

DIRECT TESTIMONY
OF
MARK F. ALDEN

DOCKET NO. R-2008-2028394

Describing PECO's Gas Operations;
Providing An Overview Of PECO's Rate Filing;
Explaining PECO's Capital Investment Process;
And Discussing Steps Taken To Ensure System Safety
And Reliability And To Enhance Customer Service

Date: March 31, 2008

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DIRECT TESTIMONY
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MARK F. ALDEN

I. INTRODUCTION

Please state your name and business address.

6 ^{no} My name is Mark F. Alden and my business address is 2301 Market Street,
7 Philadelphia, Pennsylvania 19101.

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

9 I am employed by PECO Energy Company ("PECO" or the "Company") as Vice
10 President, Gas Operations. In that capacity, I am responsible for managing the day-
11 to-day operations of PECO's natural gas business, including gas supply planning and
12 acquisition; gas system control and design; the operation of PECO's liquefied natural
13 gas (LNG) and propane-air peaking facilities; distribution system operations and
14 maintenance; regulatory compliance and other matters.

15 o **Q. Please briefly describe your educational background and professional
16 experience.**

17 I received a bachelor's degree in civil engineering from the Pennsylvania State
18 University and a master's degree in business administration from Saint Joseph's
19 University. I have worked for PECO or its corporate affiliates for the past twenty-
20 five years, starting out as a project manager in PECO's nuclear group and, most
21 recently, serving as Vice President, Projects and Services.

22 ^{oo} **What is the purpose of your direct testimony?**

1 customers also have the option to procure their own gas supply and pay PECO for
2 delivery service only. In addition, and as set forth in our gas tariff, qualifying
3 customers can avail themselves of a variety of outdoor lighting, interruptible and
4 temperature controlled services.

How does PECO's customer base break down by major customer classification?

6 ^{Ao} As of December 31, 2007, we served approximately 440,000 residential customers;
7 41,000 small commercial and industrial customers; and 300 large commercial and
8 industrial customers. Residential customers account for nearly 45% of metered
9 volume.

10 **8. What are the major assets and facilities that PECO utilizes to provide gas**
11 **service to its customers?**

12 ^{Ao} The vast majority of the gas we deliver to our customers is procured through contracts
13 with third-party suppliers and either is placed in storage on PECO's behalf for later
14 withdrawal and delivery to our system or is delivered directly to our system.
15 However, to supplement that supply on an as-needed basis during peak demand
16 periods, we operate an LNG plant in West Conshohocken and a propane air peaking
17 plant in Chester. Our purchased gas costs are recovered through a separate Section
18 1307(0 rate mechanism, which is reviewed and reconciled annually, and hence those
19 costs are not part of the increase requested by this filing. In addition to our supply
20 and storage facilities, we operate approximately 6,600 miles of low-, medium-, and
21 high-pressure gas mains and 36 gate stations that feed our distribution system.

1 **9. Q. How does PECO staff its gas operations?**

2 ^{As} At future test year end, we project that 310 employees will be engaged full-time on
3 gas operations within the Gas Department. Of that number, approximately 286 are
4 involved in the physical operation of the gas system, including the design, installation
5 and replacement of mains and other facilities; the operation and maintenance of
6 PECO's LNG plant, propane-air peaking plant and gas gate stations; damage
7 prevention and safety; and regulatory compliance. Another 24 employees are
8 responsible for the administrative side of the business, including gas procurement and
9 contract administration; planning and reporting; and the representation of PECO in
10 proceedings before the Pennsylvania Public Utility Commission (PUC) and the
11 Federal Energy Regulatory Commission (FERC). Other departments within PECO
12 that support the gas business include Regulatory and External Affairs, Distribution
13 Service Operations, and Customer Operations, to name a few examples, and will
14 contribute an estimated 228 employees for the benefit of the gas business. In
15 addition, and as discussed in greater detail by Mr. Barnett (PECO Statement No. 2),
16 we take advantage of various support services (e.g., finance and accounting, supply,
17 legal, corporate governance, and information technology) offered by the Exelon
18 Business Services Company.

19 **III. OVERVIEW OF RATE FILING**

20 10. **Q. Please summarize the relief that PECO is requesting through this rate filing.**

21 ^{no} PECO is seeking an increase in its annual gas operating revenues of \$98.3 million, or
22 11.2% on a total revenue basis. We have proposed an effective date of May 30, 2008,

1 but recognize that our filing will likely be suspended and investigated. We are also
2 proposing (1) an expansion of our discounted low income customer assistance
3 program (Gas CAP) and (2) the implementation of comprehensive energy efficiency
4 and conservation programs for gas customers. These recommended programmatic
5 changes are described in the testimony being submitted by Mr. McHugh (PECO
Statement No. 6) and Ms. Lentini (PECO Statement No. 7), respectively.

11. **Q. Why is PECO requesting a rate increase at this time?**

8 ^{Ao} Because, as further discussed by Mr. Barnett and Mr. O'Brien, our base rates are no
9 longer sufficient to provide a reasonable return on our ongoing investment in the
10 facilities required to provide our customers the safe and reliable service they have
11 come to expect. Notably, this is the first general base rate filing that PECO has made
12 for its gas operations in **twenty-one years** - - i.e., our last Section 1308(d) gas case
13 was filed in April 1987. For many years, aggressive cost containment, coupled with
14 the attraction of new customers, allowed us to offset the increase in revenue
15 requirement occasioned principally by new plant investment. Based on a review of
16 current and projected financial results, we do not believe that we can stay out any
17 longer.

18 12. ^{Qo} **You noted that PECO has been successful in constraining increases in the cost of**
19 **providing gas service. Please elaborate.**

20 ^{Ao} Since our last gas base rate case, operating costs have grown by approximately 1.8%
21 on an annual compound basis, or well below the rate of inflation over that period. We
22 have accomplished this through the deployment of new technologies, the

1 management of the size of our workforce and the realization of merger-related
2 synergies. As a result, the non-fuel components of our residential rates have been
3 among the lowest of all major Pennsylvania gas distribution companies.

4 13. **Q. What then are the primary drivers of PECO's need for base rate relief?.**

5 mo The primary driver is our very substantial investment in new and replacement utility
6 plant. In its final order in PECO's last gas case, the Commission approved a rate base
7 of approximately \$408.9 million. By contrast, our rate base claim in this case, as set
8 forth on Schedule C-1 of Exhibit RLO-1, equals \$1.104 billion. Moreover, while we
9 have substantially expanded our customer base, customers, on average, are using less
10 gas. In fact, over the past 16 years (1992-2007), per capita consumption, on a
11 weather normalized basis, has declined from 144 mcf per year to 125 mcf per year, a
12 13% decline, for our residential and commercial customers. This reduction in
13 average customer usage is attributable, in part, to improved appliance efficiency and
14 building materials.

15 14. Om **Please identify the other witnesses providing direct testimony on behalf of PECO
16 in this proceeding.**

17 A° In addition to myself, the following witnesses will be responsible for presenting
18 PECO's case-in-chief:

19 **Phillip S. Barnett** (PECO Statement No. 2) is PECO's Senior Vice President and
20 Chief Financial Officer. Mr. Barnett provides an overview of PECO's principal
21 accounting exhibits(explains PECO's budgeting process; and describes the services

1 that PECO receives from affiliated entities and the estimated cost of those services
2 during the future test year.

3 **Robert L. O'Brien (PECO Statement No. 3) is a principal consultant to Black &**
4 **Veatch Corporation, an engineering and management consulting firm that was**
5 **retained by PECO to assist it in preparing and presenting this rate filing. Mr. O'Brien**
6 **sponsors Exhibits RLO-1 and RLO-2, which set forth PECO's revenue requirement**
7 **for the future test year ending December 31, 2008 and historic test year ended**
8 **December 31, 2007, respectively. He specifically supports PECO's rate base,**
9 **revenue, operating expense and tax claims.**

10 **Matthew R. Galvanoni (PECO Statement No. 4) is PECO's Vice President and**
11 **Controller. Mr. Galvanoni describes PECO's accounting processes; supports the**
12 **assignment and allocation of common costs between PECO's electric and gas**
13 **operations; and explains the development of the depreciated original cost of the**
14 **Company's utility plant in service and its claim for annual depreciation expense.**

15 **Paul R. Moul (PECO Statement No. 5) is the Managing Consultant of P. Moul &**
16 **Associates, Inc. Mr. Moul presents expert testimony concerning the rate of return**
17 **that PECO should be afforded an opportunity to earn on its rate base. He supports**
18 **PECO's claimed capital structure ratios, its embedded costs of debt and preferred**
19 **stock, and its requested equity allowance.**

20 **Manus J. Mcttugh (PECO Statement No. 6) is Director of Revenue Management in**
21 **PECO's Customer Operations Department. Mr. McHugh discusses important**
22 **changes proposed by PECO to improve and materially expand the availability of its**
23 **Gas CAP program and the Company's overall outreach to low income customers.**

1 Kathy A. Lentini (PECO Statement No. 7) is the Manager of PECO's Marketing
2 Department. Ms. Lentini presents PECO's proposed energy efficiency and
3 conservation programs for gas customers, and describes the customer education plan
4 that PECO would implement if those programs were approved.

Howard S. Gorman (PECO Statement No. 8) is a principal consultant with Black &
6 Veatch. At PECO's request, he has prepared and sponsors an unbundled, fully
7 allocated class cost of service study.

8 Paul T. Patterson (PECO Statement No. 9) is a Principal Rate Administrator in the
9 Retail Rates Group of PECO's Regulatory and External Affairs Department. Mr.
10 Patterson presents PECO's proposed rates and explains how the results of Mr.
11 Gorman's class cost of service study, as well as the consideration of other factors,
12 were utilized in the rate design process.

13 Amy E. Hamilton (PECO Statement No. 10) is PECO's Manager of Gas Supply and
14 Transportation. Ms. Hamilton describes various changes that PECO is proposing to
15 its tariff rules governing its High Volume Transportation program to improve its
16 ability to manage that program and ensure appropriate cost recovery for balancing
17 services.

18 **Stephen R. Xander** (PECO Statement No. 11) is Manager of Retail Rates in PECO's
19 Regulatory and External Affairs Department. Mr. Xander discusses various proposed
20 changes and clarifications to PECO's tariff rules and regulations in the areas of gas
21 line extensions and responsibilities regarding Company facilities located on a
22 customer's property; and describes PECO's proposed cost recovery mechanism for its

1 gas Universal Service Fund Charge and the mechanism to change CAP discounts on a
2 quarterly basis.

3 IV. PECO'S CAPITAL INVESTMENT PROCESS

4 15. **Q. How does PECO determine its annual capital investment requirements?**

5 mo Annual capital requirements are evaluated on a functional level, e.g., System
6 Performance, Capacity Expansion, Facility Relocation, New Business, etc. The mix
7 of needs changes from year to year and is the product of a variety of factors,
8 including trends in the housing market, emergent operational constraints, local
9 municipality workloads and, most importantly, the condition of existing facilities. Of
10 particular note are our Bare Steel Service and "Optimain" programs, both of which
11 target aging infrastructure based on field observations and a review of performance
12 metrics.

13 16. **o Please describe, in broad terms, the plant additions that PECO expects to place**
14 **in service during the course of the future test year.**

15 mo PECO's projected future test year plant additions are itemized by functional area and
16 by FERC account in Schedule C-2 of Exhibit RLO-1. Through our 2008 construction
17 program, we expect to (1) replace over 20,000 feet of cast iron mains and 39,000 feet
18 of bare steel mains; (2) install over 40,000 feet of new main to provide looped feeds
19 and/or to reinforce existing facilities; (3) replace over 700 bare steel services; and (4)
20 install approximately 6,000 new residential services and over 1,000 new commercial
21 services.

1 17. **Q. In your opinion, is all of the plant that PECO has included in its rate base claim**
2 **needed in order to provide safe and reliable gas service?**

A. Yes, it is.

V. SYSTEM SAFETY AND RELIABILITY

18. ^{Qo} **How does PECO ensure the safety and reliability of its gas distribution system?**

6 Most importantly, we constantly monitor the age, condition and integrity of the pipe
7 in the ground and, where appropriate, replace and/or upgrade it. As I mentioned
8 previously, we currently have over 6,600 miles of gas mains in service that operate at
9 various pressures. Roughly 20% of this amount consists of cast iron or unprotected
10 steel pipe, which we know, from experience, is more prone over time to leakage and
11 ultimate failure than newer plastic pipe. More recently, with available capital, we
12 have accelerated the process of replacing these mains and services with either plastic
13 or cathodically protected steel pipe. In addition, we odorize our gas supplies to
14 ensure that any leakage on our system is detectable to our customers.

15 19. **Q. How do you identify the facilities most in need of replacement?**

16 ^{mo} Field personnel are constantly inspecting our gas distribution system and whenever a
17 leak is detected or reported to us, detailed information as to the location and severity
18 of the leak, as well as the repair work undertaken, is entered into a computerized Leak
19 Tracking Database. In addition, the Optimain program stores extensive data as to the
20 age, condition and operating history of mains throughout the distribution system,
21 which enables us to analyze and prioritize pipe replacement work on the basis of

1 various factors, including risk, economics, environmental considerations and third-
2 party paving schedules.

3 **20. Q. What other steps has PECO taken to enhance the safety and reliability of its gas**
4 **distribution operations?**

5 mo Since our last base rate case, we have implemented a number of important
6 technological and personnel improvements. For example, we have equipped our field
7 employees with computerized mapping products that provide them with access to our
8 facility records. We have also installed an automatic meter reading system that has
9 not only reduced costs, but has eliminated the need to gain entry to a customer's
10 home or place of business. In addition, we have established a centralized dispatch
11 center and an Energy Technician workforce specifically trained in odor response and
12 meter replacement, which has significantly enhanced our response to customer calls.

13 21. Om **In your opinion, has PECO been successful in ensuring system safety and**
14 **reliability?**

15 mo Yes, it has. Over the past ten years, PECO has not experienced any "significant
16 events" on its gas distribution system, i.e. instances involving substantial property
17 damage or personal injury. In addition, when measured against various widely-
18 accepted performance metrics, we have done quite well:

19 **Gas Odor Response.** The number of gas odors reported to PECO dropped by
20 nearly 30% between 2001 and 2006. Moreover, in each of those six years,

1 PECO field personnel responded to odor calls within one hour at least 99.9%
2 of the time.

3 Gas Line Hits. When notified by contractors or individuals of planned
4 digging activities, it is PECO's responsibility to mark the location of its
5 underground facilities. Even though the number of "tickets" issued (responses
6 to requests for facilities locating) increased by about 64% between 2002 and
7 2006, the percentage of "hits" declined by 37% and averaged only 0.55% over
8 that five-year period. This positive trend continued in 2007 during which the
9 percentage of hits declined an additional 3% notwithstanding a 10.5%
10 increase in facilities locating requests.

11 **OSHA Recordable Incidence Rate. This statistic measures the number of**
12 **work-related injuries per 100 employees that require more than standard first**
13 **aid treatment. PECO has consistently been a first quartile performer in this**
14 **area. In fact, in 2003 PECO received the American Gas Association's Safety**
15 **Achievement Award for having the lowest incident rate of disabling injuries**
16 **of any of the very large utilities in the United States.**

17 Importantly, as recognized in the August 2007 management audit report prepared by
18 Schumaker and Company at the request of the PUC, PECO's safety program is "very
19 comprehensive and places the proper emphasis on the safety of its workers and the
20 public in general." (p. 254).

1 **VI. CUSTOMER SERVICE**

2 22. **Q. Has PECO launched any programs in recent years to enhance the quality of its**
3 **customer service?**

4 Yes, several. First, and as I mentioned previously, we installed an automated meter
5 reading system throughout our service territory and, accordingly, now process more
6 accurate and more timely reads. Second, we implemented a new Customer
7 Information and Management System that will facilitate more rigorous financial
8 controls, produce more customer centric data, and improve our ability to serve our
9 customers in a variety of ways. Third, we have deployed an array of technological
10 enhancements, including, among others, an automatic call distribution switch;
11 computer telephony integration; and Virtual Hold technology that provides customers
12 with the option of maintaining their position in the queue and receiving a call back
13 from PECO instead of waiting on the line. Fourth, we established three separate call
14 centers: the Customer Contact Center, which handles all routine requests for service
15 and billing questions; the Financial Call Center, which provides credit and collection
16 services; and the Customer Assistance Program (CAP) Call Center, which supports
17 PECO's universal service programs.

18 23. **Have these enhancements helped PECO improve its performance in this area?**

19 **A.** Yes, they have, as measured by the following metrics:

20 **Busy-Out Rate.** PECO has achieved a busy-out rate of 1.0% or less in each
21 of the last three reported years (2004-2006).

1 **Call Abandonment Rate.** Between 2004 and 2006, we reduced our call
2 abandonment rate by over 50.0%.

3 **Calls Answered Within 30 Seconds.** Between 2004 and 2006, we increased
4 the percentage of calls answered within 30 seconds to in excess of 70%.

5 **Meter Reading Frequency.** We reduced the number of gas meters not read
6 for six months or longer from 428 in 2004 to 189 in 2007.

7 **Response to Disputes.** Over 90% of all residential customer disputes are
8 responded to within 30 days.

9 As a consequence of the foregoing, PECO's infraction rate has shown steady
10 improvement from 0.34 per thousand customers in 2004 to 0.03 in 2006. Data for
11 2007 indicates a continuation of this favorable trend.

12

13 24. **Q. How does PECO's customer service performance compare to other utilities?**

14 PECO believes that its customer service performance compares favorably with that of
15 other utilities in Pennsylvania. For example, our telephone response, billing and gas
16 meter reading measured statistics typically place us in first or second place among the
17 other Pennsylvania gas and electric utilities according to various categories tracked
18 by the Commission. We believe these statistics verify PECO's quest for continuously
19 improving its gas service product.

20 25. **Does PECO have any plans to further enhance its customer service?**

1 Yes, it does. As I mentioned previously, PECO is proposing, as part of this filing, to
2 expand/enhance its Gas CAP in an effort to reach and provide assistance to more low
3 income customers. In addition, we are presenting, for the Commission's review and
4 approval, comprehensive energy efficiency and conservation programs. These
5 initiatives are described in detail by Mr. McHugh and Ms. Lentini, respectively.

6 **26. Q. Please describe briefly PECO's proposed enhancements to its energy efficiency**
7 **programs.**

8 mo These enhancements are two-fold. First, we are proposing to increase our Low
9 Income Usage Reduction Program ("LIURP") funding by more than \$850,000. As
10 discussed by Mr. McHugh, PECO's LIURP is considered one of the best, if not the
11 best, programs of its kind in the nation. By increasing expenditures, we will be able
12 to reach and assist many more low-income customers. Second, as explained by Ms.
13 Lentini, PECO is planning to introduce new energy efficiency programs that will be
14 available to all of PECO's residential and commercial gas customers. These
15 programs will provide customers with monetary incentives to invest in new high
16 efficiency appliances that will assist them in controlling their energy consumption
17 and managing their energy bills. Along with this program, the Company will be
18 rolling out a customer education and information program stressing the environmental
19 and cost benefits of this new initiative. To be able to offer this new program,
20 however, PECO will need to fund the program's \$2.8 million projected cost through
21 the rates established in this case.

1 **VII. RESEARCH AND DEVELOPMENT**

2 **27. Please discuss the Company's efforts in the area of research and development.**

3 mo PECO has been committed to gas research and development for quite a long time and
4 believes that it would be appropriate to increase its expenditures in this area. Our
5 contributions over the years have assisted gas research and development efforts by
6 firms such as GTI and NYSearch to develop valuable new technologies and products.
7 For example, these advancements include the development of guided wave
8 technology, precision pipe locating tools, remote methane leak detection, robotic
9 internal main inspection, and keyhole and liner insert techniques that have enabled
10 PECO to perform certain maintenance tasks more effectively.

11 **28. Q. What specifically is the Company proposing in this case in the area of research**
12 **and development?**

13 mo PECO believes that its current funding levels for research and development are
14 inadequate. Compared to the level of research being funded by PECO's customers in
15 the early 1990s (about \$1 million per year), PECO is now contributing about
16 \$290,000 annually for this purpose. PECO believes this lower level of funding is
17 problematic because, without funding, useful new technologies are delayed or simply
18 left undeveloped. Accordingly, PECO intends to increase its annual research and
19 development expense to \$790,000 per year, a \$500,000 increase. This money would
20 allow us to fund additional valuable operations and utilization technology programs,
21 more in line with the level of other premier gas utilities.

1 **VIII. MGP REMEDIATION**

2 **29. Q. Please discuss the Company’s program to remediate former manufactured gas**
3 **plant sites and its future test year claim for the cost of that program.**

4 PECO has undertaken remarkable, positive efforts to eliminate potential
5 environmental concerns at its former MGP sites. At one time, these sites were used
6 to manufacture gas from coal for distribution to customers on the PECO gas system,
7 but they later became unnecessary following the construction of the interstate natural
8 gas pipeline system. In any event, the sites are geographically dispersed around our
9 service territory and, because of residual coal tar residue, need to be remediated to
10 certain specifications established by the Pennsylvania Department of Environmental
11 Protection (Pa. DEP). Once remediated, the sites may be used for various land use
12 purposes that otherwise would not be permitted. It is our intention to complete the
13 remediation of all 27 of the presently identified MGP sites by the end of 2013. To
14 date, we have closed out the remediation of 14 of those sites, leaving 13 sites to be
15 dealt with over the 2008-2013 period.

16 Through the end of 2007, PECO incurred approximately \$61.7 million in MGP
17 remediation costs, of which we were able to fund approximately \$40.9 million with
18 insurance proceeds and \$21.0 million through retail rates. However, sources of
19 insurance proceeds have been exhausted as we have final settlements with effectively
20 all insurance carriers that we brought actions against. Therefore, PECO is now
21 seeking additional funds from its customers so that it can bring resolution to the
22 environmental issues associated with these legacy sites. Going forward, we project
23 that our remaining MGP remediation work will cost approximately \$5.6 million

1 annually to clean up the remaining 13 sites that we have identified on our system,
2 most of which have been investigated and/or are in the process of remediation. The
3 Company's annual expense claim is presented on Schedule D-13 of Exhibit RLO-1.

4 30. **Q. Does that complete your direct testimony at this time?**

5 Yes, it does.