

**PECO ENERGY COMPANY
STATEMENT NO. 9**

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION
v.
PECO ENERGY COMPANY – GAS DIVISION

DOCKET NO. R-2022-3031113

DIRECT TESTIMONY

WITNESS: DOREEN L. MASALTA

SUBJECT: PROPOSED CHANGES TO PECO'S
RESIDENTIAL NATURAL GAS ENERGY
EFFICIENCY AND CONSERVATION
PROGRAMS

DATED: MARCH 31, 2022

TABLE OF CONTENTS

	Page
I. INTRODUCTION AND PURPOSE OF TESTIMONY	1
II. PECO’S NATURAL GAS EE&C PROGRAMS	3
A. Current Programs	3
B. Proposed Revisions to Existing Programs	8
III. CONCLUSION.....	14

1 line clearance industry in 1994 with Asplundh Tree Expert Company where I held
2 various positions including climber, foreperson, estimator and emergent work
3 coordinator. I joined PECO in 1998 as a project lead in the Vegetation Management
4 Department and transitioned to program manager in 2000. Beginning in 2002, I had
5 responsibility for the Vegetation Management Programs at both PECO and one of the
6 Company's utility affiliates, Commonwealth Edison Company. In 2007, I was named
7 Director of PECO's Project, Contract & Vegetation Management Department. In late
8 2009, I became the Director of Operations in the Bucks & Montgomery County
9 Regions and then transitioned in 2013 to the City of Philadelphia and PECO
10 Underground. Finally, in 2019, I was promoted to my current position of Director of
11 Energy and Marketing Services.

12 **5. Q. What is the purpose of your testimony?**

13 A. The purpose of my testimony is to describe PECO's existing residential natural gas
14 energy efficiency and conservation ("EE&C") programs and the Company's
15 proposals to enhance residential offerings and expand the Safe and Efficient Heating
16 Program ("SEHP") for income-eligible customers.

17 **6. Q. Please identify the exhibits you are sponsoring.**

18 A. I am sponsoring PECO Exhibits DLM-1, DLM-2, and DLM-3 which relate to the
19 proposed residential EE&C programs. In addition, I will refer to certain tariff
20 changes that are contained in PECO Exhibit JAB-2 (sponsored by Mr. Joseph A.
21 Bisti, PECO Statement No. 7).

1 **II. PECO’S NATURAL GAS EE&C PROGRAMS**

2 **A. Current Programs**

3 **7. Q. Please describe PECO’s existing natural gas EE&C programs.**

4 A. PECO currently offers its residential customers a mix of rebates to encourage them to
5 upgrade to high-efficiency furnaces, boilers and water heaters and plans to offer
6 direct install measures as part of home energy assessments by mid-2022. In addition,
7 starting in January of 2022, qualifying low-income customers received no-cost direct
8 installation measures through the SEHP to improve the efficiency and safety of
9 natural gas heating in their homes through inspection, education, maintenance and
10 installation activities. These programs were approved by the Pennsylvania Public
11 Utility Commission (the “Commission”) in PECO’s last gas base rate case at No. R-
12 2020-3018929 (the “2020 Gas Order”). The total Commission-approved budget for
13 all programs is \$2.727 million.

14 **8. Q. What rebates are currently offered to PECO’s residential customers?**

15 A. As shown in the table below, PECO offers residential customers the following four
16 rebates for ENERGY STAR® high efficiency natural gas appliances:

Rebate Type	Rebate Amount (\$)	Rebate Requirements
ENERGY STAR®+ Natural Gas Furnace	\$500	Meets current ENERGY STAR efficiency requirements, including $\geq 97\%$ AFUE, $\leq 2.0\%$ air leakage, equipped with ECM
ENERGY STAR® Natural Gas Furnace	\$300	Meets current ENERGY STAR efficiency requirements including 95-96.9% AFUE, $\leq 2.0\%$ air leakage, equipped with ECM
ENERGY STAR® Natural Gas Boiler	\$300	Meets current ENERGY STAR efficiency requirements including $\geq 90\%$ AFUE

Rebate Type	Rebate Amount (\$)	Rebate Requirements
ENERGY STAR® Natural Gas Storage Tank Water Heater	\$100	Meets current ENERGY STAR efficiency requirements including ≥ 0.64 UEF

1
2 Smart thermostat rebates are also part of the EE&C programming approved in the
3 2020 Gas Order and the Company will begin offering those rebates in the second half
4 of 2022. In addition, PECO will be proposing a larger rebate for several measures as
5 described later in my testimony.

6 **9. Q. How has PECO informed its customers about these rebates?**

7 A. PECO has used several channels to promote customer rebate opportunities, including
8 the Company’s website, trade-ally networks, newsletters and bill inserts. In addition,
9 since November of 2021, PECO has utilized targeted digital promotions to build
10 residential customer awareness of the Company’s natural gas energy efficiency
11 offerings. For example, using Google’s Ad Display Network, PECO’s residential
12 natural gas customers saw banners on sites such as Weather.com, ESPN and Yahoo!
13 News promoting the Company’s natural gas rebate program. In January of 2022, bill
14 inserts contained promotion of the new \$500 ENERGY STAR+ rebate. The
15 Company also targeted awareness through paid search ads where PECO natural gas
16 customers who entered certain key words were displayed results leading to the
17 Company’s natural gas energy efficiency landing page. These efforts have
18 significantly increased traffic at the Company’s natural gas energy efficiency

1 website.¹ The Company is planning to launch another digital campaign in March-
2 April of 2022 and will continue to promote natural gas energy efficiency
3 programming throughout the year.

4 **10. Q. What direct installation measures will be offered as part of the Company’s**
5 **residential program?**

6 A. The Company is currently working on incorporating direct install measures into the
7 natural gas EE&C residential program by mid-2022. For customers who use natural
8 gas to heat their water, PECO will install low flow faucet aerators and low flow
9 showerheads at no cost to the customer. Installations will be performed as part of the
10 Energy Assessment Program that is part of the Company’s Phase IV Act 129 EE&C
11 Plan (“Phase IV Plan”).

12 **11. Q. Please describe the components of the SEHP, including customer eligibility**
13 **requirements.**

14 A. The SEHP is designed to serve PECO natural gas heating customers who are not
15 currently eligible for a Low-Income Usage Reduction Program (“LIURP”) heating
16 audit and meet the following criteria: (1) Customer has household income that is 0-
17 100% of the Federal Poverty Level (“FPL”); (2) Customer has average monthly
18 wintertime usage of less than or equal to 149 CCF of natural gas; (3) Customer has
19 not received a LIURP heating audit in the past two years; and (4) Customer owns the

¹ For example, in November and December of 2020, the average daily unique pageviews of the natural gas energy efficiency website was 17. In November and December of 2021, during the targeted digital promotions campaign, the average daily unique pageviews was 320.

1 premise, unless the customer is 0-50% of FPL, in which case ownership is not
2 required. The Company has allocated \$719,000 of its total Commission-approved
3 budget of \$2.727 million for the SEHP.

4 When a qualifying customer receives a Free Energy Checkup through the Phase IV
5 Plan or a LIURP baseload audit,² the following additional measures will be taken
6 using available SEHP funds:

- 7 • Inspection of the natural gas furnace and/or boiler, including tune-ups and
8 repairs;
- 9 • System replacement for furnaces over 25 years old and boilers over 30 years
10 old;
- 11 • Installation of a carbon monoxide detector with a 10-year lithium battery;
- 12 • Installation of low flow faucet aerators and low flow showerheads (for
13 customers who heat water using natural gas); and
- 14 • A 12 months' supply of filter replacements in addition to education and
15 regular reminders on the frequency of filter replacement (for customers with
16 natural gas supplied furnaces)

17 Consistent with the 2020 Gas Order, PECO hosted a collaborative on December 2,
18 2021 to present an overview of the SEHP and explain how the program is coordinated
19 with low-income customer audits available under LIURP and the Phase IV Plan. The
20 collaborative was attended by several key stakeholders, including the Office of
21 Consumer Advocate, the Commission's Bureau of Investigation and Enforcement, the

² A baseload audit is available to customers who, among other things, have average monthly wintertime usage of less than or equal to 149 CCF of natural gas.

1 Public Utility Law Project,³ and the Philadelphia Area Industrial Energy Users
2 Group.

3 **12. Q. What levels of customer participation and gas savings has PECO achieved in the**
4 **last several years?**

5 A. Below is a chart reflecting annual participation, spending and estimated savings for
6 the past four years of the residential natural gas EE&C rebate program.

Program Year	Participation	Spend	Estimated Savings (MCF)
2021	3,607	\$1,150,522	33,640
2020	3,869	\$1,184,466	36,171
2019	3,575	\$1,121,793	33,895
2018	3,344	\$1,055,655	31,615

7
8
9 **13. Q. What costs has the Company incurred to implement the programs and how are**
10 **those costs recovered?**

11 A. PECO’s average annual costs to implement the programs over the last three years are
12 \$1.1 million. I note that these numbers do not include expenditures for the newly
13 implemented SEHP. Consistent with the 2020 Gas Order, the Company recovers
14 \$2.727 million for residential EE&C programs through gas distribution base rates. If
15 less than \$2.727 million is spent, the difference is credited to customers through the
16 Universal Service Fund Charge (“USFC”).

³ The Public Utility Law Project represented the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (“CAUSE-PA”) in PECO’s last gas base rate case at No. R-2020-3018929.

1 **14. Q. Has the Company performed an evaluation, management and verification**
2 **(“EM&V”) study of the current gas EE&C portfolio?**

3 A. No. The current portfolio, which includes the changes approved by the 2020 Gas
4 Order, has not been in place long enough to generate sufficient historical data for an
5 EM&V study. Most notably, the SEHP began in January of 2022. The Company
6 plans to conduct an EM&V program evaluation in 2024. In addition, as I discuss
7 later in my testimony, the Company has performed a Total Resource Cost (“TRC”)
8 analysis of the EE&C portfolio with the changes being proposed by the Company in
9 this proceeding.

10 **B. Proposed Revisions to Existing Programs**

11 **15. Q. What changes to the existing gas EE&C programs is PECO proposing?**

12 A. Working within the Company’s existing budget allocation for general residential
13 programs, PECO is proposing to add new rebate measures and increase rebate ranges
14 for existing measures. In addition, the Company is proposing to increase funding for
15 the SEHP by \$500,000 to support the addition of new measures and allow the
16 Program to replace more heating systems. This additional funding would increase the
17 total budget for all residential gas EE&C programs from the current \$2.727 million to
18 \$3.227 million.

19 **16. Q. Please describe the proposed changes to residential rebates.**

20 A. As shown in the table below, PECO is proposing to add new rebates for energy
21 efficient natural gas dryers and natural gas combination boilers. The Company is also

1 proposing new rebate ranges for existing measures to provide more flexibility to
 2 adjust to market conditions and better align with rebates offered by neighboring
 3 utilities.

4 The Company’s proposed rebate ranges were developed considering the incremental
 5 cost of each measure, the cost-effectiveness of the Company’s overall rebate
 6 program, and the rebates offered by neighboring natural gas utilities. PECO Exhibit
 7 DLM-1 provides a comparison of the Company’s rebates with those offered by other
 8 mid-Atlantic natural gas distribution companies.

Rebate Type	Current Rebate Amount	Proposed Rebate Range	Rebate Requirements
ENERGY STAR®+ Natural Gas Furnace	\$500	\$0-\$650	Meets current ENERGY STAR efficiency requirements, including $\geq 97\%$ AFUE, $\leq 2.0\%$ air leakage, equipped with ECM
ENERGY STAR® Natural Gas Furnace	\$300	\$0-\$525	Meets current ENERGY STAR efficiency requirements including 95-96.9% AFUE, $\leq 2.0\%$ air leakage, equipped with ECM
ENERGY STAR® Natural Gas Boiler	\$300	\$0-\$475	Meets current ENERGY STAR efficiency requirements including $\geq 90\%$ AFUE
ENERGY STAR® Natural Gas Storage Tank Water Heater	\$100	\$0-\$160	Meets current ENERGY STAR efficiency requirements including ≥ 0.64 UEF
Smart Thermostat	\$25*	\$0-\$155	Meets current ENERGY STAR

Rebate Type	Current Rebate Amount	Proposed Rebate Range	Rebate Requirements
			efficiency requirements.
<i>NEW</i> ENERGY STAR® Natural Gas Dryer	N/A	\$0-\$75	Meets current ENERGY STAR efficiency requirements with CEF ≥ 3.48
<i>NEW</i> Energy Efficient Natural Gas Combination Boiler	N/A	\$0-\$3,500	Has ≥ 94%AFUE

1 *Not yet implemented

2 Finally, the Company is proposing to have the flexibility during the course of
3 program implementation to adjust rebate minimum efficiency requirements and add
4 new rebates for energy efficient products.

5 **17. Q. Please describe the proposed changes to the SEHP.**

6 A. PECO is proposing to add a water heater replacement measure for eligible customers
7 with units that are in poor condition or nearing end-of-life (at least 15 years old⁴) and
8 to install smart water heater controllers on existing or replacement water heaters as
9 appropriate. To determine if water heater replacement is indicated, the Company will
10 consider unit age, overall unit condition, the availability of replacement parts for units
11 in need of repair and other factors. The Company will also assess units for the

⁴ Natural gas storage tank water heaters are typically replaced about every 13 years. See The Mid-Atlantic Technical Resource Manual, https://neep.org/sites/default/files/resources/Mid_Atlantic_TRM_V9_Final_clean_wUpdateSummary%20-%20CT%20FORMAT.pdf, Pg. 192 (stating that the measure life for natural gas storage tank water heaters is 13 years).

1 installation of smart water heater controllers to improve efficiency. Water heater
2 eligibility for this measure will be determined by the unit's compatibility and
3 customer acceptance. Finally, the Company is proposing to have the flexibility
4 during the course of program implementation to adjust measure criteria requirements
5 and add new measures.

6 **18. Q. Does the Company expect that the level of residential customer participation will**
7 **increase under the expanded EE&C offerings?**

8 A. Yes. Larger rebates and the addition of new energy efficient dryer and combination
9 boiler measures are expected to drive additional residential customer participation,
10 especially in light of the rising costs of appliances and HVAC equipment. These
11 increased rebates and measures, in combination with PECO's efforts to drive
12 awareness through targeted digital and other outreach, will encourage customers to
13 purchase energy efficient natural gas equipment for their homes. For the SEHP, the
14 expanded offerings and proposed funding increase will support a modest increase in
15 customer participation coupled with an ability to offer more measures to eligible
16 customers.

17 PECO Exhibit DLM-2 details actual (2021) and forecasted (2022-2027) participation,
18 savings and spending for the residential EE&C programs. The information is further
19 broken down by sector (residential and low-income) and measure. As the Exhibit
20 shows, the Company intends to continue its current budget allocation of \$1.66 million
21 to the residential sector while increasing the low-income budget allocation from
22 \$719,000 to \$1.219 million.

1 The 2022 projections reflect: (1) participation levels equivalent to the 3-year historic
2 average for existing rebates (furnace, furnace+, boiler, water heaters); and (2)
3 estimated participation for measures just beginning in 2022 that will not be “in
4 market” for a full 12 months (smart thermostats, aerators and showerheads). The
5 2023-2027 projections reflect: (1) an 8-9% increase in participation for existing
6 rebates (furnace, furnace+, boiler, water heaters) based on continued education and
7 higher rebate levels beginning in 2023; (2) a full year of participation in measures
8 beginning mid-2022 (smart thermostats, aerators and showerheads); and (3) a full
9 year of participation for all new measures (dryer and combination boiler).

10 Overall, the Company is expecting a 43% increase in residential rebate participation
11 and 26% increase in savings between 2022 and 2023. For the SEHP, the Company is
12 expecting a 50% increase in natural gas heating system replacements between 2022
13 and 2023 due to increased funding. The Company also estimates that up to 70 low-
14 income homes annually would benefit from the newly-proposed water heater
15 replacement and smart controls under the expanded budget.

16 **19. Q. What is the projected annual cost of the expanded residential EE&C programs?**

17 A. The projected annual cost of the expanded programs is \$3.227 million, which reflects
18 a \$500,000 increase from the current budget to support the addition of new measures
19 to the SEHP and additional Program participants. The projected annual breakdown of
20 costs by program is provided below:

Expanded Residential Programs	Estimated Funding (Dollars)
ENERGY STAR® Natural Gas Furnace Rebate	\$1,128,750
ENERGY STAR®+ Natural Gas Furnace Rebate	\$195,000
ENERGY STAR® Natural Gas Boiler Rebate	\$75,250
ENERGY STAR® Natural Gas Water Heater Rebate	\$25,000
Gas Heating Smart Thermostat Rebate	\$100,000
<i>Proposed</i> ENERGY STAR® Natural Gas Dryer Rebate	\$3,000
<i>Proposed</i> Energy Efficient Gas Combination Boiler Rebate	\$100,000
Gas Water Heating Direct Install (aerators and showerheads)	\$37,305
Safe and Efficient Heating Program (including CSP Admin)	\$1,219,500
Education, PECO Admin, CSP Admin	\$343,695
Total	\$3,227,500

1
2 PECO Exhibit DLM-3 provides additional information about cost categories for the
3 residential EE&C programs (e.g., incentives, direct installation, and administration).

4 **20. Q. Is the expanded suite of residential EE&C programs cost effective?**

5 A. On a combined basis, the proposed residential programs have a TRC of 1.0. As
6 shown below, the residential rebate offerings are cost-effective with a TRC of 1.29
7 while the low-income offerings are not cost-effective with a TRC of 0.47.

Total Resource Cost Test (TRC)	
Program Year	2023
Residential Rebate Program	1.29
Low-Income SEHP Program	0.47
Portfolio Total	1.00

8

