

**PECO ENERGY COMPANY
STATEMENT NO. 1**

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PETITION OF PECO ENERGY COMPANY
FOR APPROVAL OF ITS
SMART METER TECHNOLOGY PROCUREMENT AND
INSTALLATION PLAN

DOCKET NO. M-2009-2123944

DIRECT TESTIMONY

WITNESS: CRAIG L. ADAMS

SUBJECT: OVERVIEW OF PECO'S
SMART METER PLAN

DATED: AUGUST 14, 2009

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1 Services Company and Chief Supply Officer. I was accountable for all supply chain
2 operations and support processes for Exelon businesses. My responsibilities included
3 strategic sourcing, supply chain operations and investment recovery for Exelon
4 Energy Delivery (“EED”), Nuclear, Power and Corporate Center. I was responsible
5 for a budget of \$100 million, as well as the purchase and management of \$3 billion in
6 services and material.

7 Prior to serving as Chief Supply Officer, I was Senior Vice President of EED Support
8 Services. In that role, I led the supply chain and support processes for EED. My
9 accountabilities included: contracted services and construction project management;
10 materials and logistics management; corporate fleet operations; methods, training,
11 environmental and OSHA compliance; and experience assessment.

12 Finally, prior to joining EED Support Services, I served as Vice President, Contractor
13 and Supply Management, for PECO Energy Delivery. In that role, I was responsible
14 for the start-up and development of the original supply organization. My
15 accountabilities included: contracted services and construction project management;
16 materials and logistics management; corporate fleet operations; methods, training,
17 environmental and OSHA compliance; and corporate real estate and facilities.

18 **5. Q. What is your educational background?**

19 A. I earned my Bachelor of Science in Mathematics and Economics from the State
20 University of New York, Albany, in 1983. I have completed training in the U.S.
21 Army Nuclear Power Plant Operator Program and hold an Executive Senior Reactor
22 Operator Certification.

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

2 A. The purpose of my testimony is to provide an overview of PECO's Smart Meter
3 Technology Procurement and Installation Plan (the "Smart Meter Plan" or "Plan"),
4 and it is divided into three parts. First, I describe PECO's smart meter obligations
5 under Act 129's "smart meter" provisions. Second, I describe the two-phase
6 implementation strategy for PECO's Plan. The first phase ("Phase One") will focus
7 on the selection of the smart meter technology to be deployed; the changes to PECO's
8 Information Technology ("IT") systems; the testing and validation of the smart meter
9 technology selected; the deployment of the advanced metering infrastructure ("AMI")
10 communication network; the initial deployment of smart meters; and the development
11 of a program to educate customers and implement initial dynamic pricing options.
12 The second phase ("Phase Two") will complete the deployment of smart meters
13 across PECO's service territory.

14 In discussing the Plan, I reference the testimony of PECO's four other witnesses:

15 • **Mr. Glenn A. Pritchard** (PECO Statement No. 2) describes the current
16 deployment of PECO's meter technology and details the functionality that will
17 be implemented as part of PECO's Plan and in satisfaction of Act 129
18 requirements;

19 • **Mr. Jeffrey T. Buxton** (PECO Statement No. 3) of Enspiria Solutions, a
20 consultant to PECO Energy on its Plan, describes the state of the smart meter
21 industry, the development of PECO's Plan, and the prudence and
22 reasonableness of PECO's proposed approach and phased roll-out;

- 1 • **Ms. Ann P. Kelly** (PECO Statement No. 4) describes anticipated capital
2 expenditures and other costs and benefits associated with PECO’s Plan; and
- 3 • **Mr. Alan B. Cohn** (PECO Statement No. 5) details PECO’s proposed
4 mechanisms for cost recovery and allocation of its Plan costs.

5 Finally, I discuss the actions PECO is taking to provide notice to customers of these
6 proceedings and describe PECO’s proposed schedule for consideration of its Smart
7 Meter Plan.

8 **II. OVERVIEW OF PECO’S SMART METER PLAN**

9 **7. Q. Please explain PECO’s obligations with respect to smart meters.**

10 A. Act 129 of 2008 directed electric distribution companies (“EDCs”) to file with the
11 Pennsylvania Public Utility Commission (the “Commission”), by August 14, 2009, a
12 smart meter technology procurement and installation plan. 66 Pa. C.S. § 2807(f).
13 Each EDC smart meter plan must describe the smart meter technologies the EDC
14 proposes to install in accordance with a depreciation schedule not to exceed 15 years
15 and in response to customer requests. *Id.* The Act also requires EDCs to make
16 available to third parties direct meter access and electronic access to meter data, upon
17 customer consent. *Id.* The Act further defines minimum smart meter technology
18 capabilities and provides for cost recovery of all prudent and reasonable costs. 66 Pa.
19 C.S. §§ 2807(f), (g).

20 In June 2009, the Commission issued an Implementation Order (1) detailing plan
21 filing requirements, including key milestones that should be addressed; (2)

1 establishing a 30-month grace period from plan approval for installation of a smart
2 meter network; (3) describing the Commission's expectations for smart meter
3 capabilities; and (4) providing guidance on EDC smart meter program cost recovery.
4 *See Smart Meter Procurement and Installation, Implementation Order*, Docket No.
5 M-2009-2092655 (Order entered June 24, 2009) ("Implementation Order").

6 **8. Q. Please briefly describe PECO's Smart Meter Plan.**

7 A. PECO has been deliberate, measured and inclusive in developing its Plan. As a
8 result, PECO believes that it has developed a prudent and well-structured Plan that
9 balances the costs, benefits and risks associated with the deployment of smart meter
10 technology. Moreover, the Plan seeks to leverage available federal funding, and
11 builds on continuing, substantial stakeholder consultations.

12 The Plan's two-phase deployment schedule will be implemented through three major
13 filings with the Commission and a separate federal grant application under the
14 American Recovery and Reinvestment Act of 2009 ("ARRA"). First, through this
15 filing, PECO is seeking the Commission's approval of its plans to procure and install
16 certain smart meter infrastructure, including a new Meter Data Management System
17 ("MDMS"), an AMI Host and AMI communications network ("AMI Network") and
18 an initial deployment of 100,000 smart meters, and to implement appropriate cost
19 recovery mechanisms. Second, PECO plans to file in the second quarter of 2010 for
20 the approval of an initial dynamic pricing and customer acceptance program. Third,
21 PECO will file in 2012 for approval of a universal meter deployment plan to complete
22 the deployment of smart meters in its service territory. Lastly, I note that on August

1 6, 2009, PECO filed an application for federal assistance with the U.S. Department of
2 Energy under the ARRA for 50% of eligible project costs to enable the acceleration
3 of the deployment of PECO's smart meter system. If PECO receives its full federal
4 funding request, PECO will expand its initial deployment to 600,000 smart meters
5 and complete universal deployment in 10 years.

6 **9. Q. In addition to the three major Commission filings described above, will PECO**
7 **be seeking other approvals from the Commission to implement the Plan?**

8 A. Yes. In the final quarter of 2009, PECO anticipates seeking expedited Commission
9 approval of proposed agreements with MDMS, Middleware, and System Integration
10 vendors. Also, in the first quarter of 2010, PECO anticipates seeking expedited
11 Commission approval of proposed agreements with selected AMI technology
12 vendors. A table detailing all of PECO's anticipated filings with the Commission is
13 presented in Section 2.4 of the Plan.

14 **10. Q. Please describe how the current filing begins to implement Phase One of PECO's**
15 **Plan.**

16 A. In this filing, PECO seeks two key Commission approvals. First, PECO requests
17 approval to procure and install the foundation of PECO's smart meter system, which
18 includes a new MDMS, an AMI Host and an AMI Network, which are described in
19 detail in the testimony of Mr. Glenn Pritchard (PECO Statement No. 2). PECO
20 believes that it will realize significant benefits for its customers by leveraging
21 competitive procurements, coordinated by Exelon Business Services Company, for IT
22 systems, including an MDMS. In addition, PECO expects to procure the AMI

1 Network through a competitive process. Subject to Commission approval, PECO
2 plans to begin build-out of its MDMS and AMI Network as soon as possible
3 thereafter. PECO intends to commence the planning work on the MDMS in late 2009
4 and, once approved, the system will be installed and operational by the summer of
5 2011. PECO projects the initial AMI Network installation will begin in late 2010 for
6 technology acceptance testing and the full network will become operational by early
7 2012, well in advance of the end of the grace period.

8 Second, PECO requests approval to procure and deploy up to 600,000 smart meters,
9 or more than one-third of its meter requirements, during the grace period. The meters
10 will be procured through a competitive vendor selection and contracting process,
11 which contemplates one or more RFPs, and the size of the initial deployment will
12 depend upon the outcome of PECO's ARRA grant application. If PECO receives less
13 funding under the ARRA grant application than it has requested, it will evaluate the
14 best allocation of the funds received between smart meter deployment and the build-
15 out of its MDMS and AMI Network. At a minimum, PECO will deploy 100,000
16 meters during the grace period. The initial deployment of smart meters is projected to
17 begin in the fall of 2011.

18 Finally, PECO will initiate a collaborative process with interested statutory advocates,
19 government entities, meter technology providers and other stakeholders to design an
20 initial dynamic pricing and customer acceptance program. This is a continuation of
21 PECO's outreach efforts that began with PECO's AMI Symposium last May and
22 included numerous joint stakeholder workshops during the development of PECO's

1 Energy Efficiency and Conservation Plan and a smart meter stakeholder workshop
2 last month in Harrisburg.

3 **11. Q. Please describe how the federal grant application under the ARRA will assist**
4 **implementation of Phase One.**

5 A. ARRA funding would enable PECO to accelerate the deployment of its smart meter
6 system with a goal of completing it in ten years. If the full amount of the request is
7 awarded, ARRA funding will provide matching funds to support Phase One of
8 PECO's Smart Meter Plan and the purchase of up to 600,000 smart meters. PECO
9 expects to be notified of whether it has been successful in securing federal funds by
10 the end of 2009.

11 **12. Q. Please describe how the second filing with the Commission will continue to**
12 **implement Phase One.**

13 A. In the second quarter of 2010, PECO will seek Commission approval of the initial
14 dynamic pricing and customer acceptance program developed through the above-
15 referenced collaborative. The program will implement initial dynamic pricing
16 options, including real-time pricing, and educate customers about the dynamic pricing
17 options. The program will also collect data about customer experiences with dynamic
18 pricing.

19 **13. Q. Please describe Phase Two of the Smart Meter Plan.**

20 A. Phase Two will complete the deployment of smart meters throughout the PECO
21 service territory. In 2012, towards the end of the grace period, PECO will seek

1 Commission approval of its universal smart meter deployment plan and schedule,
2 which will be based, in part, on the lessons learned during Phase One and the
3 outcome of PECO's ARRA assistance application.

4 **14. Q. Why has PECO chosen to implement its Plan in two phases?**

5 A. PECO believes that a two-phase implementation process will allow it to meet its Act
6 129 smart meter obligations in a prudent manner, taking into account the developing
7 smart meter technologies, standards, and markets described by Mr. Jeffrey Buxton
8 (PECO Statement No. 3) and in PECO's Smart Meter Plan.

9 **15. Q. What steps has PECO taken to ensure its Plan is consistent with industry**
10 **standards and experience?**

11 A. As described in detail by Mr. Buxton, PECO worked closely with Enspira Solutions,
12 a company with significant expertise in smart meter developments, in preparing its
13 Plan. With Enspira, PECO undertook an extensive review of other smart meter
14 programs around the country and conducted a series of workshops with leading
15 vendors of smart meter technology. Mr. Buxton describes how PECO's Plan to meet
16 Act 129's requirements is reasonable, prudent and consistent with industry standards.

17 **16. Q. What are the projected costs of PECO's Plan and how will those costs be**
18 **recovered?**

19 A. In accordance with the Implementation Order, Ms. Ann Kelly (PECO Statement No.
20 4) describes the anticipated capital expenditures and other costs, as well as the
21 benefits, associated with PECO's Plan. Because the net costs of the Plan are tied to

1 the availability and amount of ARRA funding, Ms. Kelly outlines alternative
2 scenarios. The details of PECO's proposed cost recovery mechanism for the Plan are
3 discussed by Mr. Alan Cohn (PECO Statement No. 5). As Mr. Cohn explains, PECO,
4 consistent with Act 129, is proposing a Section 1307 surcharge to recover its Plan
5 costs.

6 III. NOTICE

7 **17. Q. How will PECO notify its customers of this filing?**

8 A. PECO is providing extensive public notice of this filing to its customers. PECO is
9 publishing notices of the filing in all of the major newspapers serving PECO's service
10 territory. Such notices explain where copies of the filing may be obtained and how an
11 interested person may participate in the proceeding. PECO is also issuing a press
12 release to all major media (newspapers, television and radio stations) in its service
13 territory. All notices will refer to PECO's website (www.peco.com/smart), where a
14 copy of the entire filing will be maintained. PECO is also serving copies of this filing
15 on the Pennsylvania Office of Consumer Advocate, the Pennsylvania Office of Small
16 Business Advocate, the Commission's Office of Trial Staff, and licensed Electric
17 Generation Suppliers, and requesting that the Commission publish notice of this filing
18 in the Pennsylvania Bulletin.

1 **IV. PROPOSED LITIGATION SCHEDULE**

2 **18. Q. Mr. Adams, please describe the procedural schedule PECO has proposed for**
3 **this proceeding.**

4 A. The Commission’s Implementation Order requires that a technical conference on
5 smart meter plans be held during October 2009, with evidentiary hearings, if
6 necessary, to be held during November 2009. The Implementation Order also
7 requires that Initial Decisions on the plans be issued on or before January 29, 2010.
8 In accordance with the Implementation Order, PECO proposes the following schedule
9 for this proceeding:

August 14, 2009	Filing of the Plan
September 10, 2009	Prehearing Conference
September 25, 2009	Other Parties’ Direct Testimony Due
October 5, 2009	Technical Conference
October 22, 2009	Rebuttal Testimony Due
November 12-13, 2009	Evidentiary Hearings
December 7, 2009	Main Briefs
December 18, 2009	Reply Briefs
January 29, 2010	Initial Decision

10
11

V. CONCLUSION

12 **19. Q. Does this conclude your direct testimony?**

13 A. Yes.