

**BEFORE THE
PHILADELPHIA WATER, SEWER AND STORMWATER RATE BOARD**

Re: Application of the Philadelphia Water :
Department for Increased Rates and :
Related Charges : Fiscal Years 2017-2018

**DIRECT TESTIMONY OF
ROBERT A. ROSENTHAL**

**PECO ENERGY COMPANY AND
EXELON GENERATION CO., LLC**

Dated: March 24, 2016

DIRECT TESTIMONY OF ROBERT A. ROSENTHAL

1 INTRODUCTION AND BACKGROUND

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS**

3 A. My name is Robert A. Rosenthal. My business address is 5245 Strathmore Drive,
4 Mechanicsburg, PA 17050.

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

6 A. I am employed by Robert A. Rosenthal, Inc. as President. I provide consulting services
7 to electric, natural gas and water industries on various regulatory issues. My clients
8 have included attorneys, fund managers, researchers, customers and utilities
9 themselves. My activities have ranged from informal consultation phone calls to
10 submitting reports and testimony on a range of issues from utility finance and
11 organization, depreciation, regulatory policy, rate design and cost
12 allocations/calculations and line extensions.

13 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL** 14 **EXPERIENCE**

15 A. I have both a Bachelor of Arts and Master of Arts in Geography from the University of
16 Miami, Coral Gables, FL. I worked for 30 years with the Pennsylvania Public Utility
17 Commission ("Commission") in various positions. Initially, I was directly involved in
18 prosecuting rate cases as a cost of service and rate structure witness in the Electric
19 Division of the Bureau of Rates. I was later Supervisor of Valuation and Rate Structure.
20 As part of the 1986 Commission restructuring, I was named Chief of Policy and Planning
21 in the Bureau of Conservation Economics and Energy Planning. In 1988, I joined the
22 staff of Commissioner Joseph Rhodes, Jr. as advisor for Electric and Water Industry
23 issues. In 1992, I was appointed Deputy Director for Technical Review in the Office of
24 Special Assistants. In 1993, I joined Commissioner later Chairman John Quain's staff as
25 Electric and Natural Gas advisor. Finally, I was named in 1999 as Director of the Bureau

1 of Fixed Utility Services that handled informal tariff matters, compliance, utility finances
2 and reporting for electric, natural gas, telecommunications, water and wastewater
3 industries. I also managed the Commission's emergency response liaison team in
4 coordination with the Pennsylvania Emergency Management Agency. I retired from the
5 Commission in 2007.

6 **Q. WHAT ARE YOUR DUTIES AND RESPONSIBILITIES IN YOUR CURRENT**
7 **POSITION?**

8 A. I currently provide consulting and related services on regulatory issues to fund managers
9 and researchers, technical review of utility rate case materials and expert testimony on
10 behalf of customers and utilities on all aspects of utility ratemaking, cost of service and
11 rate design.

12 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE REGULATORY**
13 **AGENCIES?**

14 A. Yes. I have submitted testimony to the Commission more than 25 times from 1979
15 through 1986 as a staff witness on electric cost of service and rate structure, Public
16 Utility Regulatory Policy Act of 1978 and as a witness for the Commission staff's
17 evidentiary presentation on Limerick Unit 2. More recently, I submitted testimony on
18 behalf of York Generating Company at Docket R-2009-2149262 regarding natural gas
19 transportation rates. I also prepared an expert report, submitted affidavits and gave
20 deposition testimony for Metropolitan Edison Company in Civil Action No. 07-CV-5298 in
21 the United States District Court for the Eastern District of Pennsylvania related to the
22 Portland Generating Station. A copy of my resume is attached to this testimony.

23 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

24 A. I am testifying on behalf of PECO Energy Company and Exelon Generation Co., LLC
25 (collectively, "the Companies"). PECO is a corporation organized and existing under the
26 laws of the Commonwealth of Pennsylvania, with its principal office located in
27 Philadelphia, Pennsylvania. PECO provides electricity to approximately 1.6 million

1 customers. Exelon is a competitive energy provider with one of the largest retail
2 customer bases in the United States. Both PECO and Exelon are water and wastewater
3 customers of PWD.

4 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

5 I have been requested by the Companies to review the Philadelphia Water Department's
6 ("PWD") rate filing and provide testimony on PWD's rate proposals. In preparing this
7 testimony, I have relied on the information presented in PWD's rate filing and the
8 discovery responses provided by PWD. I have the following comments on the PWD rate
9 proposals.

10 **PWD's Debt Coverage and Credit Rating**

11 **Q. DESCRIBE THE RATE INCREASES PROPOSED BY THE PWD**

12 A. As identified in the cost of service study presented by the PWD, the revenue
13 requirement projections for Fiscal Years 2017 and 2018 indicate the need for an
14 increase in water and wastewater revenue requirements of \$34,735,000 in 2017 and
15 \$36,171,000 in 2018. This increase in revenue requires an increase in 2016 rates of
16 approximately 5.42% in 2017 and 5.42% in 2018. The overall increase in revenues from
17 the combined water and wastewater systems over the 2 year period is approximately
18 11.1% (PWD Stmt. 9-A at p. 20). With the increase in revenues, the retail rate of return
19 for water service in 2017 will be 3.31% (Exhibit BV-E1, Table W-15). The rate of return
20 for wastewater service in 2017 will be 5.16% (Exhibit BV-E1, Table WW-II).

21 **Q. WHAT ARE THE PROJECTED REVENUE AND REVENUE REQUIREMENTS FOR**
22 **WATER SERVICE FOR FY 2016-2021?**

23 A. Table W-6 of Exhibit BV-E1 identifies the projected revenue and revenue requirements
24 for water service for FY 2016-2021. Lines 3 and 4 of the table indicate that the water
25 rates will be increased 5% each for FY 2017 and 2018. Line 29 identifies the total water
26 debt service coverage for FY 2015-2021. The indicated debt coverage for 2017 is 1.10x,
27 and the coverage for FY 2018 is 1.12x

1 **Q. WHAT ARE THE PROPOSED REVENUE AND REVENUE REQUIREMENTS FOR**
2 **WASTEWATER SERVICE?**

3 A. Table WW-6 of Exhibit BV-E1 identifies the projected revenue and revenue requirements
4 for wastewater service for FY 2016-2021. Lines 2 through 8 of the table identify the
5 percent increases in wastewater service rates for FY 2016-2021. The percentage
6 increase for FY 2017 is 5.7%, and the increase for 2018 is also 5.7%. Line 29 of the
7 table identifies the total wastewater debt coverage for FY 2015-2021. The indicated
8 debt coverage for FY 2017 is 1.14x, and the coverage for 2018 is 1.15x. The debt
9 coverages identified on Line 29 of table WW-6 for wastewater are generally higher than
10 the debt coverage for water service which appears on Line 29 of table W-6.

11 **Q. DO THE RATE INCREASES PROPOSED BY PWD IMPROVE THE DEBT**
12 **COVERAGES FOR THE WATER AND WASTEWATER SERVICES?**

13 A. The debt coverage for the water service is less than that of the wastewater service. The
14 debt coverage of the two services would be better balanced by switching the proposed
15 percentage increases between them, increasing the water service rate increase to 5.7%
16 and reducing the wastewater rate increase to 5%. Through this approach, the debt
17 coverages of the services will move closer to equality and the cross-subsidy between
18 them would be lessened. This would strengthen the PWD overall by reducing the risk
19 exposure to changing conditions in either service and align the revenue to the cost
20 requirements of each service on a current basis. The impact of switching the increases
21 would be a \$1,374,000 reduction in the proposed revenue for the wastewater service
22 and an increase in the revenue for the water service of \$1,374,000 for FY 2017 and
23 2018. The debt coverages of the services will move closer to equality and the cross-
24 subsidy between them would be lessened. As a result of the switch, the water coverage
25 rates in 2017 would be 1.13x and the wastewater coverage rates in 2017 would be 1.13x
26 and the combined coverage would also be 1.13. The water coverage rates in 2018
27 would be 1.16, the wastewater coverage in 2018 would be 1.14, and the combined

1 coverage would be 1.15. These revisions will correct the imbalances in the debt
2 coverage for these services and improve the PWD's credit rating. Exhibit 1 attached to
3 this testimony summarizes the results of switching the proposed increases in FY 2017
4 and 2018.

5 **PWD's Projected Test Year Expenses**

6 **Q. HAVE YOU REVIEWED PWD'S PROJECTED TEST YEAR EXPENSES?**

7 A. I have reviewed PWD's projected test year expenses for electric costs and chemical
8 expense. It is a generally accepted ratemaking principle in Pennsylvania that claimed
9 test year expenses must be known and measureable at the time of filing. This means
10 that adjustments cannot be based upon conjecture or even informed judgment.
11 Fundamental ratemaking principles require that all ratemaking claims be based upon
12 known, measureable and reasonable expenses.

13 **Q. WHAT COMMENTS DO YOU HAVE CONCERNING PWD'S PROPOSED** 14 **ESCALATION IN ELECTRIC COSTS?**

15 A. Fig. 5 - Annual Escalation Factors - contained on page 6 of the PWD Financial Plan:
16 Revenue and Revenue Requirement Assumptions ("Financial Plan"), projects an annual
17 5% escalation factor in FY 2018-2021 based on the PWD's long-term historical
18 experience and industry indices for power costs. As a result, the PWD estimates that
19 electricity costs will rise more than 20% in the period from 2018 to 2021. Supporting the
20 5% escalation factor is a citation to Appendix 3 on p. 22 of the Financial Plan. Appendix
21 3 contains a table identifying the Consumer Price Index for electricity in the Philadelphia
22 area in the period 2004-2015. None of the percentage changes in the chart for that
23 period identify a continuing 5% escalation year-to-year. The three-year and ten-year
24 averages on the chart are both less than 5%. Averaging the eleven percentage changes
25 in the chart indicates that the average percent increase was 3.24%, rather than the 5%
26 projected by the PWD. The PWD has not cited any government agency forecasts of
27 annual electricity increases that support its proposed escalation. Relying on the data

1 contained in Appendix 3, a more realistic escalation factor based on the chart is 3%,
2 which should be used by the Board in its design of the rates since it is supported by
3 actual data.

4 **Q. WHAT COMMENTS DO YOU HAVE CONCERNING PWD'S ESTIMATION OF**
5 **CHEMICAL EXPENSE?**

6 A. PWD's historical cost for chemicals in the base year of 2015 is identified in Appendix 2
7 of document BV-S1 (p. 20) which indicates a historical cost of \$22,324,969. However,
8 PWD's response to Interrogatory EXE-185 states that the total amount spent on
9 chemicals for FY 2015 is \$17,915,484. In the interrogatory response to PECO's Set III -
10 1, PWD explains that the difference of \$4,319,485 in the cost of chemicals in the
11 interrogatory responses is an unexplained encumbrance. The interrogatory responses
12 are attached to this testimony. Another indication of the cost of chemicals for 2015 is
13 contained in PWD Stmt. 9-A, Exhibit BV-E1, line 5 of Table W-2 and Table WW-2, an
14 amount of \$19,030,000 is identified for 2015. The Producer Price Index for industrial
15 customers contained in Appendix 3 of the Financial Plan in Exhibit BV-S1 at page 22
16 indicates that the most recent three-year period demonstrated a 6.41% price decline in
17 chemical costs rather than an escalation. The multiple indications of chemical expense
18 indicate that the PWD estimate is not accurate. In determining the projected expense for
19 the chemicals in the 2017-2018 rate period, the Board should apply the Producer Price
20 Index for industrial chemicals contained in Appendix 3 of Exhibit BV-S1 which projects a
21 6.41% price decline in chemical expense rather than an escalation.

22 **Recovery of Proposed Expenses During Test Years 2017 and 2018**

23 **Q. HAVE YOU REVIEWED PWD'S PROPOSED RECOVERY OF EXPENSES INCURRED**
24 **DURING THE TEST YEARS 2017 AND 2018?**

25 A. I have reviewed the direct testimony of Commissioner McCarty (PWD Stmt. No. 1)
26 concerning expenditures in 2017 and 2018. On p. 8 of that testimony, the Commissioner
27 explained that the launch of a second generation Advanced Metering Infrastructure

1 (“AMI”) system was a significant initiative being initiated during the rate period. The
2 Commissioner explained that the current AMR system used by the PWD is operated
3 under a contract with Itron which expires in September 2017, or September 2019, if the
4 PWD exercises the Itron contract’s two optional one-year extensions. The
5 Commissioner explained the benefits of the AMI system on pp. 8 and 9 of her direct
6 testimony.

7 At the Board hearing held February 22, 2016, the Commissioner stated that the AMI
8 project is no longer part of the present rate case. The Commissioner indicated that the
9 AMI contract would have to be negotiated and reviewed in the future by the City Council
10 and ultimately approved by them (Hearing Transcript (“Tr.”) p. 117). In response to a
11 question from Board member Popowski, the Commissioner indicated that the PWD staff
12 did not yet have a price on the AMI. The Commissioner noted that the PWD was still in
13 the preliminary stages of the AMI project working with vendors and figuring it all out (Tr.
14 p. 120). The Commissioner also indicated that the PWD was likely to exercise the two
15 one-year options to continue the existing Itron contract for AMR service while the PWD
16 rolled out its new AMI system at some future date (Tr. p. 123).

17 A review of the rate filing indicates that the PWD is requesting the recovery of costs
18 associated with the implementation of the AMI in the Financial Plan. My
19 recommendation is that with the very preliminary status of the AMI project, it is
20 premature for any of the AMI expenses to be recovered by the PWD in this proceeding.
21 As a result of the project’s preliminary status, the costs associated with the
22 implementation of the AMI infrastructure will likely not be incurred during the 2017-2018
23 rate period. The AMI expenses identified in the Financial Plan should be removed from
24 the case since the PWD’s customers are unlikely to receive any benefit from the AMI in
25 the 2017 and 2018 rate period. Recovery of these expenses should be deferred until the
26 next rate case.

27

1 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

2 A. Yes, it does. However, I reserve the right to file such additional testimony as may be
3 necessary or appropriate.