labor cost was not charged to expenses (as previously explained), the same percentage

1 was used to calculate the Company's group insurance expense claim. Details of this
2 adjustment are contained in Exhibit No. 3-B.

3 **27. Q. Are there any other payroll-related expenses?**

4 **A.** Yes, there are two. First, page 34 of Exhibit No. 3-A sets forth the Company's claim
5 for payroll taxes based on historic and future test year salary and wage expense.
6 Second, on page 26 of Exhibit No. 3-A, the Company has made a future test year
7 claim for 401K and defined contribution plan costs. As in the case of group
8 insurance, 10.73% of the calculated payroll taxes, 401K and defined contribution plan
9 costs were not charged to O&M expense. The detailed calculations of these
10 adjustments are contained in Exhibit No. 3-B.

11 **C. Miscellaneous Expense Items**

12 **28. Q. Please explain the Company's claim for chemical expense.**

13 **A.** PAWC utilizes various chemicals in the wastewater treatment process. In order to
14 secure the best available pricing, the Company participates in the American Water
15 competitive bidding process to establish unit price contracts for chemical
16 requirements. The FTY adjustment reflects actual bid prices in effect at January 1,
17 2008 applied to the projected FTY chemical usage. The adjustment is summarized on
18 page 27 of Exhibit No. 3-A and additional supporting workpapers are included in
19 Exhibit No. 3-B.

20 **29. Q. Please explain the purchased power adjustment.**

1 **A.** The development of the Company’s adjustment for purchased power reflects the
2 application of power rates to be in effect as of the end of the FTY adjusted for known
3 changes in power usage. These amounts were used to develop an appropriate annual
4 level of expense for this case. The adjustment is summarized on page 28 of Exhibit
5 No. 3-A. Supporting workpapers detailing the method used are contained in Exhibit
6 No. 3-B.

7 **30. Q.** **Please explain the Company’s claim for leased vehicle expense.**

8 **A.** The Company’s adjustment for leased vehicle expense is shown on page 29 of Exhibit
9 No. 3-A. Detailed supporting calculations are provided in Exhibit No. 3-B. The
10 FTY claim reflects the number of vehicles to be leased and the applicable lease cost
11 per vehicle at December 31, 2008.

12 **31. Q.** **Please explain the adjustment for rate case expense.**

13 **A.** Page 30 of Exhibit No. 3-A shows the components of the estimated costs of this rate
14 case. The Company proposes to recover the estimated costs for the preparation and
15 litigation of this case over a 12 month period. A normalized period of one year is
16 appropriate as the Company will need to file its next request to increase wastewater
17 rates in 2009 to capture its very substantial investment in the new Coatesville
18 Wastewater Treatment Plant, which is projected to be completed and in service by the
19 end of 2009.

20 **32. Q.** **Please explain the adjustment for inflation shown on page 31 of Exhibit No. 3-A.**

1 A. This adjustment is made to reflect the effect of inflation on those HTY expenses that
2 were not otherwise adjusted. The adjustment is based upon the average rate of change
3 in two major indices: the Consumer Price Index and the Producer Price Index. The
4 details of this adjustment are contained in Exhibit No. 3-B.

5 33. **Q. Please explain the Company’s claim for uncollectible accounts expense.**

6 A. Page 33 of Exhibit No. 3-A shows the Company’s claim, which was developed by
7 applying the three year average ratio of net write-offs to FTY levels of wastewater
8 sales revenue. This method was approved in PAWC’s last fully litigated water rate
9 proceeding at Docket No. R-00038304.

10 34. **Q. Is the Company proposing an adjustment to operating expense to account for
11 changes in customer usage?**

12 A. No. Based on my review, I believe that the HTY wastewater treatment and disposal
13 cost levels adequately reflect the Company’s ongoing costs.

14 **V. TAXES OTHER THAN INCOME TAXES**

15 35. **Q. Please explain the adjustment for General Assessments on page 35 of Exhibit No.
16 3-A.**

17 A. The General Assessments are imposed on regulated utilities to provide funding for the
18 Commission, the OCA and the OSBA. The General Assessment rates are applied to a
19 tax base consisting of revenue from wastewater sales. To calculate pro forma General
20 Assessments, the current assessment rates were applied to a tax base consisting of pro

1 forma sales revenue under present and proposed rates. The Company plans to update
2 this adjustment with the new rates once they are available.

3 36. **Q. Does this conclude your testimony at this time?**

4 **A. Yes, it does.**