



PECO Energy
Universal Services Program
Final Evaluation Report

October 2012

Executive Summary

PECO has implemented Universal Service Programs to help low-income residential customers who express or demonstrate difficulty paying their monthly energy bills. APPRISE conducted a process and impact evaluation of the programs to assess how the programs are performing and how they can be modified to increase their efficiency and effectiveness. This report provides results from the evaluation of these programs.

Introduction

The Bureau of Consumer Services (BCS) of the Public Utility Commission (PUC) requires that PECO evaluate its Universal Service Programs, and has developed standard evaluation questions to guide Universal Service Programs evaluations. The evaluation questions are listed below with brief answers and referral to the relevant section of the report.

1. *Is the appropriate population being served?*

The Customer Needs Assessment, Section II, showed that the appropriate population of low-income customers is served by PECO's CAP. The Customer Surveys, Section IV, shows that customers who participated in CAP, had vulnerable members, had low education attainment, and were likely to be unemployed.

2. *What is the customer distribution for each program by poverty guidelines?*

PECO's Universal Service Programs, Section III, showed that in 2011, eight percent of CAP participants had income below 25 percent of the FPL, 13 percent had income between 26 and 50 percent of the FPL, 46 percent had income between 51 and 100 percent of the FPL, and 33 percent had income between 101 and 150 percent of the FPL.

PECO's Universal Service Programs, Section III, showed that in 2010 24 percent of LIURP participants had income below 50 percent of poverty, 48 percent had income between 51 and 100 percent of poverty, 24 percent had income between 101 and 150 percent of poverty, and five percent had income above 150 percent of poverty.

PECO's Universal Service Programs, Section III, showed that in 2011, 13 percent of MEAF participants had income below 50 percent of the poverty level, 25 percent had income between 51 and 100 percent of the poverty level, 17 percent had income between 101 and 150 percent of the poverty level, and 46 percent were not CAP participants, so their poverty level was unknown.

Poverty statistics were not available for CARES participants.

3. *What are the barriers to program participation?*

The Customer Surveys, Section IV, showed that most customers said that CAP enrollment was not difficult. Only six percent said it was somewhat difficult and only one percent said it

was very difficult. Those who said that enrollment was difficult said that completing the application and providing proof of income were the difficult parts of enrollment.

4. *What is the distribution of customers by payment plan?*

PECO's Universal Service Programs, Section III, showed that in 2011, there was the following number of participants in each CAP tier.

**Table ES-1
2011 CAP Participation, By Tier**

CAP Tier	Poverty Level	Number	Percent
A	≤25%	73	0%
B	≤25%	11,565	8%
C	26%-50%	18,235	13%
D	51%-75%	29,298	21%
D1	76%-100%	34,620	25%
E	101%-125%	25,981	19%
E1	126%-150%	18,972	14%
Total		138,744	100%

5. *What are the barriers to program re-certification?*

The Customer Surveys, Section IV, showed that only ten percent said it was somewhat difficult and two percent said it was very difficult to recertify for CAP. These respondents reported that providing proof of income and completing the application were the most difficult parts of re-certification.

6. *What are the CAP retention rates and why?*

The CAP Impacts Analysis, Section V, showed that CAP retention rates were high. Most customers who continued to have a bill, continued to have a CAP bill. Ninety-six percent of the 2010 enrollees were still CAP participants twelve months after enrollment.

7. *Is there an effective link between participation in CAP and participation in energy assistance programs?*

PECO's Universal Service Programs, Section III, found that LIHEAP was one of the most common referrals made by the CAP call center. The CAP Impacts Analysis, Section V, showed that 51 percent of electric and gas CAP participants received LIHEAP in the year prior to enrollment, and 42 percent received LIHEAP in the year following enrollment.

8. *How effective are CAP control features at limiting program costs?*

PECO's Universal Service Programs, Section III, described PECO's CAP design. Because the CAP is structured as a rate discount rather than as a percentage of income plan, PECO and its customers share in the cost of increased usage and increased prices. Additionally, PECO limits the maximum benefit to a \$700 average. The discount cost is controlled by

limiting the discount to the first 650 kWh of usage, except customers in CAP B and C receive a discount up to 750 kWh in July through September.

9. *How effective is the CAP and LIURP link?*

PECO's Universal Service Programs, Section III, showed that 97 percent of 2010 LIURP participants were CAP participants.

10. *Does CAP participation improve payment behaviors?*

The CAP Impacts Analysis, Section V, showed that bill coverage rates improved for 2010 CAP enrollees in the year after they enrolled in the program. While 59 percent of this group paid at least 90 percent of their bill in the year prior to enrollment, 70 percent paid at least 90 percent of their bill in the year following enrollment. Cash and LIHEAP payments declined, but participants covered a greater percentage of their bill due to the large decline in charges after enrollment.

11. *Does participation in Universal Service Programs reduce arrearages?*

The CAP Impacts Analysis, Section V, showed that CAP participants reduced their arrearages by \$200. Mean arrearage forgiveness received was \$242.

12. *Does participation in Universal Service Programs decrease service terminations?*

The CAP Program Operations and Impacts Analysis, Section V, shows that there was not a meaningful change in service terminations following CAP enrollment. However, there were significant reductions in other, more common, collections actions.

13. *Does participation in Universal Service Programs lower collections costs?*

The CAP Impacts Analysis, Section V, showed the gross reduction in collection costs was \$84 and the net reduction was \$191 after customers enrolled in the CAP. This was due to a reduction in the number of collections actions for CAP customers.

14. *How can Universal Service Programs be more cost-effective and efficient?*

The Summary of Findings and Recommendations, Section VII, provides recommendations to improve PECO's Universal Service Programs. Some of the key recommendations included increased outreach to CAP participants about LIHEAP, increased outreach to customers in the lowest poverty level groups, and increased targeting of LIURP to customers in CAP B.

To address the research issues, we conducted the following evaluation activities.

1. *Background Research:* Background research consisted of document review and interviews with PECO managers, staff, and contractors.
2. *Customer Needs Assessment:* We used data from the 2008-2010 American Community Survey and PECO's customer database to develop information on the number of customers who were eligible for CAP, the overall program participation rate, and the participation rate for customers with energy burden above the Public Utility Commission's guidelines.

3. *Customer Survey:* We conducted a telephone survey with CAP participants and low-income nonparticipants to assess CAP understanding, bill payment difficulties faced by the population, CAP impact on affordability, and program satisfaction.
4. *Impact Analysis:* We used billing, payment, and collections data to assess the impact of the CAP on affordability, bill payment, and collections actions and costs.

Customer Needs Assessment

We developed information on the number and characteristics of PECO's low-income population by extracting data from the 2008-2010 American Community Survey (ACS) three-year Public Use Microdata Sample (PUMS).

PECO provides utility service to a significant portion of the Pennsylvania's low-income population. Approximately 287,000 households served by PECO had income at or below 150 percent of the federal poverty guidelines.

This analysis indicated that 46 percent of PECO's eligible customers participated in the electric CAP and 49 percent participated in the gas CAP. Participation in the electric CAP was lowest in the group of households with income at or below 25 percent of the poverty level, but this participation has increased since PECO's last Universal Service Program Evaluation. The rate for this group was 16 percent in 2005, and it was 25 percent in 2009. PECO should continue to work to increase participation among customers in this group.

Participation was higher among households identified as having energy burdens above the targets established by the PUC. Overall, 74 percent of targeted electric customers and 85 percent of targeted gas customers participated. However, because participation was not limited to customers with burdens above the target level, some of the participating customers were not in the targeted group.

PECO had higher CAP participation than other electric utilities in Pennsylvania. We estimated that 46 percent of PECO households who were income-eligible received CAP benefits, while only 25 percent of income-eligible households in other utilities' service territories participated in CAP. CAP participation was also higher for households receiving gas service from PECO than for those served by other gas utilities in Pennsylvania. The PECO gas CAP participation rate was 49 percent, compared to 37 percent for other gas utilities.

PECO's Universal Service Programs

This section provides an overview of PECO's CAP, LIURP, CARES, and MEAF programs.

Customer Assistance Program

CAP Rate is a discounted residential tariff for PECO's residential customers with income at or below 150 percent of the federal poverty level. PECO will enroll any low-income customer who expresses difficulty in paying his or her bill.

Program Costs

Total CAP costs were projected to be over \$122 million in 2012. These costs include operation and maintenance of the program, the CAP shortfall, and arrearage forgiveness. Actual CAP costs were over \$100 million in 2010.

Administration

PECO contracts with a CAP Call Center that is trained to handle all aspects of PECO's Universal Service Programs. The CAP Call Center has the following responsibilities.

- Respond to customer questions about CAP.
- Process applications for enrollment or tier change.
- Process re-certifications.
- Remove customers who fail to respond to the recertification request.
- Make referrals to agencies or CARES.
- Receive, log, track, and store all mailed or faxed income verification documents.
- Respond to PUC complaints as required.
- Review LIHEAP lists for CAP eligibility and enroll customers in CAP if they have not already done so.
- Process payment arrangements for CAP Rate customers.

Requirements

Customers must abide by the following requirements to be in the CAP Rate.

- Application – Customers must complete an application or have been approved through LIHEAP.
- Budget Billing – Customers in CAP Tiers A, B, C are required to have budget billing.
- Alternate Supplier – CAP customers cannot have an alternate supplier.
- Bill Payment – Customers must pay their bills on time and in full each month.
- Energy Usage – Customers must participate in LIURP if offered by PECO.
- LIHEAP – Customers must sign up for LIHEAP.
- Income changes – Customers must report any changes in household income to PECO.
- Re-certification – Customers must recertify on an annual or bi-annual basis.

CAP Discounts

PECO has updated its CAP rates many times over the past several years as their electric and gas rates have changed, to provide approximately 90 percent of each tier of CAP customers with an energy burden that meets the Commission targets. PECO has seven electric CAP

rates, with discounts ranging from 0 to 93 percent and six gas CAP Rates with discounts ranging from 0 to 79 percent.

Cost Controls

PECO implemented a \$700 maximum benefit cost control on an average basis. The discount cost is controlled by limiting the discount to the first 650 kWh of usage, except customers in CAP B and C receive a discount up to 750 kWh in July through September.

Arrearage Forgiveness

PECO provides forgiveness of one twelfth of pre-program arrearages each month that the customer pays the PECO bill in full and on time. A CAP customer is eligible for pre-program arrearage forgiveness only once as a PECO customer.

In 2011, PECO introduced a one-time In-Program Arrearage Forgiveness Program (IPAF) for forgiveness of over \$1,000 in arrearages accumulated while on CAP. The program forgave arrearages down to a level of \$1,000, and then asked the customer to pay the rest of the arrearages over five years. There were approximately 16,000 customers who received this benefit and the total amount forgiven was approximately \$25 million.

CAP Intake

Customers must complete and sign a CAP application and provide proof of income within ten days to enroll in CAP rate. PECO's contracted Universal Service call center handles all income verification for both enrollment and re-certification. The only exception is for CAP Rate A accounts, which are referred to CARES/Universal Services for processing.

CAP Recertification

The CAP requires recertification every two years (every year for Electric CAP A). If a customer has received assistance that is based upon the same income parameters as CAP, and the income verification procedures are acceptable to PECO, the customer may be re-certificated without completing a new CAP Rate application.

CAP Removal

Customers may be removed from CAP for the following reasons.

- Over income guidelines
- Failure to meet program requirements
- Failure to accept program services
- Failure to submit to a LIURP audit
- Failure to complete CAP re-certification
- Fraud, theft of service, or other misappropriations of service

CAP Collections Strategy

PECO begins collections actions as soon as customers are past due, with the goal of having customers keep up with bill payment obligations and avoiding large arrearages that are not manageable. CAP customers who do not pay their bills are subject to termination after proper notice procedures are followed.

Program Participation

PECO does not have an enrollment limit for the CAP. Enrollment in December 2011 was close to 139,000 customers.

Table ES-2 shows that only 73 customers were enrolled in CAP A, for customers with income below 25% and special circumstances. However, eight percent of CAP participants, over 11,500 customers, were enrolled in rate B for customers with income below 25 percent of the poverty level. The majority of CAP customers were enrolled in tiers D1, E, and E1 for customers with income between 76 and 150 percent of poverty.

**Table ES-2
PECO CAP Participation, December 2011
By CAP Tier**

CAP Tier	Poverty Level	2011 CAP Participants	
		Number	Percent
A	≤25%	73	0%
B	≤25%	11,565	8%
C	26%-50%	18,235	13%
D	51%-75%	29,298	21%
D1	76%-100%	34,620	25%
E	101%-125%	25,981	19%
E1	126%-150%	18,972	14%
Total		138,744	100%

Challenges

PECO faces the following challenges with respect to the CAP.

- Identifying and enrolling customers who need assistance as soon as possible.
- Enrollment by customers with balances over \$1,000 has increased.
- Participation by households with income at or below 50 percent of poverty continues to be lower than the other poverty level groups.
- Providing the level of discount needed to bring customers to the affordability level while maintaining appropriate cost controls is a difficult balance.
- Many customers continue to face difficulties paying their energy bills even while receiving the CAP discounts, and they build up additional arrearages while on the program.
- Getting participants to respond to recertification requests.
- CAP customers leaving CAP to go to an alternate energy supplier and then return after a few months of non-CAP billings.

Successes

PECO has continued to enhance and develop the CAP over the years. Accomplishments have included the following.

- Enhanced CAP outreach.
- Streamlined enrollment process.
- Online CAP application process.
- LIHEAP auto-enrollment and auto-recertification for CAP.
- Call center dedicated to CAP questions.
- Improved fax and mail capacity, processing time, and response time for CAP enrollment, recertification, storage and retrieval of CAP applications, and question fielding at the CAP call center.
- Exceeded the PUC CAP enrollment requirements for the past six years.
- Increased participation by the lowest poverty group customers since the previous Universal Service Program evaluation.
- Additional payment agreements for CAP customers who experience a decrease in income and move to a lower CAP tier.
- A one-time in program arrearage forgiveness program to assist customers who built up additional arrearages while participating in CAP.
- Prioritization of high usage CAP customers for LIURP.
- Usage limits on CAP discounts to encourage conservation.

LIURP

PECO's Low Income Usage Reduction Program (LIURP) provides education, conservation, and weatherization measures to assist customers to reduce the amount of electricity and/or natural gas used in their homes. LIURP targets high-usage, low-income CAP customers. While the program is mandatory for CAP customers, it is also available for other low-income customers with income below 200 percent of the poverty level.

LIURP Resources

The LIURP budget was \$7.825 million in 2009 and is planned to remain at that level through 2013.

Program Management and Administration

PECO's analyst is responsible for overseeing overall LIURP production, quality assurance, and the annual evaluation. PECO contracts with CMC Energy Services to implement the program. CMC staff members conduct the LIURP audits and develop work orders for additional measures to be installed on subsequent visit(s) by the program subcontractors.

Eligibility

PECO customers must meet the following criteria to participate in the Program.

- Residential customer
- Income requirement
 - Income at or below 150 percent of the Federal Poverty Level (FPL), or
 - Income between 150 and 200 percent of the FPL¹

¹ Since 1998, LIURP regulations have permitted companies to spend up to 20 percent of their annual Program budgets on customers with income between 150 and 200 percent of the FPL.

- Usage requirements
 - At least 500 kWh average monthly usage for CAP customers
 - At least 600 kWh average monthly usage for baseload customers
 - At least 1,400 kWh average monthly usage for electric heating customers
 - At least 50 ccf average monthly usage for gas heating customers

Job Types

There are two different LIURP job types: Baseload and Heating. Baseload jobs focus on a household's lighting and appliances. Heating jobs include weatherization, insulation, and heating system repair or replacement. Both heating and baseload issues in a household are addressed when necessary.²

Service Delivery

PECO sends a quarterly download of high usage, low-income customers to CMC.³ Customers are also referred to LIURP through PECO staff and external agencies. CMC prioritizes CAP participants for LIURP service delivery. Those with the lowest income and the greatest CAP benefits receive the highest priority. CMC prioritizes remaining LIURP participants by energy use and income.

Program Coordination

CMC maintains a LIURP referral list consisting of other Universal Service Programs and state and county agencies that provide assistance to low-income customers. CMC staff make referrals and the CMC auditor provides CAP and LIHEAP applications to customers at the time of the LIURP audit.

Participation in LIURP is a requirement of PECO's CAP. Historically, PECO and CMC have not enforced this requirement. However, beginning in Fall 2005, a procedure was initiated in which CMC sends a list of CAP customers who refused LIURP services to PECO, and PECO sends a reminder letter that restates CAP requirements.

Program Participation and Energy Savings

Over 9,000 customers received LIURP services in 2010. Table ES-3 displays energy saving results from the 2010 LIURP evaluation. The table shows that baseload jobs saved an average of 10.8 percent of pre-treatment usage, electric heat jobs saved an average of 5.7 percent, and gas heat jobs saved an average of 5.8 percent.

² Renters do not receive appliance replacement.

³ This is done through a three step process.

**Table ES-3
LIURP Average Usage and Savings
Degree-Day Normalized**

	#	Pre-Use	Post-Use	Savings	% Savings
Electric Baseload (kWh)	4,055	11,370	10,147	1,223	10.8%
Electric Heat (kWh)	144	19,662	18,534	1,128	5.7%
Gas Heat (ccf)	1,166	1,052	991	61	5.8%

Challenges

PECO's has faced the following LIURP challenges.

- PECO has had difficulty continuing to find LIURP participants with high pre-program usage because the program has identified and treated many of PECO's highest users for so many years.
- Customer refusals (reduced with LIURP participation requirement for CAP) and landlord refusals (reduced with landlord education).
- Defacto heating, the use of electric heating instead of the household's primary heating technology has been a challenge, especially for Philadelphia customers.⁴
- Increased cost of efficiency measures, which reduced the number of customers who can be served.

Successes

PECO has worked to provide high quality efficiency services to LIURP participants to improve energy affordability and health and safety. LIURP successes include the following.

- Proactive identification of high usage customers.
- LIURP contractor that is experienced, knowledgeable, and efficient.
- Successful energy education program for LIURP participants and post-delivery follow-ups to ensure customers maintain reduction goals.
- In-home services that refer customers to other Universal Service programs.
- High savings for baseload LIURP participants.

MEAF

The Matching Energy Assistance Fund (MEAF) is PECO's hardship fund program that provides emergency assistance grants to customers who have not paid their bills and have been shut off or are in danger of having services terminated. The maximum MEAF grant is \$500 per fuel.

Resources

MEAF is funded through ratepayer donations, other fundraising, and PECO contributions. Projected MEAF expenditures were \$1.14 million in 2012. Actual program expenditures were \$1.14 million in 2009 and \$0.67 in 2010. Total program funds declined significantly

⁴ The 2011 LIURP program found that 716 of the 6,822 jobs that did not have electric heat (over ten percent) had defacto electric heating.

from 2009 to 2010, likely a result of the economic conditions. There were a total of 1,442 MEAF grants in 2010, averaging \$306, and this was reduced to a total of 528 grants in 2011, averaging \$300.

Administration

PECO contracts with a MEAF Call Center to conduct intake for MEAF, respond to CBO inquiries related to MEAF enrollment and donations, and conduct outreach for MEAF donations. PECO also contracts with six county fuel fund agencies to conduct intake for the program. One of these agencies, Torres Credit Services, is PECO's MEAF Call Center.

The six county fuel fund agencies are responsible for screening clients for grant eligibility, assisting clients with the applications, contacting the MEAF Call Center to determine the customer's past due amount, approving the grant, and contacting the MEAF Call Center to stop a pending shutoff.

Eligibility

Residential PECO customers are eligible for MEAF if they meet the following criteria.

- Income at or below 175 percent of the federal poverty level
- Resident in county where they apply
- Imminent danger of service termination or have had their services terminated
- Grant must eliminate the total amount due, excluding pre-program arrearage
- Customer must make payment or solicit third party grants if MEAF grant does not cover amount owed
- Customer has not received MEAF in the past two years

Challenges

PECO faces the following challenges with MEAF.

- There has been a continued decline in customer giving since the downturn in the economy.
- PECO has not been able to locate an agency in Chester County.

There were some MEAF challenges that were reported by the MEAF call center and the MEAF agencies.

- The MEAF call center reported that they are sometimes asked by the agencies to make exceptions to the guidelines and provide extra time to customers to prevent shutoff, but they are not able to do this.
- Large balances are a challenge for many customers who cannot obtain the additional funds needed. One agency recommended that PECO assist the customer before the balance is too high for the customer to be able to pay.
- A few agencies said that the small amount of money they receive in funding and the small amount they are able to provide for grants is a challenge. There is never enough money for all of the clients who need assistance.
- One agency said that the short turn-around for some clients is a challenge. When a client calls with a 72-hour shut-off notice, it is a challenge to be able to respond that quickly.

- Some of the agencies had complaints about PECO customer service representatives' knowledge about MEAF.

Successes

PECO has implemented a successful MEAF hardship fund program.

- MEAF helps customers to achieve self-sufficiency by providing a grant that brings the balance to zero, but that is only available once every two years.
- MEAF has agencies in every county to provide local assistance for customers.
- The MEAF annual golf tournament fundraiser raises an average of \$30,000 each year.

Several successes were noted by the agency representatives.

- The agency representatives stated that the MEAF guidelines work well.
- The program provides a cushion of help between when LIHEAP assistance ends and begins again in November. It is a temporary help to give clients time to get back on track that is very much needed, as without the program, many customers would not have service.
- One agency representative noted that two years between grants is the right amount of time, because it forces customers to help themselves.

CARES

PECO's Customer Assistance Referral and Evaluation Services (CARES) Program provides referrals and information to assist customers who have temporary financial hardships that create a barrier to utility bill payment. The goal of the CARES component of Universal Services is to educate and inform PECO customers of available resources including energy and non-energy assistance, budget counseling, and housing assistance.

Resources

PECO's projected expenses for CARES were approximately \$23,000 in 2012.

Eligibility

Customers are eligible for CARES if they have income at or below 200 percent of the Federal Poverty Level. They also should have special needs and/or have extenuating circumstances.

Benefits

The benefits provided through CARES are as follows.

- Education and referral information for energy and non-energy related assistance.
- Evaluation for enrollment in PECO's Universal Service programs, including health usage, 6-month medical certification, and CAP Rate A.
- Eligible customers may receive temporary protection from termination of service.

Referrals

CARES representatives provide many types of referrals to customers. These include, but are not limited to the following.

- Welfare

- Medical assistance
- Cash assistance
- Social services
- LIHEAP
- MEAF
- LIURP
- American Cancer Society

Challenges

When asked about program challenges, the CARES supervisor and all three representatives reported that they would like to be able to assist more customers. The supervisor reported that in addition to situations where there is nothing they can do to help a customer, it is not always clear what needs to be done for a customer, because there are always unique cases that do not fit neatly into the CARES protocol.

Successes

PECO provides customized care for customers through this program and has implemented new metrics, tracking, and reporting.

The supervisor and representatives all reported that the CARES program is very successful in helping customers with special needs. While they cannot help everybody, they do make a large impact on customers' lives.

Customer Survey

APPRISE conducted a survey with participants in PECO's Customer Assistance Program and low-income nonparticipants to develop information on customer knowledge, understanding, and satisfaction with the CAP. The low-income nonparticipants were drawn from a sample of PECO's customers who received LIHEAP but did not participate in CAP.

Key findings from the CAP Survey are highlighted below.

- Vulnerable households – CAP participants were likely to have vulnerable household members. Twenty-five percent of participants had a child age five or younger in the home, 38 percent had an elderly member age 60 or older, and 41 percent had a disabled household member.
- Income source – While 73 percent of CAP participants reported that they received non-cash benefits in the past year, 43 percent reported that they received public assistance, 28 percent reported that they received retirement income, and 26 percent reported that they received wages or self-employment income. Nonparticipants were less likely to report that they received non-cash benefits and public assistance.

- **Unemployment** – When asked whether someone in the household was unemployed and looking for work in the past 12 months, 32 percent of CAP participants and 32 percent of nonparticipants said that someone in the home had experienced unemployment.
- **Annual household income** – CAP participants were likely to report lower income than nonparticipants. While 32 percent of CAP participants reported that the household’s annual income was below \$10,000, 13 percent of nonparticipants reported that household income was this low. While 15 percent of nonparticipants reported that the annual household income was \$30,000 or more, only six percent of participants reported income of \$30,000 or more.
- **CAP awareness** – About half of the nonparticipants were aware of the CAP Rate. Those who were aware were most likely to say that they did not participate because their income was too high or they did not need energy assistance.
- **CAP understanding** – Most CAP participants did not know the level of discount received on their bill. When asked what percentage discount they received, 89 percent reported that they did not know. However, 88 percent said that they felt they had a good understanding of the CAP program and 81 percent reported that their responsibility was to keep up with their payments.
- **CAP enrollment** – CAP participants were not likely to report that it was difficult to enroll. Only seven percent said it was somewhat or very difficult to enroll, about the same as CAP program participants in other PA utility CAP programs.
- **CAP benefits** – CAP participants were most likely to report that the most important benefit of the program was lower energy bills, followed by the ability to keep their energy service, and then by even monthly payments.
- **CAP impact on affordability** – CAP participants reported that the program has helped with energy bill affordability and affordability of other expenses. While 56 percent of respondents said that it was very difficult to pay their PECO bill prior to CAP participation, only nine percent said it was very difficult while participating. While 31 percent said they had to delay medical or dental service prior to CAP participation, only 18 percent said they had to do so while participating in CAP.
- **CAP impact on energy bill and usage** – When asked to compare their energy bill to before CAP participation, 68 percent said that their bill was lower. When asked to compare usage, 36 percent said their usage was lower, 45 percent said there was no change, and 15 percent said it was higher.
- **LIHEAP** – While 79 percent of participants reported that they applied for LIHEAP in the past 12 months, 50 percent said that they received it. Those who did not apply were most likely to say the reason was that they did not need it, they forgot or did not get around to applying, or they missed the deadline.

- **CAP importance and satisfaction** – Participants were likely to report that the CAP was very important. While 85 percent said it was very important in helping them to meet their needs, 9 percent said it was somewhat important. Ninety-five percent said that they were very or somewhat satisfied with the program.

CAP Impacts Analysis

The CAP Impacts Analysis showed that CAP had large positive impacts on energy affordability, CAP participants improved their payment coverage in comparison to the later enrollees and nonparticipants, and that collections actions and costs declined significantly. However, many CAP participants, especially those in the lowest poverty groups, had energy burdens above the PUC targeted level. Key findings from the data analysis are summarized below.

- ***CAP Retention:*** Most customers who had a bill in a particular month continued to have a CAP bill, indicating that customers usually did not leave CAP because they found it not beneficial, they no longer needed assistance, or their income increased. Of the 2011 CAP participants, between 89 and 93 percent of those who had a bill each month participated in CAP. Of the 2010 enrollees, between 97 and 99 percent of those who had a bill each month continued to participate in CAP.
- ***Arrearage Forgiveness:*** Among the 2010 CAP enrollees who had arrearages, 96 percent received arrearage forgiveness in the year following enrollment. They received an average of 7.4 forgiveness payments, and an average of \$325 in forgiveness.
- ***Affordability:*** The Pennsylvania PUC has set energy burden targets for CAP participants. The analysis showed that while 70 percent of full year 2011 CAP participants had an energy burden at or below the PUC target, 30 percent had an energy burden above the target. While 84 percent of those with income at or below 25 percent of the poverty level had an energy burden above the target, 17 percent of those with income between 126 and 150 percent of the poverty level had an energy burden above the target. While 33 percent of those with electric baseload service had an energy burden above the target, 17 percent of those with electric heating or electric and gas service had an energy burden above the target.
- ***Affordability Impacts:*** The CAP had positive affordability impacts for the 2010 enrollees. Net reductions in total charges averaged \$551 for electric baseload participants, \$419 for electric heating participants, and \$535 for electric and gas participants. Net reductions in energy burden were five percentage points for electric baseload customers, three percentage points for electric heating customers, and four percentage points for electric and gas customers. Customers with income below 25 percent of the poverty level had the greatest reduction in energy burdens.
- ***Bill Payment Compliance:*** The analysis showed that 41 percent of 2011 CAP participants paid at least 90 percent of their full CAP bill. Bill coverage rates improved

for 2010 CAP enrollees in the year after they enrolled in the program. While 59 percent of this group paid at least 90 percent of their bill in the year prior to enrollment, 70 percent paid at least 90 percent of their bill in the year following enrollment. Customers made less cash payments and received less LIHEAP assistance, but they covered a greater percentage of their bill due to the large decline in charges after enrollment.

- **LIHEAP Assistance:** Of the 2011 full year CAP participants, 11 percent of electric baseload customers, 40 percent of electric heating customers, and 39 percent of electric and gas customers received LIHEAP assistance in 2011. The 2010 enrollees were less likely to receive LIHEAP after enrolling in CAP. While 17 percent of electric baseload customers received LIHEAP in the year prior to enrollment, 10 percent received LIHEAP in the year following enrollment. While 50 percent of electric heating customers received LIHEAP in the year prior to enrollment, 40 percent received LIHEAP in the year following enrollment. While 51 percent of electric and gas customers received LIHEAP in the year prior to enrollment, 42 percent received it in the year following enrollment. However, there were large increases in the percent of the comparison groups that received LIHEAP. LIHEAP assistance averaged approximately \$250 for customers who received grants in 2011.
- **Collections Impact:** There was a significant reduction in the number of collections actions experienced by 2010 CAP enrollees in the year following enrollment. While these customers averaged a total of 24 collections actions in the year prior to enrollment, they experienced an average of 18 actions in the year following enrollment. The net change was a reduction of nine actions and a savings of \$191.

Key Findings

Key findings relating to program coordination, CAP affordability, and PECO's newly proposed rate changes⁵ are summarized below.

1. Program Coordination

PECO's Universal Service Programs and other low-income programs are coordinated to help their low-income customers achieve energy affordability. Some of the examples of how these programs are coordinated are as follows.

- High usage CAP customers are targeted for LIURP.
- LIHEAP recipients are auto-enrolled in CAP and auto-re-certified when the LIHEAP program parameters allow for CAP eligibility determination.
- CARES customers are referred to all Universal Service Programs and additional program and services for which they are eligible.

⁵ If approved, the rate changes would be implemented in 2013.

PECO views its programs as a portfolio of services that together help their low-income customers attain an affordable energy bill.

2. CAP Affordability

One of the key findings in this report was that a significant percentage of lower tier CAP participants do not reach the PUC affordability targets after receiving the CAP discount. The reasons that many customers do not meet the PUC target are the structure of the CAP discount and the cost controls that limit the discount to the first 650 kWh or 750 kWh of usage. Because a usage analysis was not part of this evaluation, we cannot determine what percentage of the customers exceed the target due to high usage.

PECO chose the discount design and limited the discount to the first 650 or 750 kWh for the following reasons.

- PECO believes that customers should bear some responsibility for controlling their usage. The fact that the discount is eliminated for usage above a certain level should provide a large incentive for customers to conserve energy and to participate in LIURP by positively responding to PECO contact attempts or by proactively requesting LIURP services.
- PECO has a responsibility to their other ratepayers to control the costs of the CAP Rate. The annual cost for the average electric non-heater was \$58 in 2011 and is projected to be \$69 in 2013, and the average cost for the electric heater was \$112 in 2011 and is projected to be \$133 in 2013. PECO imposes the maximum usage limit to balance the benefits for the CAP customers with these costs that the other ratepayers bear.

However, PECO has taken several steps to increase affordability for CAP customers. These steps include the following.

- The usage limit for the CAP discount was increased from 500 kWh to 650 kWh (and to 750 kWh for lower tier CAP Rate customers in the summer) in 2009. This change was in response to the 2006 Universal Services Program evaluation and general increases in usage over time. PECO continually monitors CAP costs to determine what adjustments need to be made. The analysis in this report showed that these changes did have a positive impact on affordability, as the 2011 participants were less likely to have energy burdens above the PUC target than the 2004 participants.
- PECO introduced an In Program Arrearage Forgiveness Program (IPAF) in 2011. This program is in addition to the pre-program arrearage forgiveness that CAP participants receive. The IPAF was a one-time forgiveness for CAP customers who had in program arrearages of more than \$1,000. The program forgave arrearages down to a level of \$1,000, and then asked the customer to pay the rest of the arrearages at a rate of \$16.67 per month over five years to pay back the remaining

\$1,000 in arrearages. There were approximately 16,000 customers who received this benefit and the total amount forgiven was approximately \$25 million.⁶

- PECO piloted an in-home display pilot with 200 CAP participants in 2011. This device enables customers to better monitor their usage. PECO will examine whether the program helps customers to control their usage.
- PECO leverages other assistance programs and provides outreach efforts for internal and external programs and services to help customers attain energy affordability. Some examples of the other programs that PECO has recently provided are described below.
 - Government Grant Assistance Program (GGAP) – PECO provides matching toward governmental grants to help low-income households who are in danger of service termination or who have been terminated. This match serves to make up for funding that has been reduced as a result of customer MEAF contributions declining with the poor economy.
 - LEAP – PECO used Act 129 funding to provide additional energy efficiency services to low-income customers. These services were modeled after PECO's LIURP because of the success of that program in reducing energy usage.
 - Default Service Provider Settlement Agreement Funding – PECO used funding from this settlement to provide additional energy efficiency services to low-income customers. These funds were not required to be spent according to LIURP requirements, so PECO provided this funding to other low-income properties, including multi-family properties, mass metered properties, community centers, and senior centers that serve low-income customers.
 - Education and outreach events – PECO attends events that are targeted toward low-income households, provides CFLs (funded through Act 129) and provides education and information about other programs and services.
 - LIHEAP outreach – PECO has increased their outreach for LIHEAP and they have been working with DPW to try to increase the number of customers who receive grants.

3. Rate Changes

PECO began to phase out their Rate RH (electric heating) discount on generation charges for all customers for usage over 600 kWh per month in 2012. This discount will be completely eliminated by the end of 2012. The discount that was phased out was a

⁶ Approximately 60 percent of these customers are currently on a payment agreement.

50 percent discount for monthly usage over 600 kWh that totaled between \$2 and \$3 million in revenue annually, depending on prices and weather.

PECO has filed for a change to their 2013 rates to compensate for the elimination of the rate RH discount. This change would increase affordability for CAP customers, and would have the greatest impacts on affordability for the lowest poverty group, highest usage customers. This rate change, if approved, would apply the CAP discount up to a maximum usage level of 1,500 kWh in November through April (instead of the current 650 kWh discount limit). As such, the change would provide the greatest benefits to the lowest poverty group CAP customers, as these customers receive the greatest discounts on their usage. The intent of this rate change is to return the lost RH benefits back to the customers, with a redirection of benefits to the lowest income CAP customers.

Recommendations

Recommendations relating to policies and procedures and to program impacts are described below.

Policies and Procedures

PECO has created valuable partnerships with local agencies and contractors to implement their Universal Service Programs. The programs are well operated and run efficiently and effectively. Customers receive services that improve affordability, reduce usage, provide emergency assistance, and inform them of other important assistance that is available.

Based on the research that was conducted, we have the following recommendations for improving program performance.

- 1. Attempt to increase CAP participation by the lowest poverty group households.*
Participation in CAP was lowest in the group of households with income at or below 25 percent of the poverty level, but this participation has increased since PECO's last Universal Service Program Evaluation. PECO should continue to work to increase participation among customers in this group. One potential means is to provide increased outreach and application support to customers who indicate that they are in this group but who do not successfully complete the CAP application.
- 2. Work with CAP call center and agencies to increase LIHEAP penetration.*
One of the CAP requirements is that customers must sign up for LIHEAP. The CAP Impacts Analysis showed that electric baseload, electric heating, and electric and gas customers were less likely to receive LIHEAP in the year after CAP enrollment as compared to the year prior to CAP enrollment. PECO conducts extensive outreach to inform customers of the availability of LIHEAP. They may be able to increase participation among CAP participants by having the CAP call center check if customer received LIHEAP at the time of application and recertification, and to provide additional reminders to CAP participants about the CAP requirement for LIHEAP application.

3. *Require a budget bill for all customers.*
PECO currently requires a budget bill for CAP Rate A, B, and C customers, and encourages D and E participants. PECO should consider requiring all CAP participants to have a budget bill as this may increase payment regularity by those customers. The CAP Impacts Analysis showed that CAP D and E customers had lower energy burdens, but they were less likely to pay their full CAP bill.
4. *Require all MEAF agencies to assist with CAP applications.*
The MEAF agencies reported that they had different policies with respect to CAP referrals. PECO should have all of the agencies assist customers with the CAP application so that there is a one-stop process for customers and they are more likely to be enrolled in CAP.
5. *Require all MEAF agencies to assist with LIHEAP applications.*
Agencies also reported different practices with respect to LIHEAP application. All MEAF agencies should assist customers with the LIHEAP application to ensure that the customer follows up with the application.
6. *Require all MEAF agencies to assist customers with referrals for needed services.*
MEAF agencies reported different emphasis on other program referrals. While some seemed to only refer customers to a local agency, others seemed to assess customers' needs and refer them to specific programs that were most needed. All agencies should follow the latter approach to maximize the probability that customers receive needed services.

Program Impacts

Survey research and data analysis showed that the CAP has had large positive impacts on energy affordability and customers' ability to meet their energy needs. This section highlights opportunities for improved program impact.

1. *Try to increase affordability for lowest poverty group participants.*
The CAP Impacts Analysis showed that CAP participants with income below 25 percent of the poverty level are most likely to exceed the PUC energy burden target. CAP B customers with income below 25 percent of the poverty level receive large CAP discounts. However, the electric customers face limits on the amount of usage that is discounted. PECO should investigate what percent of CAP B customers reach the maximum usage limit for the discount (a usage analysis was not part of this evaluation) and consider increasing that limit to increase affordability for this lowest income group.
2. *Target lowest income CAP customers who exceed CAP usage discount limits for LIURP.*
PECO CAP customers are targeted for LIURP, and 97 percent of 2010 LIURP participants were CAP participants. PECO should particularly target the CAP B participants with usage that exceeds the amount that is discounted. Such additional targeting may help to reduce the percent of these customers that exceed the PUC energy burden target.

This section uses the midpoint of these standards in presenting the number and percentage of CAP income-eligible households exceeding the “target energy burden.”

For households with electric-only baseload service, the number and percentage presented includes those above 3.5 percent, 5.0 percent, and 6.5 percent, for the three groups (0-50%, 51-100%, and 101-150% of the federal poverty guidelines), respectively. For households with electric heating or combination electric and gas service from PECO, the targets are 10.0 percent, 13.5 percent, and 16.0 percent, respectively. For households with only gas service from PECO, the targets are 6.5 percent, 8.5 percent, and 9.5 percent, respectively.

Table II-11 displays the median energy costs and burden for all households with PECO residential service who were income-eligible for CAP. CAP income-eligible households with gas and electric service had annual energy costs of \$2,710, while those with electric heat reported spending \$1,453.

The mean expenditures for the CAP income-eligible households with electric-only baseload service (this includes households with neither gas nor electric heat from PECO) were \$1,258. Annual costs for these households created a burden which exceeded the highest BCS target for electric-only service for over half of CAP income-eligible households.

Table II-11
Distribution of Energy Bills and Expenditures for
CAP Income-Eligible PECO Households
By Service Status

Service Status	Number of Income-Eligible Households	PECO Energy Expenditures		Median PECO Energy Burden
		Mean	Median	
Electric-Only Baseload	189,429	\$1,258	\$960	9%
Electric-Only Heating	51,802	\$1,453	\$1,200	12%
Combination Gas and Electric	45,009	\$2,710	\$2,280	17%
Gas Only	462	\$1,601	\$976	6%
All Households	286,702	\$1,522	\$1,098	10%

E. Characteristics of CAP Recipients

Beginning in 2005, PECO used Department of Public Welfare (DPW) verified LIHEAP data to automatically enroll qualified customers into CAP. They continued to conduct this enrollment when income eligibility for LIHEAP in Pennsylvania was at or below the CAP eligibility limit of 150 percent of poverty. Therefore, PECO was able to automatically enroll customers in CAP in FY 2010, when the LIHEAP eligibility limit was 150 percent of poverty, but not in FY 2009 or FY 2011, when it was greater.

Table II-12 shows that the CAP program was serving nearly 139,000 PECO households by December 2011. This was down somewhat from nearly 142,000 in December 2010, possibly due to the change in LIHEAP eligibility. Most of the CAP customers were in CAP Tier D (46% in 2011) and Tier E (33% in 2011). However, there were over 30,000 in CAP Tiers B and C, for customers with income below 50 percent of the poverty level.

Table II-12
Beginning-of-Year CAP Participants
By CAP Rate Tier

CAP Tier	Electric CAP				Combination CAP				Total CAP (including gas only)			
	2009	2010	2011		2009	2010	2011		2009	2010	2011	
A	33	46	58	0%	12	5	14	0%	45	51	73	0%
B	9,561	8,684	9,905	9%	1,835	1,601	1,630	7%	11,430	10,306	11,565	8%
C	16,273	16,580	15,509	14%	2,699	2,815	2,700	11%	19,015	19,425	18,235	13%
D	52,278	54,378	25,263	22%	9,102	9,302	4,001	17%	61,513	63,794	29,298	21%
D1			29,231	25%			5,316	23%			34,620	25%
E	30,620	36,183	20,277	18%	8,206	11,653	5,599	24%	38,957	48,045	25,981	19%
E1			14,558	13%			4,360	18%			18,972	14%
Total	108,765	115,871	114,801	100%	21,854	25,376	23,620	100%	130,960	141,621	138,744	100%

F. CAP Participation Rates

Overall, 46 percent of eligible households participated in PECO's CAP in 2009. Approximately 131,000 PECO customers participated in the CAP program, while 287,000 PECO customers were eligible for some level of CAP benefit.

Table II-13 describes the participation rates for each CAP rate tier. CAP program participation was lowest amongst households with income below 25 percent of the poverty level. Twenty-five percent of eligible households with annual income below 25 percent of the federal poverty guidelines participated in the CAP; however, 65 percent of households between 25 percent and 50 percent of the federal poverty guidelines, and 63 percent of households between 50 percent and 100 percent of the federal poverty guidelines participated in the CAP.

Table II-13
Participation Rate
By Poverty Level

Poverty Level (Cap Tier)	2009 CAP Participants	CAP Eligible PECO Residential Households	Participation Rates
0% -25% (A,B)	11,475	45,505	25%
26% -50% (C)	19,015	29,440	65%

Poverty Level (Cap Tier)	2009 CAP Participants	CAP Eligible PECO Residential Households	Participation Rates
51% -75% (D)	61,513	41,975	63%
76%-100% (D1)		55,390	
101%-125% (E)	38,957	58,118	34%
126% - 150% (E1)		56,274	
Total	130,960	286,702	46%

Participation rates for electric and gas customers were quite similar. Table II-14 shows that 22,000 of 45,000 eligible gas customers received CAP benefits and 131,000 of 286,000 eligible electric service customers participated in CAP.

Table II-14
Participation Rate
By Service Type

Service Type	2009 CAP Participants	CAP Eligible PECO Residential Households	Participation Rates
Electric	130,619	286,240	46%
Gas	22,195	45,471	49%

Table II-15 describes the participation rates for CAP eligible households that were identified as having energy burdens greater than targets set forth by the BCS. CAP program participation for targeted households was lowest amongst households with income below 25 percent of federal poverty guidelines. Twenty-five percent of eligible households with annual income below 25 percent of the federal poverty guidelines participated in the CAP, while 67 percent of targeted households between 25 percent and 50 percent of the federal poverty guidelines participated in the CAP.

Table II-15 also shows that more than 100 percent of targeted households between 100 percent and 150 percent of the federal poverty guidelines participated in the CAP. This may result from the structure of PECO's CAP program, which does not target customers by energy burden. Consequently, many CAP participants, especially those in higher poverty groups, may participate in CAP despite having energy burdens that fall below the PUC targets.

Table II-15
Participation Rate for Targeted Households
By Poverty Level

Poverty Level (Cap Tier)	2009 CAP Participants	CAP Eligible PECO Targeted Residential Households	Participation Rates
0% -25% (A,B)	11,475	45,423	25%

Poverty Level (Cap Tier)	2009 CAP Participants	CAP Eligible PECO Targeted Residential Households	Participation Rates
26% -50% (C)	19,015	28,195	67%
51% -75% (D)	61,513	31,740	93%
76%-100% (D1)		34,701	
101%-125% (E)	38,957	20,670	109%
126% - 150% (E1)		15,146	
Total	130,960	175,875	74%

Table II-16 displays participation rates for both electric and gas customers who had energy burdens that exceeded the BCS targets. The table shows that 74 percent of targeted electric customers and 85 percent of targeted gas customers participated.

Table II-16
Participation Rate for Targeted Households
By Service Type

Service Type	2009 CAP Participants	CAP Eligible PECO Targeted Residential Households	Participation Rates
Electric	130,619	175,741	74%
Gas	22,195	26,194	85%

Table II-17 shows that PECO has higher CAP participation than other electric utilities in Pennsylvania. Using ACS estimates on the number of households in Pennsylvania with income at or below 150 percent of the FPL and data reported to the PUC on the number of households served by electric utilities in December 2009, we estimated that 46 percent of PECO households who were income-eligible received CAP benefits, while only 25 percent of income-eligible households in other utilities' service territories participated in CAP.

Table II-17
Participation Rates for Pennsylvania Electric Utilities

Service Type	CAP Electric Service Households	CAP Income Eligible Households	Participation Rates
PECO	130,619	286,240	46%
Other Electric Utilities	150,066	589,883	25%
Total	280,685	876,123	32%

Table II-18 shows that CAP participation was also higher for households receiving gas service from PECO than for those served by other gas utilities in Pennsylvania. The PECO gas CAP participation rate was 49 percent, compared to 37 percent for other gas utilities.

**Table II-8
Participation Rates for Pennsylvania Gas Utilities**

Service Type	CAP Gas Service Households	CAP Income Eligible Households	Participation Rates
PECO	22,195	45,471	49%
Other Gas Utilities	168,774	455,285	37%
Total	190,969	500,756	38%

G. Summary of Customer Needs Assessment

PECO provides utility service to a significant portion of the Pennsylvania's low-income population. Approximately 287,000 households served by PECO had income at or below 150 percent of the federal poverty guidelines.

This analysis indicated that 46 percent of PECO's eligible customers participated in the electric CAP and 49 percent participated in the gas CAP. Participation in the electric CAP was lowest in the group of households with income at or below 25 percent of the poverty level, but this participation has increased since PECO's last Universal Service Program Evaluation. The rate for this group was 16 percent in 2005, and it was 25 percent in 2009. PECO should continue to work to increase participation among customers in this group.

Participation was higher among households identified as having energy burdens above the targets established by the PUC. Overall, 74 percent of targeted electric customers and 85 percent of targeted gas customers participated. However, because participation was not limited to customers with burdens above the target level, some of the participating customers were not in the targeted group.

III. PECO's Universal Service Programs

PECO implemented a set of Universal Service Programs to comply with Public Utility Commission Regulations. The programs are designed for low-income, residential customers who express or demonstrate difficulty paying for their monthly energy bill.

A. Program Overview

PECO's Universal Service Program includes six components.

1. *Customer Assistance Program (CAP)* -- The Customer Assistance Program, referred to as CAP or CAP Rate, is a discounted residential tariff for low-income, payment-troubled residential customers. Customers with total gross household income less than or equal to 150 percent of the federal poverty level are eligible for the CAP.
2. *Low Income Usage Reduction Program (LIURP)* -- The Low Income Usage Reduction Program (LIURP) provides education, conservation, and weatherization measures to reduce electric and gas usage for customers with income up to 200 percent of the federal poverty level.
3. *Matching Energy Assistance Fund (MEAF)* -- The Matching Energy Assistance Fund (MEAF) is a hardship fund that provides grants to customers who have had their service terminated or who are in danger of termination. Customers are eligible for MEAF grants of no greater than \$500 per fuel if their income is at or below 175 percent of the federal poverty level.
4. *Customer Assistance and Referral Evaluation Services (CARES)* -- Customer Assistance and Referral Evaluation Services (CARES) is a referral and information service designed to assist customers who have a temporary personal or financial hardship that prevents the payment of their utility bill. Customers with special needs including senior citizens and customers who receive government-based income (e.g., SSI, SSD) are eligible for CARES.
5. *Education-Outreach Programs* -- PECO conducts outreach to ensure awareness of program benefits. Their methods for outreach include referrals between different Universal Service programs offered by PECO, information on PECO's website, and staff training at community organizations and health providers. PECO also works with Philadelphia-based community organizations to provide referrals services.
6. *External Grant Program Administration (LIHEAP, FEMA, etc.)* -- PECO helps to support external grant programs and manages a Fuel Fund Hotline that provides information and referrals to customers in crisis. External programs include LIHEAP, PA Area Agencies on Aging, Federal Emergency Management Agency, and other Special Interest Grants.

