

Report on
2018 Universal Service Programs & Collections Performance

of the Pennsylvania Electric Distribution Companies & Natural Gas Distribution Companies





Universal Service Programs & Collections Performance 2018

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1. Introduction

The Pennsylvania Public Utility Commission's (PUC) Annual Report on 2018 Universal Service Programs and Collections Performance includes data and performance measures for the seven major Pennsylvania electric distribution companies (EDCs) and the eight major natural gas distribution companies (NGDCs), during the 2018 calendar year.

The Electricity Generation Customer Choice and Competition Act¹ and the Natural Gas Choice and Competition Act² opened the electric generation and natural gas supply markets to competition. In doing so, the General Assembly wanted to ensure that electric and natural gas service remain universally available to all customers in the state. Consequently, both Acts contain provisions relating to universal electric and gas service, and require the Commission to maintain, at a minimum, the protections, policies, and services that assist customers who are low-income to afford electric and gas service.³ The Acts also require the Commission to ensure that universal service and energy conservation policies are appropriately funded and available in each electric and natural gas distribution territory.⁴

To assist in fulfilling its universal service obligations, the Commission established standard reporting requirements for universal service and energy conservation for both the EDCs and the NGDCs.⁵ The Universal Service and Energy Conservation Reporting Requirements⁶ (USRR) became effective August 8, 1998, for EDCs and December 16, 2000, for NGDCs. This data assists the Commission in monitoring the progress of the EDCs and NGDCs in achieving universal service in their respective service territories. Beginning with 2003 data, FirstEnergy Corp. requested permission to identify and report separately on the four FirstEnergy utilities: Metropolitan Edison (Met-Ed), Pennsylvania Electric (Penelec), Pennsylvania Power (Penn Power) and West Penn Power (West Penn). The other utilities subjected to these reporting requirements are Duquesne Light (Duquesne), PECO-Electric, PPL Electric Utilities (PPL), Columbia Gas of Pennsylvania (Columbia), National Fuel Gas (NFG), PECO-Gas, Peoples Natural Gas (Peoples), Peoples-Equitable Division (Peoples-Equitable),⁷ Philadelphia Gas Works (PGW),⁸ UGI Utilities Inc. (UGI North, formerly UGI Penn Natural, and UGI South, formerly UGI Gas).⁹

Each year, the EDCs and NGDCs report the previous year's data on April 1. The PUC then conducts a data-cleaning and error-checking process, including both written and verbal dialogue between the PUC and public utilities. Uniformity issues are documented in various tables, charts and appendices and also are discussed in more detail in later chapters. The PUC continues to work with the public utilities to obtain uniform data that fully complies with the regulations.¹⁰

¹ 66 Pa. C.S. §§ 2801-2812

² 66 Pa. C.S. Chapter 22

³ 66 Pa. C.S. §§ 2203(7), §§ 2802(10)

⁴ 66 Pa. C.S. §§ 2203(8), §§ 2804(9)

⁵ 52 Pa. Code §§ 54.71–54.78, §§ 62.1-62.8

⁶ 52 Pa. Code § 54.75(2)(ii)(C)(III) for EDCs and 52 Pa. Code § 62.5 (2)(ii)(C)(III) for NGDCs

⁷ On December 18, 2013, Equitable Gas was merged into Peoples Natural Gas (Peoples). The 2018 Universal Services Report reflects separate data for Peoples and Peoples-Equitable.

⁸ 66 Pa. C.S. §§1403 includes Philadelphia Gas Works (PGW), a city natural gas distribution operation, within the category of natural gas distribution utilities.

⁹ On September 20, 2018, at Docket Nos. A-2018-3000381, the Commission approved the merger of UGI Utilities, Inc. – UGI Gas Division, UGI Penn Natural Gas, Inc., UGI Central Penn Gas, Inc. – into one entity with separate rate districts corresponding to their existing service territories, as UGI South, UGI North, and UGI Central, respectively.

¹⁰ As part of this endeavor, the Commission established the Universal Service Reporting Working Group on May 3, 2019, at Docket No. M-2017-2587711, with the goal of standardizing universal service reporting protocols for data definitions, tracking, and reporting. Information related to the Universal Service Reporting Working Group can be found at Docket No. M-2019-3011814.

Treatment of Confirmed Low-Income Data Among the Collections Performance Data

A low-income customer is defined as one whose household income is at or below 150 percent of the federal poverty income guidelines (FPIG).¹¹ A confirmed low-income customer is one whose gross household income is within this FPIG level. We have included collection data about confirmed low-income customers for only a select number of collections performance measures. The confirmed low-income data tables are subsets of the Residential data tables appearing in Chapter 2 and are reported separately in the USRR.

Universal Service Programs

Universal Service is a collective name applied to the policies, protections and services that help low-income customers maintain public utility service and includes payment assistance programs, termination of service protections, energy reduction programs, and consumer education.¹² The Commission has made the Bureau of Consumer Services (BCS) responsible for monitoring and evaluating utilities' universal service programs. The goal in monitoring these programs is to increase the effectiveness of public utility collections while protecting the public's health and safety. There are four individual universal service programs.

The **Low-Income Usage Reduction Programs (LIURPs)** are energy conservation and education programs. Qualifying households receive an energy audit to assess household condition and energy usage; free installation of energy conservation and energy efficiency measures such as insulation, air sealing, and appliance installation if cost effective; and free education on energy conservation and usage reduction.

Customer Assistance Programs (CAPs) are payment assistance and debt forgiveness programs for payment-troubled households. CAPs are intended to provide affordable monthly bills based on a set energy burden standard. These lower rates are applied to ongoing usage as long as the household remains current and timely in paying its monthly customer assistance payments. CAP rates may take the form of a discounted price on actual usage on either all or a portion of the usage, a percentage of the monthly bill, or a monthly amount that is calculated upon a percentage of the household income. Percentage of income plans are correlated directly to the household's income and the Commission-determined allowable energy burden percentage. CAP's debt forgiveness feature freezes a household's unpaid past debt upon entry into the program. As long as the household remains current and timely on their future payments, the past debt is not collected and is forgiven in incremental amounts over time.

Customer Assistance and Referral Evaluation Services (CARES) are social service and referral programs for households encountering some form of extenuating circumstance or emergency that results in the household's inability to pay for public utility service. Qualifying households may receive counseling and/or direct referrals to community resources that can aid in resolving the emergency.

Hardship Funds are programs that make cash grants available to qualifying households to assist in the payment of outstanding debt owed to the public utility. They are funded through contributions made by the public that are matched by, and paid directly to, the public utility.

¹¹ See Appendix 3

¹² Electricity Generation Customer Choice and Competition Act at 66 Pa.C.S.A. §2803 and Natural Gas Choice Competition Act at 66 Pa.C.S.A. §2202.

LIURP Regulations Review

On December 16, 2016, the Commission issued a Secretarial Letter entitled Initiative to Review and Revise the Existing Low-Income Usage Reduction Program (LIURP) Regulations at 52 Pa. Code §§ 58.1 – 58.18, under Docket No. L-2016-2557886. The proceeding is still ongoing at the time of this publication.

CAP Policy Statement

On April 9, 2010, the PUC suspended portions¹³ of the CAP policy statement.¹⁴ The Department of Human Services' (DHS) policy change regarding the application of Low Income Home Energy Assistance Program¹⁵ (LIHEAP) grants to a distribution utility's CAP made those sections inconsistent with its administration of LIHEAP.¹⁶ The suspension of Sections 69.265(9)(ii-iii) of the Commission's regulations is still in effect.

Treatment of PECO Data

PECO serves three types of customers: those who receive only electric service (electric only); those who receive both electric and gas service (combination/electric and gas); and those who receive only gas service (gas only). PECO also reports the electric and gas data separately. In order to split the second group (combination/electric and gas) for some of the data variables, PECO uses an allocation factor consistent with PECO's gas base rate filing of March 31, 2008. The updated annual allocation factor for 2018 splits the combination group into 85 percent electric and 15 percent gas.

Responsible Utility Customer Protection Act

Act 201 of 2004¹⁷ changed the rules that apply to cash deposits, reconnection of service, termination of service, payment arrangements, and the filing of termination complaints by consumers for electric, gas, and water. The goal was to increase timely collections while ensuring that service is available to all customers based on equitable terms and conditions.¹⁸ The law is applicable to EDCs, water distribution utilities, and NGDCs with an annual operating income in excess of \$6,000,000.¹⁹ Steam and wastewater utilities are not covered by Chapter 14. On October 22, 2014, Chapter 14 was revised and renewed for a period of 10 years. The Commission recently amended Chapter 56 to make these regulations consistent with new Chapter 14.²⁰ BCS is required to provide a Report detailing the impact of Chapter 14 every five years.²¹ The next report is due in December 2019.

¹³ 52 Pa. Code §§ 69.265(9)(ii-iii)

¹⁴ Amendments were made to the CAP Policy Statement in an Order entered on November 5, 2019, at Docket No. M-2019-3012599. These amendments may impact future reports, beginning with 2020 data.

¹⁵ LIHEAP is a federally-funded program, administered by DHS, which enables the state to help low-income households meet their home heating needs.

¹⁶ Set forth in DHS's 2010 Final LIHEAP State Plan

¹⁷ 66 Pa.C.S. §§1401-1418

¹⁸ 66 Pa. C.S. §1402

¹⁹ Small natural gas distribution utilities may voluntarily "opt in" to Chapter 14. 66 Pa. C.S. §1403.

²⁰ Docket no. L-2015-2508421, published in Pennsylvania Bulletin June 1, 2019.

²¹ http://www.puc.state.pa.us/general/publications_reports/pdf/Chapter14-Biennial121414.pdf

2. Collection Performance

The regulations require EDCs and NGDCs to report various residential and confirmed low-income collection data. The following report reviews each of the collection measures and uses the data to arrive at calculated variables that are more useful in analyzing trends in collection performance. All of the data and statistics used in this chapter are drawn from information submitted by the public utilities. **Industry averages may be calculated based on category totals and may not represent an average of rates shown in the tables.** Additionally, totals may be affected by rounding.

It is also important to note that we have reflected both the number of confirmed low-income customers and the number of estimated low-income customers in a public utility's given service territory. Most confirmed low-income households are verified through the customer's receipt of a LIHEAP grant, enrollment in a Universal Service program or determined during the course of making a payment arrangement.

Average Number of Residential Customers

The number of residential customers represents an average of the 12 months of month-end data reported by the public utilities. The data includes all residential customers, including universal service program recipients.

Average Number of Residential Electric Customers – 2016-2018

Utility	2016 Residential Customers	2017 Residential Customers	2018 Residential Customers
Duquesne	526,283	532,204	535,487
Met-Ed	495,698	499,192	502,110
PECO-Electric	1,450,942	1,463,266	1,476,268
Penelec	501,820	501,533	501,456
Penn Power	143,536	144,286	145,285
PPL	1,231,155	1,223,076	1,227,683
West Penn	623,830	624,914	626,454
Total/Industry Average	4,973,264	4,988,471	5,014,743

Average Number of Residential Natural Gas Customers - 2016-2018

Utility	2016 Residential Customers	2017 Residential Customers	2018 Residential Customers
Columbia	390,394	393,410	396,835
NFG	197,992	196,950	197,108
PECO-Gas	470,133	480,586	480,731
Peoples	331,814	333,761	334,790
Peoples-Equitable	243,371	247,930	248,408
PGW	473,019	474,960	477,533
UGI South	345,693	352,720	361,789
UGI North	152,761	154,319	156,554
Total/Industry Average	2,605,177	2,634,636	2,653,748

Average Number of Confirmed Low-Income Electric Customers

Utility	Number of Confirmed Low-Income Customers	Percent of Residential Customers
Duquesne	49,346	9.2%
Met-Ed	72,200	14.4%
PECO-Electric	146,100	9.9%
Penelec	90,502	18.0%
Penn Power	20,087	13.8%
PPL	189,826	15.5%
West Penn	72,291	11.5%
Total/Industry Average	640,352	12.8%

Average Number of Confirmed Low-Income Natural Gas Customers

Utility	Number of Confirmed Low-Income Customers	Percent of Residential Customers
Columbia	67,590	17.0%
NFG	22,423	11.4%
PECO-Gas	25,704	5.3%
Peoples	60,262	18.0%
Peoples-Equitable	44,714	18.0%
PGW	149,217	31.2%
UGI South	34,802	9.6%
UGI North	21,958	14.0%
Total/Industry Average	426,670	16.1%

Average Number of Confirmed Low-Income Electric Customers – 2016-2018

Utility	2016 Number of Confirmed Low-Income Customers	2017 Number of Confirmed Low-Income Customers	2018 Number of Confirmed Low-Income Customers
Duquesne	45,065	48,500	49,346
Met-Ed	67,415	69,787	72,200
PECO-Electric	169,370	155,803	146,100
Penelec	84,466	88,036	90,502
Penn Power	19,344	19,695	20,087
PPL	176,938	181,782	189,826
West Penn	64,026	68,644	72,291
Total/Industry Average	626,624	632,247	640,352

Average Number of Confirmed Low-Income Natural Gas Customers – 2016-2018

Utility	2016 Number of Confirmed Low-Income Customers	2017 Number of Confirmed Low-Income Customers	2018 Number of Confirmed Low-Income Customers
Columbia	68,178	67,959	67,590
NFG	26,030	25,612	22,423
PECO-Gas	32,163	27,784	25,704
Peoples	59,727	60,077	60,262
Peoples-Equitable	43,807	44,627	44,714
PGW	148,995	146,488	149,217
UGI South	34,269	33,508	34,802
UGI North	23,061	21,973	21,958
Total/Industry Average	436,230	428,028	426,670

The estimated low-income customers represent the public utility's approximation of its total (maximum) population of low-income customers, and is based on the latest census data available at the time of reporting. Census data is compiled by Pennsylvania State University annually and sent to the Commission for distribution to the public utilities for use in determining the estimated number of low-income customers.

Number of Estimated Low-Income Electric Customers

Utility	Number of Estimated Low-Income Customers	Estimated Percent of Residential Customers
Duquesne	95,316	17.8%
Met-Ed	126,816	25.3%
PECO-Electric	389,621	26.4%
Penelec	166,285	33.2%
Penn Power	38,733	26.7%
PPL	258,786	21.1%
West Penn	172,244	27.5%
Total/Industry Average	1,247,801	24.9%

Number of Estimated Low-Income Natural Gas Customers

Utility	Number of Estimated Low-Income Customers	Estimated Percent of Residential Customers
Columbia	99,925	25.2%
NFG	59,009	29.9%
PECO-Gas	74,121	15.4%
Peoples	77,002	23.0%
Peoples-Equitable	54,650	22.0%
PGW	206,533	43.2%
UGI South	90,220	24.9%
UGI North	47,882	30.6%
Total/Industry Average	709,342	26.7%

Number of Estimated Low-Income Electric Customers – 2016-2018

Utility	2016 Number of Estimated Low-Income Customers	2017 Number of Estimated Low-Income Customers	2018 Number of Estimated Low-Income Customers
Duquesne	134,808	134,808	95,316
Met-Ed	123,432	126,209	126,816
PECO-Electric	381,799	386,185	389,621
Penelec	164,713	166,354	166,285
Penn Power	38,034	38,499	38,733
PPL	322,692	262,000	258,786
West Penn	170,286	171,806	172,244
Total/Industry Average	1,335,764	1,285,861	1,247,801

Number of Estimated Low-Income Natural Gas Customers - 2016-2018

Utility	2016 Number of Estimated Low-Income Customers	2017 Number of Estimated Low-Income Customers	2018 Number of Estimated Low-Income Customers
Columbia	98,375	101,375	99,925
NFG	59,334	58,785	59,009
PECO-Gas	69,527	73,381	74,121
Peoples	92,745	89,417	77,002
Peoples-Equitable	67,637	65,056	54,650
PGW	194,884	172,885	206,533
UGI South	91,478	92,051	90,220
UGI North	49,410	49,394	47,882
Total/Industry Average	723,390	702,344	709,342

Payment Troubled Customers

A payment troubled customer is a customer who has failed to maintain one or more payment arrangements in a 1-year period.²² A **payment arrangement**²³ is an arrangement in which a customer who admits liability for billed service is permitted to pay the unpaid balance in one or more payments. Absent a change in income, the PUC can only offer a second payment arrangement to a payment troubled customer when all "catch-up" arrears are paid, or when a previous arrangement has been satisfied.²⁴ The public utilities have no restrictions on the number or terms of any payment arrangements they may choose to offer to payment troubled customers.

The following tables reflect an average of the 12 months of month-end data reported by the public utilities for payment troubled customer totals, ²⁵ and include both residential and confirmed low-income subcategory to allow for the presentation of the percent of payment troubled customers which are confirmed low-income.

Average Electric Payment Troubled Customers

Utility	Residential	Confirmed Low-Income	Percent of Payment Troubled Customers which are Confirmed Low-Income
Duquesne	798	243	30.5%
Met-Ed	696	465	66.8%
PECO-Electric	2,367	480	20.3%
Penelec	672	476	70.8%
Penn Power	155	109	70.3%
PPL	206,835	65,670	31.8%
West Penn	567	343	60.5%
Total/Industry Average	212,090	67,786	32.0%

Average Natural Gas Payment Troubled Customers

Utility	Residential	Confirmed Low-Income	Percent of Payment Troubled Customers which are Confirmed Low-Income
Columbia	13,475	7,816	58.0%
NFG	8,085	5,060	62.6%
PECO-Gas	678	132	19.5%
Peoples	11,520	5,870	51.0%
Peoples-Equitable	8,092	4,285	53.0%
PGW	34,627	29,373	84.9%
UGI South	10,110	9,538	94.3%
UGI North	5,528	5,199	94.1%
Total/Industry Average	92,115	67,273	73.0%

²² 52 Pa. Code § 54.72 or § 62.2

²³ 52 Pa. Code, Chapter 56

²⁴ 66 Pa. C.S. §1405(d)

²⁵ 52 Pa. Code § 54.75(1)(vii) or § 62.5(a)(1)(x)

Number of Payment Arrangements

The method²⁶ by which utilities determine the total number of payment arrangements for reporting also takes into consideration the limitations in documenting and tracking payment arrangements. This results in treating a broken payment arrangement that is reinstated due to a "catch-up" payment as a new payment arrangement. The public utility and PUC-granted payment arrangement requests are included in this category. However, CAP payment plans are not included in the count of payment arrangements.

The following tables reflect year-end payment arrangement totals, and include both all residential and confirmed low-income categories to allow for the presentation of the percent of payment arrangements which are confirmed low-income.

Electric Payment Arrangements

Utility	Residential	Confirmed Low-Income	Percent of Payment Arrangements which are Confirmed Low-Income
Duquesne	33,334	8,622	25.9%
Met-Ed	43,034	25,657	59.6%
PECO-Electric	65,525	9,317	14.2%
Penelec	43,057	28,662	66.6%
Penn Power	9,824	6,157	62.7%
PPL	120,568	76,896	63.8%
West Penn	41,747	23,787	57.0%
Total/Industry Average	357,089	179,098	50.2%

Natural Gas Payment Arrangements

Utility	Residential	Confirmed Low-Income	Percent of Payment Arrangements which are Confirmed Low-Income
Columbia	27,781	15,735	56.6%
NFG	18,357	11,522	62.8%
PECO-Gas	25,443	2,531	10.0%
Peoples	24,992	7,877	31.5%
Peoples-Equitable	18,539	9,425	50.8%
PGW	85,067	61,532	72.3%
UGI South	25,817	23,241	90.0%
UGI North	13,958	12,527	89.8%
Total/Industry Average	239,954	144,390	60.2%

²⁶ 52 Pa. Code § 54.75(1)(i) or § 62.5(a)(1)(i)

Electric Payment Arrangements - Residential Electric Customers - 2016-2018

Utility	2016 Payment Arrangements	2017 Payment Arrangements	2018 Payment Arrangements	Percent Change 2016-18
Duquesne	28,253	28,691	33,334	18.0%
Met-Ed	37,429	38,305	43,034	15.0%
PECO-Electric	72,169	65,563	65,525	-9.2%
Penelec	38,827	39,435	43,057	10.9%
Penn Power	10,058	8,260	9,824	-2.3%
PPL	111,673	122,421	120,568	8.0%
West Penn	37,322	33,632	41,747	11.9%
Total/Industry Average	335,731	336,307	357,089	6.4%

^{*}Duquesne performed limited credit and collection activities in 2016 due to a system conversion.

Natural Gas Payment Arrangements - Residential Natural Gas Customers - 2016-2018

Utility	2016 Payment Arrangements	2017 Payment Arrangements	2018 Payment Arrangements	Percent Change 2016-18
Columbia	25,275	24,597	27,781	9.9%
NFG	10,850	10,836	18,357	69.2%
PECO-Gas	26,563	24,896	25,443	-4.2%
Peoples	12,435	15,752	24,992	101.0%
Peoples-Equitable	10,893	13,073	18,539	70.2%
PGW	67,057	83,184	85,067	26.9%
UGI South	31,042	**28,770	**25,817	-16.8%
UGI North	20,537	**14,857	**13,958	-32.0%
Total/Industry Average	204,652	215,965	239,954	17.2%

^{*}Peoples-Equitable and NFG performed limited credit and collections activities in 2016 due to a system conversion.

Electric Payment Arrangements - Confirmed Low-Income Electric Customers - 2016-2018

Utility	2016 Payment Arrangements	2017 Payment Arrangements	2018 Payment Arrangements	Percent Change 2016-18
Duquesne	2,651	5,881	8,622	225.2%
Met-Ed	22,951	22,669	25,657	11.8%
PECO-Electric	9,889	8,417	9,317	-5.8%
Penelec	26,025	26,002	28,662	10.1%
Penn Power	6,271	5,303	6,157	-1.8%
PPL	75,048	80,109	76,896	2.5%
West Penn	21,359	18,389	23,787	11.4%
Total/Industry Average	164,194	166,770	179,098	9.1%

^{*}Duquesne performed limited credit and collection activities in 2016 due to a system conversion.

^{**}UGI South and UGI North performed limited credit and collection activities for most of 2017 through April of 2018 due to a system conversion.

Natural Gas Payment Arrangements – Confirmed Low-Income Natural Gas Customers – 2016-2018

Utility	2016 Payment Arrangements	2017 Payment Arrangements	2018 Payment Arrangements	Percent Change 2016-18
Columbia	16,751	15,339	15,735	-6.1%
NFG	6,361	6,194	11,522	81.1%
PECO-Gas	2,802	2,422	2,531	-9.7%
Peoples	5,989	7,654	7,877	31.5%
Peoples-Equitable	5,637	6,816	9,425	67.2%
PGW	49,659	61,301	61,532	23.9%
UGI South	25,995	**23,772	**23,241	-10.6%
UGI North	16,800	**12,024	**12,527	-25.4%
Total/Industry Average	129,994	135,522	144,390	11.1%

^{*}Peoples-Equitable and NFG performed limited credit and collection activities in 2016 due to a system conversion.

Termination of Service

Termination of public utility service is the most serious consequence of customer nonpayment and is viewed as a last resort when customers fail to meet their payment obligations. The termination rate is calculated by dividing the number of service terminations by the number of residential customers, allowing for a comparison of termination activities regardless of the number of residential consumers. Any significant increase in a termination rate could indicate a trend or pattern that the Commission may need to investigate.

Terminations - Residential Electric Customers - 2016-2018

Utility	2016 Terminations	2017 Terminations	2018 Terminations	Percent Change 2016-18
Duquesne	*12,726	21,575	26,119	105.2%
Met-Ed	25,276	23,870	24,099	-4.7%
PECO-Electric	84,736	89,257	84,893	<1.0%
Penelec	22,121	21,096	19,949	-9.8%
Penn Power	4,651	4,360	4,089	-12.1%
PPL	40,849	42,216	44,971	10.1%
West Penn	14,878	14,234	13,577	-8.7%
Total/Industry Average	205,237	216,608	217,697	6.1%

^{*}Duquesne performed limited credit and collection activities in 2016 due to a system conversion.

^{**}UGI South and UGI North performed limited credit and collection activities for most of 2017 through April of 2018 due to a system conversion.

Terminations - Residential Natural Gas Customers - 2016-2018

Utility	2016 Terminations	2017 Terminations	2018 Terminations	Percent Change 2016-18
Columbia	9,945	10,728	10,859	9.2%
NFG	*1,422	5,490	6,449	353.5%
PECO-Gas	20,755	19,813	19,815	-4.5%
Peoples	7,536	9,744	9,707	28.8%
Peoples-Equitable	*5,845	7,757	8,622	47.5%
PGW	25,805	27,443	25,576	-1.0 %
UGI South	12,029	**8,580	15,924	32.4%
UGI North	6,826	**4,840	8,243	20.8%
Total/Industry Average	90,163	94,395	105,195	16.7%

^{*}Peoples-Equitable and NFG performed limited credit and collections activities in 2016 due to a system conversion.

Terminations - Confirmed Low-Income Electric Customers - 2016-2018

Utility	2016 Terminations	2017 Terminations	2018 Terminations	Percent Change 2016-18
Duquesne	*438	4,301	7,600	1635.2%
Met-Ed	13,638	12,769	13,246	-2.9%
PECO-Electric	23,801	21,950	22,657	-4.8%
Penelec	13,631	12,910	12,561	-7.9%
Penn Power	2,764	2,484	2,431	-12.1%
PPL	33,075	30,717	27,433	-17.1%
West Penn	8,090	7,860	7,631	-5.7%
Total/Industry Average	95,437	92,991	93,559	-2.0%

^{*}Duquesne performed limited credit and collection activities in 2016 due to a system conversion.

^{**}UGI South and UGI North performed limited credit and collection activities for most of 2017 through April of 2018 due to a system conversion.

Terminations - Confirmed Low-Income Natural Gas Customers - 2016-2018

Utility	2016 Terminations	2017 Terminations	2018 Terminations	Percent Change 2016-18
Columbia	6,030	6,425	6,314	4.7%
NFG	*861	3,835	3,710	330.9%
PECO-Gas	5,390	4,917	4,990	-7.4%
Peoples	1,959	2,535	2,366	20.8%
Peoples-Equitable	*1,106	1,397	1,527	38.1%
PGW	18,757	19,887	17,567	-6.3%
UGI South	7,716	5,649	**593	-92.3%
UGI North	4,459	3,357	**513	-88.5%
Total/Industry Average	46,278	48,002	37,580	-21.2%

^{*}Peoples-Equitable and NFG performed limited credit and collection activities in 2016 due to a system conversion.

Termination Rate - Residential Electric Customers - 2016-2018

Utility	2016 Termination Rate	2017 Termination Rate	2018 Termination Rate	Percent Change 2016-18
Duquesne	*2.4%	4.1%	4.9%	104.2%
Met-Ed	5.1%	4.8%	4.8%	-5.9%
PECO-Electric	5.8%	6.1%	5.8%	0.0%
Penelec	4.4%	4.2%	4.0%	-9.1%
Penn Power	3.2%	3.0%	2.8%	-12.5%
PPL	3.3%	3.5%	3.7%	12.1%
West Penn	2.4%	2.3%	2.2%	-8.3%
Total/Industry Average	4.1%	4.3%	4.3%	4.9%

^{*}Duquesne performed limited credit and collection activities in 2016 due to a system conversion.

^{**}UGI South and UGI North performed limited credit and collection activities for most of 2017 through April of 2018 due to a system conversion.

Termination Rate - Residential Natural Gas Customers - 2016-2018

Utility	2016 Termination Rate	2017 Termination Rate	2018 Termination Rate	Percent Change 2016-18
Columbia	2.5%	2.7%	2.7%	8.0%
NFG	*0.7%	2.8%	3.3%	371.4%
PECO-Gas	4.4%	4.1%	4.1%	-6.8%
Peoples	2.3%	2.9%	2.9%	26.1%
Peoples-Equitable	*2.4%	3.1%	3.5%	45.8%
PGW	5.5%	5.8%	5.4%	-1.8%
UGI South	3.5%	**2.4%	4.4%	25.7%
UGI North	4.5%	**3.1%	5.3%	17.8%
Total/Industry Average	3.5%	3.6%	4.0%	14.3%

^{*}Peoples-Equitable and NFG performed limited credit and collection activities in 2016 due to a system conversion.

Termination Rate - Confirmed Low-Income Electric Customers - 2016-2018

Utility	2016 Termination Rate	2017 Termination Rate	2018 Termination Rate	Percent Change 2016-18
Duquesne	*1.0%	8.9%	15.4%	1,440.0%
Met-Ed	20.2%	18.3%	18.3%	9.4%
PECO-Electric	14.1%	14.1%	15.5%	9.9%
Penelec	16.1%	14.7%	13.9%	-13.7%
Penn Power	14.3%	12.6%	12.1%	-15.4%
PPL	18.7%	16.9%	14.5%	-22.5%
West Penn	12.6%	11.5%	10.6%	-15.9%
Total/Industry Average	15.2%	14.7%	14.6%	-4.0%

^{*}Duquesne performed limited credit and collection activities in 2016 due to a system conversion.

^{**}UGI South and UGI North performed limited credit and collection activities for most of 2017 through April of 2018 due to a system conversion.

Termination Rate - Confirmed Low-Income Natural Gas Customers - 2016-2018

Utility	2016 Termination Rate	2017 Termination Rate	2018 Termination Rate	Percent Change 2016-18
Columbia	8.8%	9.5%	9.3%	5.7%
NFG	*3.3%	15.0%	16.5%	400.0%
PECO-Gas	16.8%	17.7%	19.4%	15.5%
Peoples	3.3%	4.2%	3.9%	18.2%
Peoples-Equitable	*2.5%	3.1%	3.4%	36.0%
PGW	12.6%	13.6%	11.8%	-6.4%
UGI South	22.5%	16.9%	**1.7%	-92.4%
UGI North	19.3%	15.3%	**2.3%	-88.1%
Total/Industry Average	10.6%	11.2%	8.8%	-19.8%

^{*}Peoples-Equitable and NFG performed limited credit and collection activities in 2016 due to a system conversion.

Reconnection of Service

Reconnection of service occurs when customers either pay their debt in full or make a significant up-front payment to the public utility and agree to a payment arrangement for the balance owed. The **reconnection rate** is calculated by dividing the number of service reconnections by the number of terminations, allowing for a comparison of reconnection activities regardless of the number of residential consumers. The result is generally indicative of the success of a customer, whose service has been terminated, at getting service reconnected.

Reconnections - Residential Electric Customers - 2016-2018

Utility	2016 Reconnections	2017 Reconnections	2018 Reconnections	Percent Change 2016-18
Duquesne	*8,710	15,622	19,522	124.1%
Met-Ed	20,811	19,607	19,916	-4.3%
PECO-Electric	69,913	74,228	71,461	2.2%
Penelec	16,942	15,957	14,882	-12.2%
Penn Power	4,201	3,415	3,186	-24.2%
PPL	30,669	31,280	31,666	3.3%
West Penn	11,744	10,812	10,104	-14.0%
Total/Industry Average	162,990	170,921	170,737	4.8%

^{*}Duquesne performed limited credit and collection activities in 2016 due to a system conversion.

^{**}UGI South and UGI North performed limited credit and collection activities for most of 2017 through April of 2018 due to a system conversion.

Reconnections - Residential Natural Gas Customers - 2016-2018

Utility	2016 Reconnections	2017 Reconnections	2018 Reconnections	Percent Change 2016-18
Columbia	5,199	5,878	6,054	16.5%
NFG	*913	4,578	4,224	362.7%
PECO-Gas	17,242	17,061	17,621	2.2%
Peoples	5,081	5,884	6,658	31.0%
Peoples-Equitable	*4,006	5,171	6,055	51.2%
PGW	16,771	18,324	17,657	5.3%
UGI South	7,556	**4,816	10,806	43.0%
UGI North	4,318	**2,799	5,539	28.3%
Total/Industry Average	61,086	64,511	74,614	22.2%

^{*}Peoples-Equitable and NFG performed limited credit and collection activities in 2016 due to a system conversion.

Reconnections - Confirmed Low-Income Electric Customers - 2016-2018

Utility	2016 Reconnections	2017 Reconnections	2018 Reconnections	Percent Change 2016-18
Duquesne	*336	3,233	5,875	1,648.5%
Met-Ed	10,110	9,461	9,931	-1.8%
PECO-Electric	20,081	19,077	20,212	6.5%
Penelec	9,266	8,898	8,567	-7.5%
Penn Power	2,041	1,660	1,620	-20.6%
PPL	19,365	21,207	20,351	5.1%
West Penn	5,643	5,098	5,056	-10.4%
Total/Industry Average	66,842	68,634	71,612	7.1%

^{*}Duquesne performed limited credit and collection activities in 2016 due to a system conversion.

^{**}UGI South and UGI North performed limited credit and collection activities for most of 2017 through April of 2018 due to a system conversion.

Reconnections - Confirmed Low-Income Natural Gas Customers - 2016-2018

Utility	2016 Reconnections	2017 Reconnections	2018 Reconnections	Percent Change 2016-18
Columbia	2,753	3,123	3,133	13.8%
NFG	*435	2,137	1,783	309.9%
PECO-Gas	4,201	4,022	4,252	1.2%
Peoples	1,321	1,528	1,736	31.4%
Peoples-Equitable	*720	929	1,090	51.4%
PGW	13,492	14,702	13,404	-1.0%
UGI South	4,362	2,511	**691	-84.2%
UGI North	2,430	1,566	**548	-77.5%
Total/Industry Average	29,714	30,518	26,637	-14.5%

^{*}Peoples-Equitable and NFG performed limited credit and collection activities in 2016 due to a system conversion.

Reconnection Rate - Residential Electric Customers - 2016-2018

Utility	2016 Reconnection Rate	2017 Reconnection Rate	2018 Reconnection Rate	Percent Change 2016-18
Duquesne	68.4%	72.4%	74.7%	9.2%
Met-Ed	82.3%	82.1%	82.6%	0.4%
PECO-Electric	82.5%	83.2%	84.2%	2.1%
Penelec	76.6%	75.6%	74.6%	-2.6%
Penn Power	90.3%	78.3%	77.9%	-13.7%
PPL	75.1%	74.1%	70.4%	-6.3%
West Penn	78.9%	76.0%	74.4%	-5.7%
Total/Industry Average	79.4%	78.9%	78.4%	-1.3%

^{**}UGI South and UGI North performed limited credit and collection activities for most of 2017 through April of 2018 due to a system conversion.

Reconnection Rate - Residential Natural Gas Customers - 2016-2018

Utility	2016 Reconnection Rate	2017 Reconnection Rate	2018 Reconnection Rate	Percent Change 2016-18
Columbia	52.3%	54.8%	55.8%	6.7%
NFG	*64.2%	83.4%	65.5%	2.0%
PECO-Gas	83.1%	86.1%	88.9%	7.0%
Peoples	67.4%	60.4%	68.6%	1.8%
Peoples-Equitable	*68.5%	66.7%	70.2%	2.5%
PGW	65.0%	66.8%	69.0%	6.2%
UGI South	62.8%	**56.1%	67.9%	8.1%
UGI North	63.3%	**57.8%	67.2%	6.2%
Total/Industry Average	67.8%	68.3%	70.9%	4.6%

^{*}Peoples-Equitable and NFG performed limited credit and collection activities in 2016 due to a system conversion.

Reconnection Rate - Confirmed Low-Income Electric Customers - 2016-2018

Utility	2016 Reconnection Rate	2017 Reconnection Rate	2018 Reconnection Rate	Percent Change 2016-18
Duquesne	76.7%	75.2%	77.3%	0.9%
Met-Ed	74.1%	74.1%	75.0%	1.2%
PECO-Electric	84.4%	86.9%	89.2%	5.7%
Penelec	68.0%	68.9%	68.2%	0.3%
Penn Power	73.8%	66.8%	66.6%	-9.8%
PPL	58.5%	69.0%	74.2%	26.8%
West Penn	69.8%	64.9%	66.3%	-5.0%
Total/Industry Average	70.0%	73.8%	76.5%	9.3%

^{**}UGI South and UGI North performed limited credit and collection activities for most of 2017 through April of 2018 due to a system conversion.

Reconnection Rate - Confirmed Low-Income Natural Gas Customers - 2016-2018

Utility	2016 Reconnection Rate	2017 Reconnection Rate	2018 Reconnection Rate	Percent Change 2016-18
Columbia	45.7%	48.6%	49.6%	8.5%
NFG	*50.5%	55.7%	48.1%	-4.8%
PECO-Gas	77.9%	81.8%	85.2%	9.4%
Peoples	67.4%	60.3%	73.4%	8.9%
Peoples-Equitable	*65.1%	66.5%	71.4%	9.7%
PGW	71.9%	73.9%	76.3%	6.1%
UGI South	56.5%	44.5%	**116.5%	106.2%
UGI North	54.5%	46.6%	**106.8%	96.0%
Total/Industry Average	64.2%	63.6%	69.6%	8.4%

^{*}Peoples-Equitable and NFG performed limited credit and collection activities in 2016 due to a system conversion.

Average Number of Customers in Debt

Two categories exist for reporting customers overdue or in debt. The first includes customers who are on a payment arrangement, and the second includes customers who are not on a payment arrangement. Those "on a payment arrangement" include both public utility and PUC-granted payment arrangements. Debt that is on a payment arrangement is considered active and is often easier to collect than debt not on a payment arrangement. Debt that is not on a payment arrangement can become "uncollectable debt." Uncollectable debt often leads to an increase in gross write-offs, which are recovered across all ratepayers in public utility rates.

Many factors affect the number of customers in debt, including customer income level and ability to pay, public utility collection practices, public utility termination practices, and the affordability of customer bills. Public utility collection policies vary and therefore also influence the "overdue" or "in debt" categorization.

One of the stated purposes of the Chapter 56 regulations²⁷ is to "provide functional alternatives to termination." Customers who make a payment arrangement on an outstanding balance have acknowledged that they are aware of the outstanding debt, and have avoided any imminent threat of termination.²⁸

Two factors affect the uniformity of the data reported regarding the number of overdue customers and the dollars in debt associated with those customers. First, public utilities use different methods for determining when an account is overdue. Public utilities consider either the due date of the bill or the transmittal date of the bill to be day zero. The transmittal date is 20 days before the due date. For USRR comparative purposes, public utilities are requested to consider the due date as day zero and to report debt that is at least 30 days overdue.

Duquesne Light, Met-Ed, Penelec, Penn Power, West Penn, Columbia, Peoples, Peoples-Equitable, UGI North and UGI South reported according to the method requested. The variance among the other EDCs and NGDCs shows a difference of no more than 20 days from that method. PECO Electric and Gas, PPL, and PGW report debt that is 10 days old, meaning these public utilities are overstating the debt compared to public utilities that reported debt as 30 days overdue. NFG reports debt that is about 40 days old, meaning NFG is understating its debt relative to the other public utilities.

^{**}UGI South and UGI North performed limited credit and collection activities for most of 2017 through April of 2018 due to a system conversion.

²⁷ 52 Pa. Code § 56.1

²⁸ 52 Pa. Code § 56.97

The second factor affecting the arrearage data uniformity is when a public utility moves a terminated or discontinued account from active status (included in the reporting) to inactive status (excluded from the reporting). Public utility collection policies and accounting practices affect the timing.

See Appendix 1 for a chart showing the different methods public utilities use to determine overdue accounts and how they compare to the preferred method (30 days overdue). See Appendix 2 for the methods public utilities use to determine when an account is removed from active status after termination of service or discontinuance of service.

CAP recipients are excluded from all data tables referencing the number of customers in debt, the dollars in debt, and gross residential write-offs.

The number of residential and confirmed low-income customers in debt on arrangement and not on arrangement represent an average of the 12 months of month-end data reported by the public utilities.

Average Number of Residential Electric Customers in Debt

Utility	Number of Customers in Debt on an Arrangement	Number of Customers in Debt Not on an Arrangement	Total of Customers in Debt
Duquesne	13,074	31,358	44,432
Met-Ed	19,550	25,731	45,281
PECO-Electric	17,123	86,494	103,616
Penelec	21,611	29,055	50,665
Penn Power	5,064	6,929	11,993
PPL	74,328	132,507	206,835
West Penn	20,398	31,649	52,047
Total/Industry Average	171,147	343,723	514,869

Average Number of Residential Natural Gas Customers in Debt

Utility	Number of Customers in Debt on an Arrangement	Number of Customers in Debt Not on an Arrangement	Total of Customers in Debt
Columbia	16,269	11,057	27,327
NFG	13,414	13,370	26,784
PECO-Gas	5,799	21,078	26,877
Peoples	11,143	17,383	28,526
Peoples-Equitable	7,194	13,982	21,176
PGW	22,969	62,546	85,514
UGI South	12,398	35,022	47,420
UGI North	6,680	15,594	22,274
Total/Industry Average	95,866	190,032	285,898

Average Number of Confirmed Low-Income Electric Customers in Debt

Utility	Number of Customers in Debt on an Arrangement	Number of Customers in Debt Not on an Arrangement	Total of Customers in Debt
Duquesne	3,289	3,459	6,748
Met-Ed	12,296	10,066	22,362
PECO-Electric	2,723	7,423	10,146
Penelec	14,754	13,206	27,959
Penn Power	3,330	2,891	6,221
PPL	22,769	42,901	65,670
West Penn	11,732	11,317	23,049
Total/Industry Average	70,893	91,263	162,155

Average Number of Confirmed Low-Income Natural Gas Customers in Debt

Utility	Number of Customers in Debt on an Arrangement	Number of Customers in Debt Not on an Arrangement	Total of Customers in Debt
Columbia	7,456	3,293	10,749
NFG	5,715	3,654	9,369
PECO-Gas	802	1,717	2,519
Peoples	4,413	5,335	9,748
Peoples-Equitable	3,994	3,823	7,817
PGW	16,315	3,489	19,804
UGI South	11,408	1,193	12,601
UGI North	6,117	1,018	7,135
Total/Industry Average	56,220	23,522	79,742

Average Number of Residential Electric Customers in Debt - 2016-2018

Utility	2016 Total of Customers in Debt	2017 Total of Customers in Debt	2018 Total of Customers in Debt	Percent Change 2016-18
Duquesne	78,459	46,149	44,432	-43.4%
Met-Ed	46,457	42,739	45,281	-2.5%
PECO-Electric	96,065	96,886	103,616	7.9%
Penelec	50,197	47,943	50,665	0.9%
Penn Power	12,840	11,833	11,993	-6.6%
PPL	215,376	212,174	206,835	-4.0%
West Penn	50,734	48,549	52,047	2.6%
Total/Industry Average	550,128	506,273	514,869	-6.4%

Average Number of Residential Natural Gas Customers in Debt - 2016-2018

Utility	2016 Total of Customers in Debt	2017 Total of Customers in Debt	2018 Total of Customers in Debt	Percent Change 2016-18
Columbia	27,691	26,619	27,327	-1.3%
NFG	17,853	23,760	26,784	50.0%
PECO-Gas	24,841	24,978	26,877	8.2%
Peoples	25,098	24,786	28,526	13.7%
Peoples-Equitable	21,300	19,965	21,176	-1.0%
PGW	81,596	86,230	85,514	4.8%
UGI South	29,428	35,094	*47,420	61.1%
UGI North	12,953	15,955	*22,274	72.0%
Total/Industry Average	240,760	257,387	*285,898	18.8%

^{*}UGI South and UGI North performed limited credit and collection activities for most of 2017 through April of 2018 due to a system conversion.

Average Number of Confirmed Low-Income Electric Customers in Debt - 2016-2018

Utility	2016 Total of Customers in Debt	2017 Total of Customers in Debt	2018 Total of Customers in Debt	Percent Change 2016-18
Duquesne	4,152	7,508	6,748	62.5%
Met-Ed	22,789	20,823	22,362	-1.9%
PECO-Electric	11,593	10,052	10,146	-12.5%
Penelec	27,379	26,273	27,959	2.1%
Penn Power	6,624	6,087	6,221	-6.1%
PPL	65,279	66,576	65,670	0.6%
West Penn	20,927	20,058	23,049	10.1%
Total/Industry Average	158,743	157,377	162,155	2.2%

Average Number of Confirmed Low-Income Natural Gas Customers in Debt - 2016-2018

Utility	2016 Total of Customers in Debt	2017 Total of Customers in Debt	2018 Total of Customers in Debt	Percent Change 2016-18
Columbia	12,294	11,059	10,749	-12.6%
NFG	6,324	9,252	9,369	48.1%
PECO-Gas	2,911	2,493	2,519	-13.4%
Peoples	8,608	8,613	9,748	13.2%
Peoples-Equitable	6,773	6,731	7,817	15.4%
PGW	15,733	19,451	19,804	25.9%
UGI South	12,260	12,046	12,601	2.8%
UGI North	6,542	6,598	7,135	9.1%
Total/Industry Avg	71,445	76,243	79,742	11.6%

Percent of Customers in Debt

The **percent of customers in debt** is a useful statistic that highlights utility collection activity and the need for universal service programs. A public utility with a low percent of its residential customers in debt should experience better cash flow and have a better credit rating than one with a high percent of its residential customers in debt. The percent of customers in debt is calculated by dividing the number of customers in debt by the total number of residential customers. This calculation is done for both groups of customers in debt – those on a payment arrangement and those not on a payment arrangement.

Percent of Total Residential Electric Customers in Debt

Utility	Customers in Debt on an Arrangement	Customers in Debt Not on an Arrangement	Total Percent of Customers in Debt
Duquesne	2.4%	5.9%	8.3%
Met-Ed	3.9%	5.1%	9.0%
PECO-Electric	1.2%	5.9%	7.0%
Penelec	4.3%	5.8%	10.1%
Penn Power	3.5%	4.8%	8.3%
PPL	6.1%	10.8%	16.8%
West Penn	3.3%	5.1%	8.3%
Total/Industry Average	3.4%	6.9%	10.3%

Percent of Total Residential Natural Gas Customers in Debt

Utility	Customers in Debt on an Arrangement	Customers in Debt Not on an Arrangement	Total Percent of Customers in Debt
Columbia	4.1%	2.8%	6.9%
NFG	6.8%	6.8%	13.6%
PECO-Gas	1.2%	4.4%	5.6%
Peoples	3.3%	5.2%	8.5%
Peoples-Equitable	2.9%	5.6%	8.5%
PGW	4.8%	13.1%	17.9%
UGI South	3.4%	9.7%	13.1%
UGI North	4.3%	10.0%	14.2%
Total/Industry Average	3.6%	7.2%	10.8%

Percent of Confirmed Low-Income Electric Customers in Debt

Utility	Customers in Debt on an Arrangement	Customers in Debt Not on an Arrangement	Total Percent of Customers in Debt
Duquesne	6.7%	7.0%	13.7%
Met-Ed	17.0%	13.9%	31.0%
PECO-Electric	1.9%	5.1%	6.9%
Penelec	16.3%	14.6%	30.9%
Penn Power	16.6%	14.4%	31.0%
PPL	12.0%	22.6%	34.6%
West Penn	16.2%	15.7%	31.9%
Total/Industry Average	11.1%	14.3%	25.3%

Percent of Confirmed Low-Income Natural Gas Customers in Debt

Utility	Customers in Debt on an Arrangement	Customers in Debt Not on an Arrangement	Total Percent of Customers in Debt
Columbia	11.0%	4.9%	15.9%
NFG	25.5%	16.3%	41.8%
PECO-Gas	3.1%	6.7%	9.8%
Peoples	7.3%	8.9%	16.2%
Peoples-Equitable	8.9%	8.5%	17.5%
PGW	10.9%	2.3%	13.3%
UGI South	32.8%	3.4%	36.2%
UGI North	27.9%	4.6%	32.5%
Total/Industry Average	13.2%	5.5%	18.7%

Residential Customer Debt in Dollars Owed

The amount of money owed has an impact on public utility expenses, making up part of the public utility's distribution charge. Higher dollars not on an **arrangement** represent greater risk for those dollars to be uncollectible.

Dollars in Debt - Residential Electric Customers

Utility	Dollars in Debt on an Arrangement	Dollars in Debt Not on an Arrangement	Total Dollars in Debt
Duquesne	\$11,504,194	\$7,958,481	\$19,462,675
Met-Ed	\$12,723,886	\$7,200,321	\$19,924,206
PECO-Electric	\$8,684,280	\$19,523,235	\$28,207,515
Penelec	\$14,734,333	\$7,924,180	\$22,658,514
Penn Power	\$3,840,061	\$2,064,814	\$5,904,875
PPL	\$37,174,341	\$55,181,939	\$92,356,281
West Penn	\$12,371,073	\$8,808,295	\$21,179,368
Total/Industry Average	\$101,032,167	\$108,661,265	\$209,693,434

Dollars in Debt – Residential Natural Gas Customers

Utility	Dollars in Debt on an Arrangement	Dollars in Debt Not on an Arrangement	Total Dollars in Debt
Columbia	\$9,911,122	\$3,944,726	\$13,855,849
NFG	\$1,913,885	\$3,192,658	\$5,106,543
PECO-Gas	\$3,345,282	\$6,949,305	\$10,294,587
Peoples	\$3,492,501	\$6,530,344	\$10,022,845
Peoples-Equitable	\$2,165,666	\$4,465,588	\$6,631,254
PGW	\$13,095,539	\$29,048,526	\$42,144,065
UGI South	\$7,449,784	\$6,481,510	\$13,931,294
UGI North	\$4,543,708	\$3,751,615	\$8,295,323
Total/Industry Average	\$45,917,487	\$64,364,272	\$110,281,760

Dollars in Debt – Confirmed Low-Income Electric Customers

Utility	Dollars in Debt on an Arrangement	Dollars in Debt Not on an Arrangement	Total Dollars in Debt
Duquesne	\$4,242,636	\$2,596,756	\$6,839,392
Met-Ed	\$8,480,655	\$3,487,991	\$11,968,646
PECO-Electric	\$1,982,867	\$3,471,997	\$5,454,863
Penelec	\$10,461,928	\$4,315,257	\$14,777,185
Penn Power	\$2,628,982	\$1,024,829	\$3,653,811
PPL	\$9,668,320	\$36,956,697	\$46,625,017
West Penn	\$7,473,871	\$4,190,429	\$11,664,300
Total/Industry Average	\$44,939,259	\$56,043,956	\$100,983,214

Dollars in Debt - Confirmed Low-Income Natural Gas Customers

Utility	Dollars in Debt on an Arrangement	Dollars in Debt Not on an Arrangement	Total Dollars in Debt
Columbia	\$5,136,113	\$1,340,195	\$6,476,308
NFG	\$958,309	\$1,565,221	\$2,523,530
PECO-Gas	\$710,642	\$1,287,345	\$1,997,986
Peoples	\$1,916,330	\$2,787,614	\$4,703,944
Peoples-Equitable	\$1,253,981	\$1,777,435	\$3,031,415
PGW	\$8,658,763	\$2,550,717	\$11,209,481
UGI South	\$7,005,679	\$410,566	\$7,416,246
UGI North	\$4,245,896	\$369,270	\$4,615,167
Total/Industry Average	\$29,885,713	\$12,088,363	\$41,974,077

Dollars in Debt - Residential Electric Customers - 2016-2018

Utility	2016 Total Dollars in Debt	2017 Total Dollars in Debt	2018 Total Dollars in Debt	Percent Change 2016-18
Duquesne	\$23,421,163	\$21,127,172	\$19,462,675	-16.9%
Met-Ed	\$20,089,702	\$17,263,485	\$19,924,206	-1.0%
PECO-Electric	\$27,459,958	\$26,316,954	\$28,207,515	2.7%
Penelec	\$20,488,054	\$19,305,202	\$22,658,514	10.6%
Penn Power	\$6,183,118	\$5,350,600	\$5,904,875	-4.5%
PPL	\$101,379,527	\$93,937,614	\$92,356,281	-8.9%
West Penn	\$17,604,367	\$17,341,825	\$21,179,368	20.3%
Total/Industry Average	\$216,625,889	\$200,642,852	\$209,693,434	-3.2%

Dollars in Debt - Residential Natural Gas Customers - 2016-2018

Utility	2016 Total Dollars in Debt	2017 Total Dollars in Debt	2018 Total Dollars in Debt	Percent Change 2016-18
Columbia	\$12,198,817	\$12,125,914	\$13,855,849	13.6%
NFG	\$4,686,567	\$4,968,503	\$5,106,543	8.9%
PECO-Gas	\$9,987,500	\$9,718,969	\$10,294,587	3.1%
Peoples	\$4,990,890	\$6,710,784	\$10,022,845	100.8%
Peoples-Equitable	\$4,041,024	\$4,794,464	\$6,631,254	64.1%
PGW	\$42,492,338	\$40,854,115	\$42,144,065	-1.0%
UGI South	\$6,348,278	\$7,933,919	*\$13,931,294	119.4%
UGI North	\$3,783,649	\$4,481,840	*\$8,295,323	119.2%
Total/Industry Average	\$88,529,063	\$91,588,508	\$110,281,760	24.6%

^{*}UGI South and UGI North performed limited credit and collection activities for most of 2017 through April of 2018 due to a system conversion.

Dollars in Debt - Confirmed Low-Income Electric Customers - 2016-2018

Utility	2016 Total CLI Dollars in Debt	2017 Total CLI Dollars in Debt	2018 Total CLI Dollars in Debt	Percent Change 2016-18
Duquesne	\$3,392,854	\$7,618,075	\$6,839,392	101.6%
Met-Ed	\$12,278,506	\$10,315,367	\$11,968,646	-2.5%
PECO-Electric	\$6,229,415	\$4,960,119	\$5,454,863	-12.4%
Penelec	\$13,562,576	\$12,450,341	\$14,777,185	9.0%
Penn Power	\$3,834,917	\$3,298,746	\$3,653,811	-4.7%
PPL	\$50,120,887	\$46,459,644	\$46,625,017	-7.0%
West Penn	\$8,943,780	\$8,785,974	\$11,664,300	30.4%
Total/Industry Average	\$98,362,935	\$93,888,266	\$100,983,214	2.7%

Dollars in Debt - Confirmed Low-Income Natural Gas Customers - 2016-2018

Utility	2016 Total CLI Dollars in Debt	2017 Total CLI Dollars in Debt	2018 Total CLI Dollars in Debt	Percent Change 2016-18
Columbia	\$6,512,732	\$6,079,091	\$6,476,308	-1.0%
NFG	\$2,469,326	\$2,642,970	\$2,523,530	2.2%
PECO-Gas	\$2,411,765	\$1,940,009	\$1,997,986	-17.2%
Peoples	\$2,218,184	\$3,371,091	\$4,703,944	112.1%
Peoples-Equitable	\$1,713,919	\$2,305,343	\$3,031,415	76.9%
PGW	\$9,572,276	\$10,903,801	\$11,209,481	17.1%
UGI South	\$4,026,123	\$4,748,568	*\$7,416,246	84.2%
UGI North	\$2,553,107	\$2,781,563	*\$4,615,167	80.8%
Total/Industry Average	\$31,477,432	\$34,772,436	\$41,974,077	33.3%

^{*}UGI South and UGI North experienced an increase in number of customers with arrearages as a result of delays in resuming collection activity in 2018.

Percent of Total Dollars Owed - On an Arrangement Versus Not on an Arrangement

The **percent of total dollars owed** in the two reporting categories is calculated by dividing the total dollars owed in a category by the overall total dollars owed. Higher percentages of dollars not on an arrangement represent greater uncollectible risk.

Percent of Dollars Owed on an Arrangement – Residential Electric Customers

Utility	Percent of Dollars Owed – On an Arrangement	Percent of Dollars Owed – Not on an Arrangement
Duquesne	59.1%	40.9%
Met-Ed	63.9%	36.1%
PECO-Electric	30.8%	69.2%
Penelec	65.0%	35.0%
Penn Power	65.0%	35.0%
PPL	40.3%	59.7%
West Penn	58.4%	41.6%
Total/Industry Average	48.2%	51.8%

Percent of Dollars Owed on an Agreement – Residential Natural Gas Customers

Utility	Percent of Dollars Owed – On an Arrangement	Percent of Dollars Owed – Not on an Arrangement
Columbia	71.5%	28.5%
NFG	37.5%	62.5%
PECO-Gas	32.5%	67.5%
Peoples	34.8%	65.2%
Peoples-Equitable	32.7%	67.3%
PGW	31.1%	68.9%
UGI South	53.5%	46.5%
UGI North	54.8%	45.2%
Total/Industry Average	41.6%	58.4%

Percent of Dollars Owed on an Arrangement – Confirmed Low-Income Electric Customers

Utility	Percent of Dollars Owed – on an Arrangement	Percent of Dollars Owed – Not on an Arrangement
Duquesne	62.0%	38.0%
Met-Ed	70.9%	29.1%
PECO-Electric	36.4%	63.6%
Penelec	70.8%	29.2%
Penn Power	72.0%	28.0%
PPL	20.7%	79.3%
West Penn	64.1%	35.9%
Total/Industry Average	44.5%	55.5%

Percent of Dollars Owed on an Arrangement – Confirmed Low-Income Natural Gas Customers

Utility	Percent of Dollars Owed – on an Arrangement	Percent of Dollars Owed – Not on an Arrangement
Columbia	79.3%	20.7%
NFG	38.0%	62.0%
PECO-Gas	35.6%	64.4%
Peoples	40.7%	59.3%
Peoples-Equitable	41.4%	58.6%
PGW	77.2%	22.8%
UGI South	94.5%	5.5%
UGI North	92.0%	8.0%
Total/Industry Average	71.2%	28.8%

Average Arrearage

Average arrearage is calculated by dividing the total dollars in debt by the number of customers in debt. This shows the average arrearage (debt) carried by each customer with an overdue balance. Larger average arrearages may take more time for customers to pay off and pose more of an uncollectible risk than smaller average arrearages.

Average Arrearage – Residential Electric Customers

Utility	Average Arrearage on an Arrangement	Average Arrearage Not on an Arrangement	Overall Average Arrearage
Duquesne	\$879.93	\$253.79	\$438.03
Met-Ed	\$650.85 \$279.83		\$440.02
PECO-Electric	\$507.18	\$225.72	\$272.23
Penelec	\$681.80	\$272.73	\$447.22
Penn Power	\$758.31	\$298.00	\$492.36
PPL	\$500.14	\$416.45	\$446.52
West Penn	\$606.48	\$278.31	\$406.93
Total/Industry Average	\$590.32	\$316.13	\$407.28

Average Arrearage – Residential Natural Gas Customers

Utility	Average Arrearage on an Arrangement	Average Arrearage Not on an Arrangement	Overall Average Arrearage	
Columbia	\$609.20	\$356.76	\$507.04	
NFG	\$142.68	\$238.79	\$190.66	
PECO-Gas	\$576.87	\$329.69	\$383.03	
Peoples	\$313.43	\$375.67	\$351.36	
Peoples-Equitable	\$301.04	\$319.38	\$313.15	
PGW	\$570.14	\$464.43	\$492.83	
UGI South	\$600.89	\$185.07	\$293.79	
UGI North	\$680.20	\$240.58	\$372.42	
Total/Industry Average	\$478.98	\$338.70	\$385.74	

Average Arrearage – Confirmed Low-Income Electric Customers

Utility	Average Arrearage on an Arrangement	Average Arrearage Not on an Arrangement	Overall Average Arrearage
Duquesne	\$1,289.95	\$750.72	\$1,013.54
Met-Ed	\$689.71	\$346.51	\$535.22
PECO-Electric	\$728.19	\$467.74	\$537.64
Penelec	\$709.09	\$326.76	\$528.53
Penn Power	\$789.48	\$354.49	\$587.33
PPL	\$424.63	\$861.44	\$709.99
West Penn	\$637.05	\$370.28	\$506.07
Total/Industry Average	\$633.90	\$614.09	\$622.76

Average Arrearage – Confirmed Low-Income Natural Gas Customers

Utility	Average Arrearage on an Arrangement	Average Arrearage Not on an Arrangement	Overall Average Arrearage
Columbia	\$688.86	\$406.98	\$602.49
NFG	\$167.68	\$428.36	\$269.36
PECO-Gas	\$886.09	\$749.76	\$792.98
Peoples	\$434.25	\$522.51	\$482.56
Peoples-Equitable	\$313.97	\$464.93	\$387.79
PGW	\$530.72	\$731.07	\$566.02
UGI South	\$614.10	\$344.15	\$588.52
UGI North	\$694.11	\$362.74	\$646.81
Total/Industry Average	\$531.59	\$513.92	\$526.37

Average Arrearage – Residential Electric Customers – 2016-2018

Utility	2016 Average Arrearage	2017 Average Arrearage	2018 Average Arrearage	Percent Change 2016-18
Duquesne	\$298.51	\$457.80	\$438.03	46.7%
Met-Ed	\$432.44	\$403.93	\$440.02	1.8%
PECO-Electric	\$285.85	\$271.63	\$272.23	-4.8%
Penelec	\$408.15	\$402.67	\$447.22	9.6%
Penn Power	\$481.55	\$452.18	\$492.36	2.2%
PPL	\$470.71	\$442.74	\$446.52	-5.1%
West Penn	\$346.99	\$357.20	\$406.93	17.3%
Total/Industry Average	\$393.77	\$396.31	\$407.28	3.4%

Average Arrearage - Residential Natural Gas Customers - 2016-2018

Utility	2016 Average Arrearage	2017 Average Arrearage	2018 Average Arrearage	Percent Change 2016-18
Columbia	\$440.53	\$455.54	\$507.04	15.1%
NFG	\$262.51	\$209.11	\$190.66	-27.4%
PECO-Gas	\$402.06	\$389.10	\$383.03	-4.7%
Peoples	\$198.86	\$270.75	\$351.36	76.7%
Peoples-Equitable	\$189.72	\$240.14	\$313.15	65.1%
PGW	\$520.76	\$473.78	\$492.83	-5.4%
UGI South	\$215.72	\$226.08	*\$293.79	36.2%
UGI North	\$292.11	\$280.91	*\$372.42	27.5%
Total/Industry Average	\$367.71	\$355.84	\$385.74	4.9%

^{*}UGI South and UGI North experienced an increase in number of customers with arrearages as a result of delays in resuming collection activity in 2018.

Average Arrearage – Confirmed Low-Income Electric Customers – 2016-2018

Utility	2016 Average Arrearage	2017 Average Arrearage	2018 Average Arrearage	Percent Change 2016-18
Duquesne	\$817.16	\$1,014.66	\$1,013.54	24.0%
Met-Ed	\$538.79	\$495.38	\$535.22	-1.0%
PECO-Electric	\$537.34	\$493.45	\$537.64	0.1%
Penelec	\$495.36	\$473.88	\$528.53	6.7%
Penn Power	\$578.94	\$541.93	\$587.33	1.4%
PPL	\$767.79	\$697.84	\$709.99	-7.5%
West Penn	\$427.38	\$438.03	\$506.07	18.4%
Total/Industry Average	\$619.64	\$596.58	\$622.76	1.0%

Average Arrearage - Confirmed Low-Income Natural Gas Customers - 2016-2018

Utility	2016 Average Arrearage	2017 Average Arrearage	2018 Average Arrearage	Percent Change 2016-18
Columbia	\$529.75	\$549.70	\$602.49	3.8%
NFG	\$390.47	\$285.66	\$269.36	-26.8%
PECO-Gas	\$828.50	\$778.23	\$792.98	-6.1%
Peoples	\$257.69	\$391.38	\$482.56	87.3%
Peoples-Equitable	\$253.05	\$342.47	\$387.79	53.2%
PGW	\$608.42	\$560.59	\$566.02	-7.9%
UGI South	\$328.40	\$394.20	*\$588.52	20.0%
UGI North	\$390.26	\$421.59	*\$646.81	8.0%
Total/Industry Average	\$440.58	\$456.07	\$526.36	19.5%

^{*}UGI South and UGI North experienced an increase in number of customers with arrearages as a result of delays in resuming collection activity in 2018.

Accounts Exceeding \$10,000 in Arrearages

On December 22, 2014, Act 155 became effective, reauthorizing and amending Chapter 14 of the Public Utility Code (66 Pa. C.S. §§ 1401-1419), Responsible Utility Customer Protection. Act 155 implemented a new reporting requirement²⁹ for the public utilities to report data regarding the number of active (*i.e.* accounts not final billed) residential accounts that exceed \$10,000 in arrearages at the end of each calendar year, along with those account balances.³⁰ We present that data in the tables below, noting that PECO has reported electric and gas accounts together. Peoples and Peoples-Equitable have also reported combined data. The average arrearage is calculated by dividing the total arrearage (sum of all account balances over \$10,000) by the number of accounts.

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²⁹ Final Order Chapter 14 Implementation Docket No. M-2014-2448824, order entered July 9, 2015. Section 1410.1(3) (Public utility duties) (Reporting Requirements re: Accounts Exceeding \$10,000 in Arrearages), pp 32-33.

³⁰ The utilities report several data points under Section 1410.1(3), however, only data relevant to the Universal Service Programs & Collections Performance has been included in this report. All public utility annual 1410.1(3) reports are available at Docket No. M-2014-2448824.

Residential Total Number of Accounts Over \$10,000 - Electric Customers - 2016-2018

Utility	2016 Total Number of Accounts over 10k	2017 Total Number of Accounts over 10k	2018 Total Number of Accounts over 10k	Percent Change 2016-18
Duquesne	16	51	46	*187.5%
Met-Ed	53	34	48	-9.4%
PECO-Electric/Gas	53	53	69	30.2%
Penelec	**63	48	75	19.0%
Penn Power	23	19	22	-4.3%
PPL	169	168	181	7.1%
West Penn	93	51	73	-21.5%
Total/Industry Average	470	424	514	9.4%

^{*}Duquesne performed limited credit and collection activities in 2016 due to a system conversion.

Residential Total Number of Accounts Over \$10,000 - Natural Gas Customers - 2016-2018

Utility	2016 Total Number of Accounts over 10k	2017 Total Number of Accounts over 10k	2018 Total Number of Accounts over 10k	Percent Change 2016-18
Columbia	0	0	0	0.0%
NFG	0	0	0	0.0%
Peoples/Peoples-EQT	52	27	5	-90.4%
PGW	299	224	200	-33.1%
UGI South	0	2	1	n/a
UGI North	0	1	2	n/a
Total/Industry Average	351	254	208	-40.7%

Residential Total Arrearages of Accounts Over \$10,000 - Electric Customers - 2016-2018

Utility	2016 Total Arrearages of Accounts over 10k	2017 Total Arrearages of Accounts over 10k	2018 Total Arrearages of Accounts over 10k	Percent Change 2016-18
Duquesne	\$204,389.77	\$651,869.38	\$632,534.79	*209.5%
Met-Ed	\$680,193.14	\$442,145.68	\$608,870.47	-10.5%
PECO-Electric/Gas	\$687,746.57	\$777,082.08	\$939,149.75	36.6%
Penelec	**\$823,252.42	\$634,487.66	\$1,037,115.04	26.0%
Penn Power	\$340,016.40	\$316,219.72	\$298,263.05	-12.3%
PPL	\$2,277,802.42	\$2,325,907.76	\$2,555,841.30	12.2%
West Penn	\$1,200,619.68	\$642,125.51	\$939,165.85	-21.8%
Total/Industry Average	\$6,214,020.40	\$5,789,837.79	\$7,010,940.25	12.8%

^{*}Duquesne performed limited credit and collection activities in 2016 due to a system conversion.

^{**}In 2019, Penelec discovered an error in the 2016 data which has now been corrected.

^{**}In 2019, Penelec discovered an error in the 2016 data which has now been corrected.

Residential Total Arrearages of Accounts Over \$10,000 - Natural Gas Customers - 2016-2018

Utility	2016 Total Arrearages of Accounts over 10k	2017 Total Arrearages of Accounts over 10k	2018 Total Arrearages of Accounts over 10k	Percent Change 2016-18
Columbia	\$0.00	\$0.00	\$0.00	0.0%
NFG	\$0.00	\$0.00	\$0.00	0.0%
Peoples/Peoples-EQT	\$683,785.82	\$351,533.98	\$70,330.20	-89.7%
PGW	\$4,122,060.98	\$2,922,472.66	\$2,527,458.65	-38.7%
UGI South	\$0.00	\$22,304.89	\$13,372.32	n/a
UGI North	\$0.00	\$10,362.38	\$29,189.34	n/a
Total/Industry Average	\$4,805,846.80	\$3,306,673.91	\$2,640,350.51	-45.1%

Residential Average Arrearage of Accounts Over \$10,000 - Electric Customers - 2016-2018

Utility	2016 Average Arrearage of Accounts over 10k	2017 Average Arrearage of Accounts over 10k	2018 Average Arrearage of Accounts over 10k	Percent Change 2016-18
Duquesne	\$12,774.36	\$12,781.75	\$13,750.76	7.6%
Met-Ed	\$12,833.83	\$13,004.28	\$12,684.80	-1.2%
PECO-Electric/Gas	\$12,976.35	\$14,661.93	\$13,610.87	4.9%
Penelec	*\$13,067.50	\$13,218.49	\$13,828.20	5.8%
Penn Power	\$14,783.32	\$16,643.14	\$13,557.41	-8.3%
PPL	\$13,478.12	\$13,844.69	\$14,120.67	4.8%
West Penn	\$12,909.89	\$12,590.70	\$12,865.29	>-1.0%
Total/Industry Average	\$13,221.32	\$13,655.28	\$13,639.96	3.2%

^{*}In 2019, Penelec discovered an error in the 2016 data which has now been corrected.

Residential Average Arrearage of Accounts Over \$10,000 - Natural Gas Customers - 2016-2018

Utility	2016 Average Arrearage of Accounts over 10k	2017 Average Arrearage of Accounts over 10k	2018 Average Arrearage of Accounts over 10k	Percent Change 2016-18
Columbia	\$0.00	\$0.00	\$0.00	0.0%
NFG	\$0.00	\$0.00	\$0.00	0.0%
Peoples/Peoples-EQT	\$13,149.73	\$13,019.78	\$14,066.04	7.0%
PGW	\$13,786.16	\$13,046.75	\$12,637.29	-8.3%
UGI South	\$0.00	\$11,152.45	*\$13,372.32	n/a
UGI North	\$0.00	\$10,362.38	*\$14,594.67	n/a
Total/Industry Average	\$13,691.87	\$13,018.40	\$12,693.99	-7.3%

^{*}UGI South and UGI North experienced an increase in number of customers with arrearages as a result of delays in resuming collection activity in 2018.

Revenues (Billings)

Revenues (Billings) are the cumulative, year-end total dollars billed by the public utility for the previous year and reported in the USRR for both the residential and confirmed low-income categories. Billings are used in the calculation of other collection performance measures, and include dollars collected from universal service program recipients, including CAP customers' billings.

Residential Revenues (Billings) - Electric Customers

Utility	Residential	Confirmed Low-Income	Percent Confirmed Low-Income
Duquesne	\$565,825,977	\$64,350,429	11.4%
Met-Ed	\$631,235,520	\$107,524,051	17.0%
PECO-Electric	\$2,043,151,737	\$153,528,533	7.5%
Penelec	\$591,507,790	\$129,883,881	22.0%
Penn Power	\$195,071,468	\$30,381,011	15.6%
PPL	\$2,076,233,183	\$380,116,149	18.3%
West Penn	\$715,500,920	\$102,980,372	14.4%
Total/Industry Average	\$6,818,526,595	\$968,764,426	14.2%

Residential Revenues (Billings) - Natural Gas Customers

Utility	Residential	Confirmed Low-Income	Percent Confirmed Low-Income
Columbia	\$441,253,741	\$77,926,868	17.7%
NFG	\$153,674,403	\$22,138,172	14.4%
PECO-Gas	\$434,469,209	\$22,770,367	5.2%
Peoples	\$315,638,063	\$82,065,896	26.0%
Peoples-Equitable	\$230,033,115	\$41,405,961	18.0%
PGW	\$548,304,433	\$138,417,801	25.2%
UGI South	\$269,363,627	\$38,870,375	14.4%
UGI North	\$163,406,878	\$27,720,999	17.0%
Total/Industry Average	\$2,556,143,469	\$451,316,439	17.7%

Percent of Revenues (Billings) in Debt

The **percent of revenues (billings) in debt** is calculated by dividing the total annual revenues (billings) by the total monthly average dollars in debt. This calculated variable provides another way to measure the extent of customer debt. In the following two tables, the higher the percentage, the greater the potential collection risk.

Percent of Revenues (Billings) in Debt - Residential Electric Customers - 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Duquesne	4.4%	4.1%	3.4%	-22.7%
Met-Ed	3.5%	2.9%	3.2%	-8.6%
PECO-Electric	1.3%	1.4%	1.4%	7.7%
Penelec	3.9%	3.5%	3.8%	-2.6%
Penn Power	3.4%	3.0%	3.0%	-11.8%
PPL	5.0%	4.8%	4.4%	-12.0%
West Penn	2.7%	2.6%	3.0%	11.1%
Total/IndustryAverage	3.3%	3.1%	3.1%	-6.1%

Percent of Revenues (Billings) in Debt - Residential Natural Gas Customers - 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Columbia	3.6%	3.1%	3.1%	-13.9%
NFG	4.2%	3.7%	3.3%	-14.3%
PECO-Gas	3.1%	2.7%	2.4%	-22.6%
Peoples	2.1%	2.5%	3.2%	52.4%
Peoples-Equitable	2.5%	2.5%	2.9%	16.0%
PGW	10.4%	8.3%	7.7%	-26.0%
UGI South	3.4%	3.2%	*5.2%	52.9%
UGI North	2.9%	3.1%	*5.1%	75.9%
Total/Industry Average	4.6%	4.1%	4.3%	-6.5%

^{*}UGI South and UGI North experienced an increase in number of customers with arrearages as a result of delays in resuming collection activity in 2018.

Percent of Revenues (Billings) in Debt – Confirmed Low-Income Electric Customers – 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Duquesne	6.0%	13.2%	10.6%	76.7%
Met-Ed	13.4%	10.5%	11.1%	-17.2%
PECO-Electric	5.6%	3.3%	3.6%	-35.7%
Penelec	12.3%	10.5%	11.4%	-7.3%
Penn Power	13.8%	12.3%	12.0%	-13.0%
PPL	13.4%	12.8%	12.3%	-8.2%
West Penn	10.5%	9.6%	11.3%	7.6%
Total/Industry Average	11.5%	10.3%	10.4%	-9.6%

Percent of Revenues (Billings) in Debt - Confirmed Low-Income Natural Gas Customers - 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Columbia	11.4%	8.8%	8.3%	-27.2%
NFG	18.2%	13.1%	11.4%	-37.4%
PECO-Gas	17.6%	9.6%	8.8%	-50.0%
Peoples	3.7%	4.8%	5.7%	54.1%
Peoples-Equitable	5.8%	6.7%	7.3%	25.9%
PGW	7.8%	8.6%	8.1%	3.8%
UGI South	17.5%	20.0%	19.1%	9.1%
UGI North	12.4%	14.7%	16.6%	33.9%
Total/Industry Average	9.2%	9.1%	9.3%	1.1%

Gross Residential Write-Offs in Dollars

The tables below represent the **gross residential write-offs in dollars** for EDCs and NGDCs. Write-offs are the last action on final-billed overdue accounts. A residential account is written off after all pre-write-off collection actions are taken and the customer fails to make payment on the balance owed. Generally, a public utility writes off accounts on either a monthly or annual basis. The gross write-offs figures do not include CAP credits or arrearage forgiveness.

Gross Write-Offs in Dollars - Electric Customers

Utility	Residential	Confirmed Low-Income	Percent Confirmed Low-Income
Duquesne	\$19,578,220	\$6,837,415	34.9%
Met-Ed	\$15,183,890	\$11,804,288	77.7%
PECO-Electric	\$27,660,902	\$7,021,663	25.4%
Penelec	\$15,418,293	\$12,456,688	80.8%
Penn Power	\$3,358,838	\$2,721,776	81.0%
PPL	\$53,809,070	\$39,280,621	73.0%
West Penn	\$15,506,690	\$11,935,290	77.0%
Total/Industry Average	\$150,515,903	\$92,057,741	61.2%

Gross Write-Offs in Dollars - Natural Gas Customers

Utility	Residential	Confirmed Low-Income	Percent Confirmed Low-Income
Columbia	\$8,531,390	\$4,937,124	57.9%
NFG	\$4,330,927	\$2,960,771	68.4%
PECO-Gas	\$1,784,559	\$290,818	16.3%
Peoples	\$7,957,830	\$2,069,036	26.0%
Peoples-Equitable	\$5,143,394	\$925,811	18.0%
PGW	\$34,986,533	\$29,177,942	83.4%
UGI South	\$8,854,360	\$5,046,985	57.0%
UGI North	\$4,904,780	\$3,040,964	62.0%
Total/Industry Average	\$76,493,773	\$48,449,451	63.3%

Gross Write-Offs in Dollars – Residential Electric Customers – 2016-2018

Utility	2016 Gross Write-Offs in Dollars	2017 Gross Write-Offs in Dollars	2018 Gross Write-Offs in Dollars	Percent Change 2016-18
Duquesne	\$8,688,610	\$18,617,640	\$19,578,220	125.3%
Met-Ed	\$13,557,436	\$12,158,927	\$15,183,890	12.0%
PECO-Electric	\$24,328,821	\$27,484,369	\$27,660,902	13.7%
Penelec	\$12,745,926	\$11,516,271	\$15,418,293	21.0%
Penn Power	\$2,930,804	\$2,851,522	\$3,358,838	14.6%
PPL	\$56,183,980	\$50,434,096	\$53,809,070	-4.2%
West Penn	\$12,404,107	\$12,673,729	\$15,506,690	25.0%
Total/Industry Average	\$130,839,684	\$135,736,554	\$150,515,903	15.0%

Gross Write-Offs in Dollars – Residential Natural Gas Customers – 2016-2018

Utility	2016 Gross Write-Offs in Dollars	2017 Gross Write-Offs in Dollars	2018 Gross Write-Offs in Dollars	Percent Change 2016-18
Columbia	\$7,405,860	\$7,722,801	\$8,531,390	15.2%
NFG	\$3,650,873	\$2,616,334	\$4,330,927	18.6%
PECO-Gas	\$829,122	\$1,956,647	\$1,784,559	115.2%
Peoples	\$10,256,963	\$8,722,734	\$7,957,830	-22.4%
Peoples-Equitable	\$3,659,582	\$4,985,137	\$5,143,394	40.5%
PGW	\$61,371,552	\$47,487,882	\$34,986,533	-43.0%
UGI South	\$4,725,255	\$6,329,806	*\$8,854,360	87.4%
UGI North	\$2,534,491	\$3,384,812	*\$4,904,780	93.5%
Total/Industry Average	\$94,433,698	\$83,206,153	\$76,493,773	-19.0%

^{*}UGI South and UGI North experienced an increase in number of customers with arrearages as a result of delays in resuming collection activity in 2018.

Gross Write-Offs in Dollars - Confirmed Low-Income Electric Customers - 2016-2018

Utility	2016 Gross Write-Offs in Dollars CLI	2017 Gross Write-Offs in Dollars CLI	2018 Gross Write-Offs in Dollars CLI	Percent Change 2016-18
Duquesne	\$1,738,898	\$7,593,815	\$6,837,415	293.2%
Met-Ed	\$9,765,101	\$9,426,686	\$11,804,288	20.9%
PECO-Electric	\$5,655,959	\$6,679,875	\$7,021,663	24.1%
Penelec	\$9,732,711	\$9,316,626	\$12,456,688	28.0%
Penn Power	\$2,005,630	\$2,411,836	\$2,721,776	35.7%
PPL	\$39,337,372	\$36,254,853	\$39,280,621	-0.1%
West Penn	\$9,317,684	\$10,061,834	\$11,935,290	28.1%
Total/Industry Average	\$77,553,355	\$81,745,525	\$92,057,741	18.7%

Gross Write-Offs in Dollars - Confirmed Low-Income Natural Gas Customers - 2016-2018

Utility	2016 Gross Write-Offs in Dollars CLI	2017 Gross Write-Offs in Dollars CLI	2018 Gross Write-Offs in Dollars CLI	Percent Change 2016-18
Columbia	\$4,986,181	\$5,417,332	\$4,937,124	-1.0%
NFG	\$2,227,918	\$1,116,455	\$2,960,771	32.9%
PECO-Gas	\$208,706	\$577,754	\$290,818	39.3%
Peoples	\$2,666,811	\$2,267,911	\$2,069,036	-22.4%
Peoples-Equitable	\$658,724	\$897,325	\$925,811	40.5%
PGW	\$25,758,078	\$30,648,945	\$29,177,942	13.3%
UGI South	\$3,749,968	\$2,148,256	*\$5,046,985	34.6%
UGI North	\$2,337,406	\$1,312,505	*\$3,040,964	30.1%
Total/Industry Average	\$42,593,792	\$44,386,483	\$48,449,451	13.7%

^{*}UGI South and UGI North experienced an increase in number of customers with arrearages as a result of delays in resuming collection activity in 2018.

Gross Write-Offs Ratio

The percentage of residential billings written off as uncollectible is the most commonly used long-term measure of collection system performance, and is called the **Gross Write-Offs Ratio**. This measure is calculated by dividing the annual total gross dollars written off for residential accounts by the annual total dollars of residential billings. The measure offers an equitable basis for comparison of gross residential dollars written off to the annual total dollars of residential billings. Figures used in the tables below do not include CAP credits or arrearage forgiveness.

Gross Write-Offs Ratio – Electric Customers

Utility	Residential Gross Write-Offs Ratio	Confirmed Low-Income Gross Write-Offs Ratio
Duquesne	3.5%	10.6%
Met-Ed	2.4%	11.0%
PECO-Electric	1.4%	4.6%
Penelec	2.6%	9.6%
Penn Power	1.7%	9.0%
PPL	2.6%	10.3%
West Penn	2.2%	11.6%
Total/Industry Average	2.2%	9.5%

Gross Write-Offs Ratio - Natural Gas Customers

Utility	Residential Gross Write-Offs Ratio	Confirmed Low-Income Gross Write-Offs Ratio
Columbia	1.9%	6.3%
NFG	2.8%	13.4%
PECO-Gas	0.4%	1.3%
Peoples	2.5%	2.5%
Peoples-Equitable	2.2%	2.2%
PGW	6.4%	21.1%
UGI South	3.3%	13.0%
UGI North	3.0%	11.0%
Total/Industry Average	3.0%	10.7%

Gross Write-Offs Ratio - Residential Electric Customers - 2016-2018

Utility	2016 Gross Write-Offs Ratio	2017 Gross Write-O14ffs Ratio	2018 Gross Write-Offs Ratio	Percent Change 2016-18
Duquesne	1.6%	3.6%	3.5%	118.8%
Met-Ed	2.4%	2.0%	2.4%	0.0%
PECO-Electric	1.2%	1.4%	1.4%	16.7%
Penelec	2.4%	2.1%	2.6%	8.3%
Penn Power	1.6%	1.6%	1.7%	6.3%
PPL	2.8%	2.6%	2.6%	-7.1%
West Penn	1.9%	1.9%	2.2%	15.8%
Total/Industry Average	2.0%	2.1%	2.2%	10.0%

Gross Write-Offs Ratio - Residential Natural Gas Customers - 2016-2018

Utility	2016 Gross Write-Offs Ratio	2017 Gross Write-Offs Ratio	2018 Gross Write-Offs Ratio	Percent Change 2016-18
Columbia	2.2%	2.0%	1.9%	-13.6%
NFG	3.2%	1.9%	2.8%	-12.5%
PECO-Gas	0.3%	0.6%	0.4%	33.3%
Peoples	4.4%	3.2%	2.5%	-43.2%
Peoples-Equitable	2.2%	2.6%	2.2%	0.0%
PGW	15.0%	9.7%	6.4%	-57.3%
UGI South	2.5%	2.5%	*3.3%	32.0%
UGI North	1.9%	2.4%	*3.0%	57.9%
Total/Industry Average	5.0%	3.7%	3.0%	-40.0%

^{*}UGI South and UGI North experienced an increase in number of customers with arrearages as a result of delays in resuming collection activity in 2018.

Annual Collection Operating Expenses

Annual collection operating expenses include administrative expenses associated with termination activity, negotiating payment arrangements, budget counseling, investigation and resolution of informal and formal complaints associated with payment arrangements, securing and maintaining deposits, tracking delinquent accounts, collection agencies' expenses, litigation expenses other than Commission-related, dunning expenses, and winter survey expenses. Dunning, in the business context, refers to the collections process, whereby a business communicates with customers who have fallen behind in paying their bills. CAP recipient collection expenses are excluded.

The tables below include both the residential and confirmed low-income categories to allow for the presentation of the percent of annual collection operating expenses which are attributed to confirmed low-income. Confirmed Low Income dollar amounts are based on a Utility-specific allocation factors (percentages) of the total operating expenses.

Annual Electric Collection Operating Expenses

Utility	Residential	Confirmed Low-Income	Percent of Collection Operating Expenses for Confirmed Low-Income Customers
Duquesne	\$8,114,677	\$8,114,677	TBD
Met-Ed	\$17,699,048	\$13,046,400	73.7%
PECO-Electric	\$13,817,082	\$1,484,300	10.7%
Penelec	\$17,756,784	\$13,747,163	77.4%
Penn Power	\$4,130,948	\$3,122,297	75.6%
PPL	\$9,825,885	\$5,207,719	53.0%
West Penn	\$17,645,222	\$12,882,353	73.0%
Total/Industry Average	\$88,989,646	\$57,604,909	TBD

Annual Natural Gas Collection Operating Expenses

Utility	Residential	Confirmed Low-Income	Percent of Collection Operating Expenses for Confirmed Low-Income Customers
Columbia	\$4,848,900	\$2,348,014	48.4%
NFG	\$669,066	\$185,978	27.8%
PECO-Gas	\$1,707,729	\$95,177	5.6%
Peoples	\$2,225,302	\$578,578	26.0%
Peoples-Equitable	\$1,631,759	\$293,717	18.0%
PGW	\$4,229,699	\$1,321,675	31.2%
UGI South	\$4,843,785	\$2,179,703	45.0%
UGI North	\$2,294,424	\$1,147,212	50.0%
Total/Industry Average	\$22,450,664	\$8,150,054	36.3%

3. Universal Service Programs

Demographics

The USRR requires EDCs and NGDCs to report the demographics of universal service program recipients, including the number of household members under age 18 and over age 62, household size, income, and source of income. A low-income customer is defined³¹ as a residential public utility customer whose household income is at or below 150 percent of FPIG. Appendix 3 shows poverty levels in relation to household size and income. The following tables present some of the demographic information for low-income customers who participate in the universal service programs during 2018.

Average Household Income and Size

Electric customers who received LIURP services in 2018 had average annual household incomes of \$16,419, while gas customers' average income was \$15,070. Electric and natural gas households receiving CAP benefits in 2018 have average annual household incomes of \$14,400 per year. For all 2018 participants in universal service programs, average annual household income for electric customers was \$14,800, and \$14,342 for natural gas customers. In general, the households participating in universal service programs average three persons, with at least one member under 18 years old. Approximately one in three of these households has a member over the age of 62.

Participants in Universal Service Programs

Average Household Income – Summary for All Electric Customers – 2016-2018

Program	2016	2017	2018	Percent Change 2016-18
LIURP	\$16,144	\$16,854	\$16,419	1.7%
CAP	\$14,298	\$14,391	\$14,291	>-1.0%
CARES	\$16,046	\$15,901	\$17,109	6.6%
Hardship Fund	\$19,651	\$20,438	\$21,156	7.7%
Total/Industry Average	\$16,535	\$16,896	\$14,800	-10.5%

Participants in Universal Service Programs

Average Household Income – Summary for All Natural Gas Customers – 2016-2018

Program	2016	2017	2018	Percent Change 2016-18
LIURP	\$16,667	\$16,679	\$15,070	-9.6%
CAP	\$13,674	\$13,979	\$14,509	6.1%
CARES	\$15,081	\$14,848	\$14,815	-1.8%
Hardship Fund	\$17,578	\$15,337	\$12,972	-26.2%
Total/Industry Average	\$15,750	\$15,211	\$14,342	-8.9%

³¹ 52 Pa. Code **§** 54.72

Source of Income

The majority of electric and gas customers participating in universal service programs have incomes from employment or pension/retirement benefits. The Other catagory includes all other income types, such as self-employed, seasonal, dependent, alimony, child support, no income, and missing data.

Participants in Universal Service Programs

Source of Household Income – Summary for All LIURP Electric Customers – 2016-2018

Source of Household Income	2016 LIURP	2017 LIURP	2018 LIURP
Employment	32.5%	32.7%	32.3%
Pension or Retirement	19.4%	19.5%	21.0%
Unemployment Compensation	15.6%	16.0%	13.7%
Disability	12.5%	12.5%	12.4%
Public Assistance	2.9%	3.0%	2.7%
Other	17.2%	16.3%	18.0%

Participants in Universal Service Programs Source of Household Income – Summary for All CAP Electric Customers – 2016-2018

Source of Household Income	2016 CAP	2017 CAP	2018 CAP
Employment	31.7%	30.6%	29.0%
Pension or Retirement	20.7%	21.6%	20.2%
Unemployment Compensation	2.9%	2.6%	2.3%
Disability	23.4%	24.2%	25.2%
Public Assistance	3.8%	3.4%	3.2%
Other	17.5%	17.5%	20.2%

Participants in Universal Service Programs Source of Household Income – Summary for All Hardship Fund Electric Customers – 2016-2018

Source of Household Income	2016 Hardship Fund	2017 Hardship Fund	2018 Hardship Fund
Employment	46.7%	45.2%	47.1%
Pension or Retirement	17.9%	20.4%	18.3%
Unemployment Compensation	3.3%	3.3%	2.9%
Disability	14.3%	12.9%	14.1%
Public Assistance	3.8%	4.3%	3.7%
Other	14.1%	14.0%	13.9%

Participants in Universal Service Programs Source of Household Income — Summary for All LIURP Natural Gas Customers — 2016-2018

Source of Household Income	2016 LIURP	2017 LIURP	2018 LIURP
Employment	27.6%	29.0%	27.8%
Pension or Retirement	31.8%	28.0%	29.7%
Unemployment Compensation	7.1%	9.4%	9.7%
Disability	19.3%	16.8%	15.9%
Public Assistance	4.5%	3.7%	3.3%
Other	9.8%	13.2%	13.6%

Participants in Universal Service Programs Source of Household Income - Summary for All CAP Natural Gas Customers - 2016-2018

Source of Household Income	2016 CAP	2017 CAP	2018 CAP
Employment	29.3%	29.8%	30.5%
Pension or Retirement	27.1%	29.3%	31.8%
Unemployment Compensation	2.5%	2.3%	2.2%
Disability	22.4%	20.9%	18.5%
Public Assistance	5.5%	4.5%	3.8%
Other	13.3%	13.3%	13.2%

Participants in Universal Service Programs Source of Household Income – Summary for All Hardship Fund Natural Gas Customers – 2016-2018

Source of Household Income	2016 Hardship Fund	2017 Hardship Fund	2018 Hardship Fund
Employment	47.0%	45.2%	41.0%
Pension or Retirement	16.4%	17.2%	18.6%
Unemployment Compensation	3.5%	3.2%	2.5%
Disability	16.7%	15.1%	17.1%
Public Assistance	4.0%	2.9%	2.5%
Other	12.4%	16.3%	18.4%

Universal Service Participant Income Compared to the Federal Poverty Income Guidelines

Demographic data from the USRR reporting shows that "working poor" households in Pennsylvania do not always have incomes that exceed 150 percent of FPIG. According to the U.S. Bureau of Labor Statistics, the definition of a "working poor" household begins with a wage-earner who works full time (35+ hrs/week) at a minimum-wage job. In 2018, minimum wage in Pennsylvania was \$7.25 per hour, the same as it has been since 2009.³² Annual income for an

³² The Pennsylvania state minimum wage of \$7.25 per hour was enacted on July 24, 2009. https://www.pacode.com/secure/data/034/chapter231/s231.101.html

individual wage earner who works at a full time (40hr/week) minimum-wage job is \$15,080, which equates to 124 percent of FPIG in 2018 and 121 percent FPIG in 2019. By comparison, the average electric CAP household (three persons) had an income of \$14,291 in 2018, which placed these households' incomes at approximately 69 percent of FPIG (for three persons) for 2018, and 67 percent for 2019. The average natural gas CAP household (two persons) had an income of \$14,509, which placed the household at approximately 70 percent of FPIG for 2018, and 68 percent for 2019. The industry average of household incomes for universal service program participants in 2018 and 2019 is approximately 76 percent FPIG and 74 percent, respectively. This is well below 150 percent of FPIG for three persons (\$31,170 in 2018; \$31,995 in 2019). See Appendix 3.

Low Income Usage Reduction Program (LIURP)

LIURP is a statewide, public utility-sponsored, residential usage-reduction program mandated by the PUC.³³ The primary goal of LIURP is to assist low-income residential customers to reduce energy bills through usage reduction (energy conservation) and, as a result, to make bills more affordable.

LIURP is targeted toward customers with annual incomes at or below 150 percent of FPIG. However, public utilities are permitted to spend up to 20 percent of their annual LIURP budgets on customers with incomes between 151 percent and 200 percent of FPIG. LIURP places priority on the highest energy users who offer the greatest opportunities for bill reductions. Generally, EDCs target customers with annual usage of approximately 6,000 kWhs, and NGDCs target customers with annual usage of approximately 120 Mcfs. When feasible, the program targets customers with payment problems (arrearages). The program is available to both homeowners and renters. LIURP services all housing types, including single family homes, mobile homes, and small and large multi-family residences.

The LIURP funds are often included in public utility rates as part of the distribution cost passed on to all residential customers. The LIURP funding levels, which are often modified in rate case proceedings, are reviewed as part of the public utility's most recently filed universal service and energy conservation plans (USECPs). The utilities file USECPs approximately every three years, and the plans are reviewed by BCS. The public utility is required to develop a LIURP funding level based upon a needs assessment,³⁴ which, in turn, will likely be based on census and public utility data.

The PUC has regulatory oversight of LIURP, and the utilities administer the program using both non-profit and for-profit contractors. The various program costs and installed usage reduction measures are agreed to in contracts between the contractors and the utilities.

Program measures are installed on a simple payback recovery basis of seven years or less for most program measures. Some exceptions must meet a 12-year simple payback recovery. The exceptions include sidewall insulation, attic insulation, furnace replacement, water heater replacement and refrigerator replacement. Recovery is the time it takes to recover the cost of the installed program measure through projected energy savings. Examples of the program measures include: air infiltration measures using the blower door air sealing techniques, all types of insulation such as attic and sidewall, heating system treatments and replacements, water heating tank and pipe wraps, water heater replacements, faucet aerators, light-emitting diode (LED) lighting, refrigerator replacement, incidental repairs (not home rehabilitation), health and safety measures such as smoke and carbon monoxide detectors, and energy conservation education.

The factors impacting energy savings are: the level of pre-weatherization usage, occupant energy behavior, housing type and size, age of the dwelling, condition of the dwelling, end uses such as heating, cooling, and water heating, and contractor capabilities.

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^{33 52} Pa. Code, Chapter 58

³⁴ 52 Pa. Code, § 58.4(c)(1-4)

LIURP benefits include: bill reduction, improved health, safety and comfort levels, arrearage reduction, reduced collection activity, improved bill payment behavior, reduced use of supplemental fuels and secondary heating devices, more affordable low-income housing, reduction in homelessness, and less housing abandonment.

The USRR provisions require reporting various LIURP data, including: annual program costs for the reporting year, number of family members under 18 years of age, number of family members over 62 years of age, family size, household income, source of income, participation levels for the reporting year, projected annual spending for the current year, projected annual participation levels for the current year, and average job costs.

In addition, this report also includes aggregate data on completed LIURP jobs provided by EDCs and NGDCs.

LIURP Spending

Most public utilities that are unable to spend projected LIURP funds during one program year may carry over the unspent funds to the next year. Projected spending numbers noted below are reported to the Commission annually, but are estimates based on LIURP budgets approved in USECPs, or modified in base rate proceedings.

LIURP Spending - Electric Utilities

Utility	2018 Projected Spending*	2018 Actual Spending	2019 Projected Spending*
Duquesne	\$3,098,741	\$2,341,637	\$3,048,064
Met-Ed	\$5,670,358	\$5,588,477	\$5,230,882
PECO-Electric	\$7,300,000	\$5,600,000	\$5,600,000
Penelec	\$7,152,457	\$6,167,794	\$6,793,662
Penn Power	\$3,155,330	\$2,504,699	\$3,496,630
PPL	\$10,301,695	\$10,229,891	\$10,072,104
West Penn	\$4,649,000	\$4,378,426	\$5,738,574
Total/Industry Average	\$41,327,581	\$36,810,924	\$39,979,916

^{*}May include carryover of unspent funds from previous program year, special provisions, and settlements from rate cases.

LIURP Spending - Natural Gas Utilities

Utility	2018 Projected Spending*	2018 Actual Spending	2019 Projected Spending*
Columbia	\$5,007,696	\$4,448,061	\$5,309,635
NFG	\$2,039,835	\$1,331,938	\$2,007,897
PECO-Gas	\$2,250,000	\$2,250,000	\$2,250,000
Peoples	\$1,250,000	\$1,294,769	\$1,305,231
Peoples-Equitable	\$800,000	\$791,077	\$808,923
PGW	\$7,988,818	\$7,848,602	\$7,988,818
UGI South	\$1,731,439	\$1,200,908	\$1,816,431
UGI North	\$1,026,380	\$1,059,335	\$1,015,495
Total/Industry Average	\$22,094,168	\$20,224,690	\$22,502,430

^{*}May include carryover of unspent funds from previous program year, special provisions, and settlements from rate cases.

LIURP Production

LIURP production levels are influenced by many factors including: the size of the public utility's LIURP program budget; the heating saturation among the public utility's customer population; housing-stock characteristics such as the type, size, and condition; contractor capability; contractor capacity; and to a lesser extent, customer demographics and customer behavior.

All LIURP gas jobs are classified as heating. For electric jobs, the determination of the job type depends on whether the customer heats with electricity. If most of the dollars spent on the completed job are on heating-related program measures, then the job is classified as a heating job. If the customer does not heat with electricity but uses electricity for water heating, and most of the dollars spent on the completed job are on water-heating measures, then the job is classified as a water-heating job. If the customer does not use electricity for either heating or water heating, the completed job is automatically classified as a baseload job. This is a simplistic model for classifying the type of job, and this model is easy to apply to the vast majority of electric jobs in LIURP.

LIURP Electric Production - 2017-2019

	Act	2017 ual Produc	tion	Act	2018 ual Produc	tion	Proje	2019 cted Produ	ıction
Utility	Heating Jobs	Water Heating Jobs	Baseload Jobs	Heating Jobs	Water Heating Jobs	Baseload Jobs	Heating Jobs	Water Heating Jobs	Baseload Jobs
Duquesne	16	0	2,644	148	1	3,075	310	0	2,790
Met-Ed	682	623	360	831	530	615	600	535	395
PECO-Electric	943	0	6,081	876	0	5,344	900	0	5,616
Penelec	497	1,309	759	521	1,168	848	450	1,180	680
Penn Power	228	307	355	245	324	377	230	305	330
PPL	1,970	803	1,029	1,822	932	1,196	2,050	750	1,100
West Penn	415	576	159	303	575	230	470	432	143
Total/Industry Average	4,751	3,618	11,387	4,746	3,530	11,685	5,010	3,202	11,054

LIURP Natural Gas Production - 2017-2019

Utility	2017 Actual Production Heating Jobs	2018 Actual Production Heating Jobs	2019 Projected Production Heating Jobs
Columbia	440	417	498
NFG	143	149	250
PECO-Gas	1,117	1,298	1,000
Peoples	195	168	169
Peoples-Equitable	135	100	102
PGW	2,113	2,500	2,511
UGI South	184	156	213
UGI North	153	158	119
Total/Industry Average	4,480	4,946	4,862

LIURP Average Job Costs

Customer usage profiles are typically highest for heating jobs followed by water heating jobs and baseload jobs. Average job costs are based on the total number of completed jobs in the job-type category and the total costs associated with those jobs. Specifically, the average job cost is calculated by dividing the total dollars spent on a type of job by the number of jobs completed.

LIURP Electric Average Heating Job Costs - 2016-2018

Utility	2016 Heating Jobs	2017 Heating Jobs	2018 Heating Jobs	
Duquesne	\$2,793	\$4,181	\$6,275	
Met-Ed	\$2,590	\$2,868	\$2,968	
PECO-Electric	\$1,352	\$1,818	\$1,970	
Penelec	\$2,149	\$2,467	\$3,392	
Penn Power	\$2,925	\$2,730	\$3,349	
PPL	\$3,846	\$3,552	\$3,860	
West Penn	\$3,095	\$3,401	\$3,543	

LIURP Electric Average Water Heating Job Costs - 2016-2018

Utility	2016 Water Heating Jobs	2017 Water Heating Jobs	2018 Water Heating Jobs
Duquesne	\$0	\$0	\$1,962
Met-Ed	\$1,754	\$1,813	\$1,921
PECO-Electric	\$0	\$0	\$0
Penelec	\$1,565	\$1,586	\$1,776
Penn Power	\$1,668	\$1,718	\$1,931
PPL	\$2,036	\$1,820	\$1,815
West Penn	\$2,581	\$2,619	\$2,906

LIURP Electric Average Baseload Job Costs - 2016-2018

Utility	2016 Baseload Jobs	2017 Baseload Jobs	2018 Baseload Jobs	
Duquesne	\$436	\$424	\$459	
Met-Ed	\$1,617	\$1,828	\$1,730	
PECO-Electric	\$507	\$535	\$615	
Penelec	\$1,175	\$1,308	\$1,504	
Penn Power	\$1,243	\$1,403	\$1,436	
PPL	\$1,081	\$1,101	\$1,052	
West Penn	\$1,695	\$2,441	\$2,217	

LIURP Natural Gas Average Job Cost - 2016-2018

Utility	2016 Heating Jobs	2017 Heating Jobs	2018 Heating Jobs
Columbia	\$7,076	\$6,709	\$8,172
NFG	\$4,585	\$4,567	\$5,208
PECO-Gas	\$1,802	\$2,001	\$1,718
Peoples	\$4,723	\$5,236	\$6,301
Peoples-Equitable	\$4,733	\$4,827	\$6,486
PGW	\$1,573	\$1,651	\$2,327
UGI South	\$6,240	\$5,822	\$6,203
UGI North	\$5,273	\$5,212	\$5,512

LIURP Energy Savings and Bill Reduction

LIURP energy savings are determined by calculating the difference in a customer's usage during the 12 months following the installation of the LIURP measures (post period), from the usage during the 12 preceding months (pre period). The energy savings reported are based on weather-normalized data and represent an average of the public utility results for each job category. LIURP reporting results for the program year always trail two years behind the USRR reporting year due to the process of evaluating post-installation usage for 12 months, with analysis performed in the following year.³⁵

The estimated annual bill reduction is calculated by multiplying the average number of kWhs or Mcfs saved during the post-treatment period by the average price per kWh or Mcf during that period. Public utilities voluntarily report pricing information annually. The 2014-2016 estimated annual bill reductions presented below are based on the average of the public utility results from each category of LIURP jobs completed in the program year, evaluated in following year (post period), and reported in the year after that. Example: 2016 program year was evaluated in 2017 (post period) and reported to the Commission in 2018.

LIURP Energy Savings - 2014-2016

Job Type	2014 Energy Savings	2015 Energy Savings	2016 Energy Savings
Electric Heating	10.6%	11.3%	9.3%
Electric Water Heating	10.0%	14.3%	11.1%
Electric Baseload	8.8%	9.4%	7.7%
Gas Heating	14.4%	15.1%	13.1%

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³⁵ Example: 2016 LIURP program year installations were completed and evaluated after the post-installation period ended in 2017. Those results were then reported in 2018. LIURP program year 2017 results will be available in the 2019 version of this report.

LIURP Estimated Annual Bill Reductions - 2014-2016

Job Type	2014 Estimated Annual Bill Reduction	2015 Estimated Annual Bill Reduction	2016 Estimated Annual Bill Reduction
Electric Heating	\$168	\$243	\$212
Electric Water Heating	\$157	\$240	\$206
Electric Baseload	\$115	\$135	\$119
Gas Heating	\$257	\$254	\$211

Customer Assistance Programs (CAPs)

The PUC monitors implementation of the Commission's CAP Policy Statement and regulations³⁶ by the seven largest EDCs and NGDCs serving more than 100,000 customers. The USRR requires the public utilities to report the number of customers enrolled in CAP. The Commission uses the number of participants enrolled in CAP at the end of the program year to quantify participation. Each public utility's restructuring proceeding established a program phase-in enrollment size. Since then, each public utility submits a three-year USECP for Commission approval. PUC regulations³⁷ require the public utilities to submit a projected needs assessment and projected enrollment level for its universal service programs. USECPs and Evaluations are posted on the Commission's website (Appendix 4 contains viewing instructions).

CAP Participation Rate

The **CAP Participation Rate** is defined as the number of participants enrolled as of December 31, 2018, divided by the number of confirmed low-income customers served by the EDC or NGDC. The Commission expects a public utility to maintain open enrollment to meet the need in each public utility's service territory. The CAP participation rate would be much lower if the rate reflected estimated low-income customers rather than confirmed low-income customers, as estimated customer numbers based on census data are much higher and less accurate.

CAP Participation – Electric Utilities – 2016-2018

	20:	16	20:	17	20	18
Utility	Participants Enrolled as of 12/31/16	CAP Participant Rate	Participants Enrolled as of 12/31/17	CAP Participant Rate	Participants Enrolled as of 12/31/18	CAP Participant Rate
Duquesne	40,521	89.9%	34,445	71.0 %	36,075	73.1%
Met-Ed	14,896	22.1%	14,801	21.2 %	14,927	20.7%
PECO-Electric	132,898	78.5%	119,552	76.7 %	117,162	80.2 %
Penelec	21,528	25.5%	20,956	23.8 %	20,902	23.1 %
Penn Power	4,646	24.0 %	4,650	23.6 %	4,619	23.0 %
PPL	56,223	31.8 %	51,692	28.4 %	56,539	29.8 %
West Penn	24,538	38.3%	25,700	37.4 %	19,178	26.5 %
Total/Industry Average	295,250	44.3%	271,796	40.3%	269,402	39.5%

³⁶ 66 Pa. C.S. §§ 2802(10), §§ 2804(9), §§ 2203(7) and §§ 2203(8)

³⁷ 52 Pa. Code § 54.74 for EDCs and 52 Pa. Code §62.4 for NGDCs

CAP Participation – Natural Gas Utilities – 2016-2018

	20:	16	20:	17	20	18
Utility	Participants Enrolled as of 12/31/16	CAP Participant Rate	Participants Enrolled as of 12/31/17	CAP Participant Rate	Participants Enrolled as of 12/31/18	CAP Participant Rate
Columbia	20,405	29.9%	22,255	32.8%	23,600	34.9 %
NFG	8,040	30.9%	8,021	31.3%	7,728	34.5 %
PECO-Gas	22,984	71.5%	20,723	74.6%	20,310	79.0 %
Peoples	19,333	32.4%	17,565	29.2%	17,425	62.0 %
Peoples-Equitable	13,289	30.3%	12,921	29.0%	13,194	64.7 %
PGW	49,321	33.1%	49,310	33.7%	51,371	34.4 %
UGI South	7,725	22.5%	8,169	24.4%	8,975	25.8 %
UGI North	5,684	24.7%	5,353	24.4%	5,744	26.2 %
Total/Industry Average	146,781	34.4%	144,317	34.9%	148,347	45.2%

Monthly Average Electric CAP Participation by Poverty Level - 2016-2018

		2016		2017			2018			
Utility	0%-50% FPIG	51%-100% FPIG	101%- 150% FPIG	0%-50% FPIG	51%-100% FPIG	101%- 150% FPIG	0%-50% FPIG	51%-100% FPIG	101%- 150% FPIG	
Duquesne	8,050	19,654	11,015	7,814	18,726	11,056	7,016	17,485	10,673	
Met-Ed	3,102	6,819	4,829	3,308	6,839	4,728	3,445	6,881	4,875	
PECO-Electric	30,399	64,441	42,001	28,556	60,672	37,172	25,951	57,045	33,329	
Penelec	3,777	10,681	6,832	3,893	10,418	6,843	3,836	10,340	7,035	
Penn Power	793	2,182	1,622	833	2,195	1,640	842	2,180	1,618	
PPL	8,629	25,240	20,101	8,262	25,232	19,231	9,440	25,980	19,558	
West Penn	5,623	11,009	7,261	4,921	12,253	8,395	4,325	10,390	7,434	
Total/Industry Average	60,373	140,026	93,661	57,587	136,335	89,065	54,855	130,301	84,522	

Monthly Average Natural Gas CAP Participation by Poverty Level - 2016-2018

		2016			2017			2018		
Utility	0%-50% FPIG	51%-100% FPIG	101%- 150% FPIG	0%-50% FPIG	51%-100% FPIG	101%-150% FPIG	0%-50% FPIG	51%-100% FPIG	101%-150% FPIG	
Columbia	4,537	9,922	7,050	5,068	10,409	7,444	5,426	10,772	8,012	
NFG	1,078	4,519	3,018	977	4,153	2,884	1,022	4,181	3,035	
PECO-Gas	5,278	9,593	9,044	5,114	9,066	7,718	4,755	8,564	6,919	
Peoples	4,164	9,100	6,542	3,917	8,367	5,910	3,838	7,934	5,673	
Peoples- Equitable	3,869	6,807	2,889	3,519	6,286	3,205	3,615	6,144	3,492	
PGW	16,374	29,555	6,839	15,324	27,267	5,881	14,469	27,579	6,986	
UGI South	2,530	3,799	1,697	2,652	3,918	1,755	2,314	3,680	1,582	
UGI North	1,489	2,900	1,727	1,376	2,733	1,557	1,132	2,352	1,346	
Total/Industry Average	39,319	76,195	38,806	37,947	72,199	36,354	36,571	71,206	37,045	

Monthly Average Percent Electric CAP Participation by Poverty Level – 2016-2018

		2016		2017			2018		
Utility	0%-50% FPIG	51%-100% FPIG	101%- 150% FPIG	0%-50% FPIG	51%-100% FPIG	101%- 150% FPIG	0%-50% FPIG	51%-100% FPIG	101%- 150% FPIG
Duquesne	20.8%	50.8%	28.4%	20.8%	49.8%	29.4%	19.9%	49.7%	30.3%
Met-Ed	21.0%	46.2%	32.7%	22.2%	46.0%	31.8%	22.7%	45.3%	32.1%
PECO-Electric	22.2%	47.1%	30.7%	22.6%	48.0%	29.4%	22.3%	49.0%	28.7%
Penelec	17.7%	50.2%	32.1%	18.4%	49.2%	32.3%	18.1%	48.7%	33.2%
Penn Power	17.3%	47.5%	35.3%	17.8%	47.0%	35.1%	18.1%	47.0%	34.9%
PPL	16.0%	46.8%	37.2%	15.7%	47.9%	36.5%	17.2%	47.3%	35.6%
West Penn	23.5%	46.1%	30.4%	19.2%	47.9%	32.8%	19.5%	46.9%	33.6%
Total/Industry Average	20.5%	49.5%	31.9%	20.3%	48.2%	31.5%	20.3%	48.3%	31.3%

Monthly Average Percent Natural Gas CAP Participation by Poverty Level - 2016-2018

		2016			2017				2018		
Utility	0%-50% FPIG	51%-100% FPIG	101%- 150% FPIG	0%-50% FPIG	51%-100% FPIG	101%-150% FPIG	0%-50% FPIG	51%-100% FPIG	101%-150% FPIG		
Columbia	21.1%	46.1%	32.8%	22.1%	45.4%	32.5%	22.4%	44.5%	33.1%		
NFG	12.5%	52.5%	35.0%	12.2%	51.8%	36.0%	12.4%	50.8%	36.8%		
PECO-Gas	22.1%	40.1%	37.8%	23.4%	41.4%	35.2%	23.5%	42.3%	34.2%		
Peoples	21.0%	45.9%	33.0%	21.5%	46.0%	32.5%	22.0%	45.5%	32.5%		
Peoples- Equitable	28.5%	50.2%	21.3%	27.0%	48.3%	24.6%	27.3%	46.4%	26.4%		
PGW	31.0%	56.0%	13.0%	31.6%	56.3%	12.1%	29.5%	56.2%	14.2%		
UGI South	31.5%	47.3%	21.1%	31.9%	47.1%	21.1%	30.5%	48.6%	20.9%		
UGI North	24.3%	47.4%	28.2%	24.3%	48.2%	27.5%	23.4%	48.7%	27.9%		
Total/Industry Average	25.5%	52.0%	25.1%	25.9%	49.3%	24.8%	25.3%	49.2%	25.6%		

CAP Default Rate

The **CAP default rate** is calculated by dividing the average monthly CAP participation at each poverty level, by the total annual number of defaults for each poverty level. CAP customers are considered non-compliant (in default) when they fail to meet program requirements. Actions resulting in CAP defaults include missing payments, making late payments, or failing to recertify. CAP customers who voluntarily leave the program are not counted in the default rate. Public utilities may track CAP default occurences differently. Therefore, the default rates in the tables below are not statisticly-valid for comparison purposes. ³⁸

Annual Electric CAP Default Rate by Poverty Level - 2016-2018

	2016		2017			2018			
Utility	0%-50% FPIG	51%-100% FPIG	101%- 150% FPIG	0%-50% FPIG	51%-100% FPIG	101%-150% FPIG	0%-50% FPIG	51%-100% FPIG	101%-150% FPIG
Duquesne	13.1%	7.5%	7.6%	47.7%	32.2%	33.3%	25.2%	16.9%	17.8%
Met-Ed	54.6%	42.8%	46.2%	63.7%	45.1%	50.2%	58.6%	35.1%	40.1%
PECO-Electric	51.1%	34.7%	43.8%	36.4%	24.6%	30.8%	30.2%	20.0%	55.3%
Penelec	57.1%	36.4%	39.9%	66.6%	41.6%	45.0%	62.6%	31.0%	35.1%
Penn Power	61.0%	38.3%	39.6%	64.1%	39.3%	42.1%	65.4%	34.7%	40.0%
PPL	22.2%	14.7%	12.5%	29.3%	18.1%	15.6%	26.2%	18.2%	17.1%
West Penn	46.7%	49.8%	58.5%	66.6%	34.6%	41.9%	77.2%	56.5%	65.1%
Total/Industry Average	43.7%	32.0%	35.4%	53.5%	33.6%	37.0%	49.3%	30.3%	38.6%

³⁸ The USR Working Group is currently working to establish consistent standards for all public utilities to track CAP defaults.

Annual Natural Gas CAP Default Rate by Poverty Level - 2016-2018

	2016			2017			2018		
Utility	0%-50% FPIG	51%- 100% FPIG	101%- 150% FPIG	0%-50% FPIG	51%-100% FPIG	101%- 150% FPIG	0%-50% FPIG	51%-100% FPIG	101%-150% FPIG
Columbia	18.4%	15.0%	17.6%	14.7%	11.9%	14.2%	16.3%	13.0%	15.6%
NFG	10.9%	10.8%	10.9%	7.6%	7.5%	7.5%	19.0%	19.0%	19.0%
PECO-Gas	57.8%	44.9%	51.3%	32.6%	23.0%	30.8%	28.1%	20.7%	67.1%
Peoples	19.2%	12.5%	25.0%	24.5%	16.6%	33.4%	23.0%	17.1%	33.8%
Peoples- Equitable	29.7%	22.6%	56.6%	27.2%	18.5%	61.6%	23.2%	16.3%	54.9%
PGW	20.8%	17.0%	23.5%	15.2%	11.7%	13.9%	26.9%	18.3%	18.7%
UGI South	12.2%	11.7%	13.0%	20.1%	22.0%	29.2%	33.4%	27.7%	49.8%
UGI North	10.6%	9.9%	10.2%	20.9%	23.2%	32.6%	31.3%	25.7%	44.9%
Total/Industry Average	22.5%	18.1%	26.0%	20.4%	16.8%	27.9%	25.4%	19.3%	38.0%

CAP Benefits – Bills & Credits

The USRR requires public utilities to report data on CAP benefits. Public utilities report by month the number of participants enrolled in CAP. Because CAP enrollment fluctuates during the year, the Commission bases average CAP credits and arrearage forgiveness benefits on the average monthly number of CAP participants rather than the number of CAP participants enrolled at the end of the year.

The PUC has identified the three components of **CAP benefits** as the average CAP bill, average CAP credits, and average arrearage forgiveness. The average **CAP bill** is the total billed (total of the expected monthly CAP payment) divided by the total number of CAP bills rendered. The average **CAP credit** is the difference between the usage-based bill and the CAP bill, divided by the average number of monthly CAP participants. The average **arrearage forgiveness** is the total preprogram arrearages forgiven as a result of customers making agreed upon CAP payments divided by the average monthly CAP participants. The tables show average monthly CAP bills and CAP benefits.

Average CAP bills and CAP credits fluctuate due to several factors, including varying CAP payment plans based on FPIG income levels, type of usage (heating or non-heating), condition of housing stock, and changes in usage related to customer behavior.

Average Monthly Electric CAP Bill - 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Duquesne	\$79	\$70	\$55	-30.4%
Met-Ed	\$68	\$67	\$72	5.9%
PECO-Electric	\$68	\$65	\$72	5.9%
Penelec	\$56	\$57	\$62	10.7%
Penn Power	\$63	\$61	\$68	7.9%
PPL	\$90	\$92	\$88	-2.2%
West Penn	\$77	\$70	\$73	-5.2%
Total/Industry Average	\$73	\$70	\$72	-1.4%

Average Monthly Natural Gas CAP Bill - 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Columbia	\$51	\$48	\$50	-2.0%
NFG	\$52	\$61	\$65	25.0%
PECO-Gas	\$48	\$45	\$60	25.0%
Peoples	\$68	\$68	\$79	16.2%
Peoples-Equitable	\$66	\$66	\$75	13.6%
PGW	\$73	\$80	\$99	35.6%
UGI South	\$64	\$60	\$63	-1.6%
UGI North	\$72	\$66	\$68	-5.6%
Total/Industry Average	\$63	\$64	\$76	20.6%

Average Annual Electric CAP Credits – 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Duquesne	\$396	\$439	\$523	32.1%
Met-Ed	\$763	\$793	\$869	13.9%
PECO-Electric	\$588	\$491	\$469	-20.2%
Penelec	\$691	\$728	\$797	15.3%
Penn Power	\$754	\$763	\$841	11.5%
PPL	\$1,024	\$1,031	\$1,028	0.4%
West Penn	\$763	\$748	\$823	7.9%
Total/Industry Average	\$676	\$646	\$674	-0.3%

Average Annual Natural Gas CAP Credits - 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Columbia	\$567	\$742	\$711	25.4%
NFG	\$76	\$99	\$133	75.0%
PECO-Gas	\$78	\$71	\$89	14.1%
Peoples	\$142	\$232	\$349	145.8%
Peoples-Equitable	\$172	\$258	\$391	127.3%
PGW	\$695	\$819	\$961	38.3%
UGI South	\$163	\$253	\$440	169.9%
UGI North	\$193	\$229	\$417	116.1%
Total/Industry Average	\$382	\$478	\$579	51.6%

CAP Benefits - Arrearage Forgiveness

Amounts of arrearage forgiveness can differ depending on: the length of time over which forgiveness occurs; the length of time a customer is enrolled in CAP; and the amount of customer arrearages brought into the CAP program.

Average Annual Electric Utilities Arrearage Forgiveness – 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Duquesne	\$109	\$133	\$164	50.5%
Met-Ed	\$118	\$106	\$103	-12.7%
PECO-Electric	\$64	\$43	\$42	-34.4%
Penelec	\$80	\$76	\$76	-5.0%
Penn Power	\$73	\$79	\$80	9.6%
PPL	\$525	\$441	\$357	-32.0%
West Penn	\$197	\$231	\$180	-8.6%
Total/Industry Average	\$170	\$152	\$140	-17.6%

Average Annual Natural Gas Utilities Arrearage Forgiveness - 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Columbia*	\$15	\$64	\$188	1,153.3%
NFG	\$32	\$23	\$55	71.9%
PECO-Gas	\$20	\$13	\$15	-25.0%
Peoples	\$138	\$153	\$124	-10.1%
Peoples-Equitable	\$49	\$87	\$91	85.7%
PGW	\$177	\$163	\$200	13.0%
UGI South	\$112	\$100	\$86	-23.2%
UGI North	\$122	\$108	\$90	-26.2%
Total/Industry Average	\$100	\$104	\$135	35.0%

^{*}The 2018 data reflects a change in the way Columbia reports the amount of average annual arrearage forgiveness.

Percent of CAP Bills Paid

The **percentage of CAP bills paid** by CAP customers is calculated by dividing the total annual CAP payments by the total annual CAP amount billed. The higher the percent of CAP bills paid by the customer, the less the public utility may have to recover in uncollectibles. CAP customer payments may include energy assistance grants (*e.g.*, LIHEAP, Hardship Fund, etc.).

Percentage of CAP Bills Paid by Electric CAP Customers - 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Duquesne	62.0%	73.9%	86.9%	40.2%
Met-Ed	87.2%	88.8%	90.3%	3.6%
PECO-Electric	83.0%	87.0%	86.0%	3.6%
Penelec	91.2%	90.8%	90.1%	-1.2%
Penn Power	91.4%	85.4%	88.4%	-3.3%
PPL	78.4%	76.9%	91.9%	17.2%
West Penn	75.4%	83.6%	85.9%	13.9%
Total/Industry Average	79.0%	82.8%	88.1%	11.5%

Percentage of CAP Bills Paid by Natural Gas CAP Customers - 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Columbia	75.1%	71.8%	73.5%	-2.1%
NFG	56.5%	68.9%	67.2%	18.9%
PECO-Gas	83.0%	87.0%	86.0%	3.6%
Peoples	67.4%	69.6%	67.6%	0.3%
Peoples-Equitable	66.6%	68.1%	65.7%	-1.4%
PGW	84.2%	71.6%	62.5%	-25.8%
UGI South	78.5%	71.9%	74.5%	-5.1%
UGI North	73.3%	68.0%	69.3%	-5.5%
Total/Industry Average	77.0%	72.5%	68.2%	-11.4%

CAP Payment Rate

The **CAP Payment rate** is calculated by dividing the total number of full monthly CAP payments by the total number of monthly CAP bills rendered. The CAP payment rate reflects overall program totals and is not a household average or broken out by poverty level.

CAP Payment Rate Electric CAP Customers - 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Duquesne	40.5%	41.7%	49.8%	23.0%
Met-Ed	66.3%	64.3%	64.7%	-2.4%
PECO-Electric	67.7%	60.5%	60.6%	-10.5%
Penelec	70.5%	69.9%	70.2%	>-1.0%
Penn Power	69.2%	71.4%	69.3%	0.1%
PPL	60.3%	58.1%	60.5%	0.1%
West Penn	54.7%	56.9%	59.5%	8.8%
Total/Industry Average	61.8%	58.1%	60.2%	-2.6%

CAP Payment Rate Natural Gas CAP Customers - 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Columbia	56.3%	53.1%	53.4%	-5.2%
NFG	67.3%	72.7%	69.4%	3.1%
PECO-Gas	68.0%	53.1%	59.0%	-13.2%
Peoples	51.1%	47.1%	46.5%	-9.0%
Peoples-Equitable	47.3%	43.9%	42.4%	-10.4%
PGW	80.1%	88.5%	89.3%	11.5%
UGI South	62.4%	59.3%	57.5%	-7.9%
UGI North	54.9%	56.3%	54.1%	-1.5%
Total/Industry Average	65.7%	64.5%	65.2%	-1.0%

CAP Costs

The USRR requires public utilities to report data on the three components of **CAP costs**: CAP administration costs, CAP credits, and arrearage forgiveness. Administrative costs include: contract and staffing, account monitoring, intake, outreach, consumer education and conservation training, recertification processing, computer programming, program evaluation, and other fixed overhead costs. Account monitoring costs include collection expenses, as well as other operation and maintenance expenses. The tables below contain the percentage of CAP spending by program component.

Component costs are gross costs and do not reflect any potential savings to traditional collection expenses, cash-working-capital expenses, and bad debt expenses that may result from enrolling low-income customers in CAP. Appendicies 5-7 show total universal service costs, universal service funding mechanisms, and average annual universal service costs per ratepayer.

Percent of Electric Total CAP Spending by CAP Component – Administrative Costs – 2016-2018

Utility	CAP Administrative Costs					
	2016	2017	2018			
Duquesne	8.0%	7.0%	6.4%			
Met-Ed	9.4%	9.4%	8.4%			
PECO-Electric	3.4%	4.4%	4.5%			
Penelec	10.1%	9.8%	8.7%			
Penn Power	11.1%	11.4%	9.5%			
PPL	3.3%	4.2%	4.9%			
West Penn	6.8%	8.2%	7.0%			
Total/Industry Average	5.0%	5.9%	5.8%			

Percent of Electric Total CAP Spending by CAP Component – Credits – 2016-2018

114774	CAP Credits					
Utility	2016	2017	2018			
Duquesne	72.1%	71.5%	71.2%			
Met-Ed	78.6%	79.9%	81.9%			
PECO-Electric	87.1%	87.9%	87.7%			
Penelec	80.6%	81.7%	83.3%			
Penn Power	81.0%	80.3%	82.6%			
PPL	63.9%	67.1%	70.6%			
West Penn	74.1%	70.1%	76.4%			
Total/Industry Average	76.0%	76.2%	78.0%			

Percent of Electric Total CAP Spending by CAP Component – Arrearage Forgiveness – 2016-2018

Utility	CAP Arrearage Forgiveness					
	2016	2017	2018			
Duquesne	19.9%	21.6%	22.4%			
Met-Ed	12.1%	10.7%	9.7%			
PECO-Electric	9.5%	7.6%	7.8%			
Penelec	9.3%	8.5%	8.0%			
Penn Power	7.8%	8.3%	7.9%			
PPL	32.8%	28.7%	24.5%			
West Penn	19.1%	21.7%	16.7%			
Total/Industry Average	19.1%	18.0%	16.2%			

Percent of Natural Gas Total CAP Spending by CAP Component – Administrative Costs – 2016-2018

	CAP Administrative Costs					
Utility	2016	2017	2018			
Columbia	7.6%	6.1%	2.9%			
NFG	20.2%	18.9%	16.4%			
PECO-Gas	17.7%	21.7%	19.1%			
Peoples	16.0%	13.5%	7.6%			
Peoples-Equitable	21.6%	15.7%	4.7%			
PGW	2.8%	2.9%	4.4%			
UGI South	10.5%	7.6%	6.3%			
UGI North	9.9%	8.3%	8.4%			
Total/Industry Average	6.8%	6.3%	5.1%			

Percent of Natural Gas Total CAP Spending by CAP Component - Credits - 2016-2018

	CAP Credits					
Utility	2016	2017	2018			
Columbia	90.1%	86.5%	76.8%			
NFG	56.1%	66.0%	59.1%			
PECO-Gas	65.4%	66.0%	69.0%			
Peoples	42.5%	52.2%	68.1%			
Peoples-Equitable	60.9%	63.1%	77.3%			
PGW	77.5%	81.0%	79.2%			
UGI South	53.1%	66.1%	78.4%			
UGI North	55.1%	62.3%	75.3%			
Total/Industry Average	73.8%	77.0%	77.0%			

Percent of Natural Gas Total CAP Spending by CAP Component – Arrearage Forgiveness – 2016-2018

	CAP Arrearage Forgiveness					
Utility	2016	2017	2018			
Columbia	2.3%	7.5%	20.3%			
NFG	23.7%	15.1%	24.5%			
PECO-Gas	16.9%	12.3%	11.9%			
Peoples	41.5%	34.4%	24.3%			
Peoples-Equitable	17.5%	21.3%	17.9%			
PGW	19.8%	16.1%	16.5%			
UGI South	36.4%	26.2%	15.3%			
UGI North	35.0%	29.4%	16.3%			
Total/Industry Average	19.4%	16.7%	18.0%			

Electric Average CAP Enrollment - 2016-2018

Flatin.	Average CAP Enrollment					
Utility	2016	2017	2018			
Duquesne	38,719	37,596	35,173			
Met-Ed	14,750	14,875	15,201			
PECO- Electric	136,841	126,401	116,325			
Penelec	21,291	21,154	21,210			
Penn Power	4,596	4,667	4,640			
PPL	53,970	52,726	54,978			
West Penn	23,892	25,568	22,150			
Total/Industry Average	294,059	282,987	269,677			

Natural Gas Average CAP Enrollment - 2016-2018

Flatin.	Average Total CAP Enrollment					
Utility	2016	2017	2018			
Columbia	21,509	22,921	24,209			
NFG	8,615	8,014	8,238			
PECO-Gas	23,915	21,898	20,238			
Peoples	19,806	18,194	17,445			
Peoples-Equitable	13,564	13,009	13,251			
PGW	52,767	48,471	49,034			
UGI South	8,026	8,326	7,576			
UGI North	6,116	5,666	4,830			
Total/Industry Average	154,318	146,499	144,821			

CAP Costs Per CAP Customer

The average **CAP cost per CAP customer** is calculated by dividing the Total CAP Cost by the Average Total CAP Enrollment. This provides an estimate of the amount of program costs for each CAP participant.

Electric CAP Costs - 2016-2018

Utility		Total CAP Costs		Average Program Costs per CAP Customer			
	2016	2017	2018	2016	2017	2018	
Duquesne	\$21,244,454	\$23,083,236	\$25,820,755	\$549	\$614	\$734	
Met-Ed	\$14,313,820	\$14,758,527	\$16,128,557	\$970	\$992	\$1,061	
PECO- Electric	\$92,369,577	\$70,653,278	\$62,290,529	\$675	\$559	\$535	
Penelec	\$18,254,884	\$18,852,006	\$20,282,993	\$857	\$891	\$956	
Penn Power	\$4,275,287	\$4,435,519	\$4,720,719	\$930	\$950	\$1,017	
PPL	\$86,446,411	\$80,923,575	\$80,034,598	\$1,602	\$1,535	\$1,456	
West Penn	\$24,609,316	\$27,280,111	\$23,885,800	\$1,030	\$1,067	\$1,078	
Total/Industry Average	\$261,513,749	\$239,986,252	\$233,163,951	\$889	\$848	\$865	

Natural Gas CAP Costs - 2016-2018

Utility		Total CAP Costs		Average Program Costs per CAP Customer			
	2016	2017	2018	2016	2017	2018	
Columbia*	\$13,544,667	\$19,668,704	\$22,396,085	\$630	\$858	\$925	
NFG	\$1,169,595	\$1,199,650	\$1,849,773	\$136	\$150	\$225	
PECO-Gas	\$2,857,660	\$2,357,836	\$2,595,584	\$119	\$108	\$128	
Peoples	\$6,606,963	\$8,102,420	\$8,927,521	\$334	\$445	\$512	
Peoples-Equitable	\$3,826,459	\$5,328,722	\$6,703,377	\$282	\$410	\$506	
PGW	\$47,310,248	\$49,005,928	\$59,549,654	\$897	\$1,011	\$1,214	
UGI South	\$2,470,474	\$3,187,005	\$4,253,550	\$308	\$383	\$561	
UGI North	\$2,137,095	\$2,088,411	\$2,671,047	\$349	\$369	\$553	
Total/Industry Average	\$79,923,161	\$90,938,676	\$108,946,591	\$518	\$621	\$752	

^{*} Columbia reports the increase in the CAP costs from 2016 to 2018 is attributed to an increase in CAP Credits and changes to how pre-program arrearage forgiveness and administrative costs are reported.

CARES

The primary purpose of a CARES program is to provide a cost-effective service that helps payment troubled customers maximize their ability to pay public utility bills and maintain safe and adequate public utility service. CARES staff maintains and utilizes a network of community organizations and government agencies that can provide services to eligible customers who are experiencing a temporary hardship. CARES services include account counseling and monitoring (case management) and referrals to services that provide additional resources or assistance, such as LIHEAP and hardship funds.

LIHEAP outreach and networking are vital pieces of CARES, especially when addressing important health and safety concerns relating to public utility service.

CARES-LIHEAP

USRR requires public utilities to report data on their CARES programs. CARES benefits are defined in the USRR as the total number and dollar amount of all LIHEAP benefits applied to all low-income customer accounts. The tables show the number of households receiving only LIHEAP cash grants, but the "Total LIHEAP Grants" dollar amounts include both LIHEAP cash and crisis benefits.³⁹ The total amount of LIHEAP dollars each public utility receives depends primarily on the amount of the federal LIHEAP appropriation to the state and the number of low-income customers who participate in LIHEAP.

³⁹ Most households that receive LIHEAP crisis grants also receive LIHEAP cash benefits.

Electric CARES-LIHEAP - 2016-2018

Utility	Low-Income Households who Received LIHEAP Cash Grants		Low-Income Households who Received LIHEAP Crisis Grants			Total LIHEAP Grants for Low-Income Customers*			
	2016	2017	2018	2016	2017	2018	2016	2017	2018
Duquesne	4,537	9,853	16,186	81	1,037	2,682	\$1,340,031	\$2,963,843	\$3,871,905
Met-Ed	8,284	8,350	8,470	1,679	2,141	2,614	\$2,903,012	\$3,329,526	\$3,397,341
PECO-Electric	96,707	66,469	57,323	8,873	6,291	10,317	\$14,971,213	\$12,916,755	\$14,295,971
Penelec	11,425	12,369	11,083	2,662	3,586	4,176	\$4,377,878	\$5,033,379	\$4,943,148
Penn Power	3,227	3,059	2,820	1,043	1,104	1,279	\$1,265,993	\$1,273,640	\$1,319,800
PPL	26,139	21,709	38,484	3,008	2,874	6,243	\$8,816,935	\$7,777,324	\$9,001,842
West Penn	12,148	12,964	12,176	1,868	3,145	3,812	\$4,234,893	\$5,107,303	\$5,085,258
Total	162,467	134,773	146,542	19,214	20,178	31,123	\$37,909,955	\$38,401,770	\$41,915,265

^{*}Total LIHEAP grants include both LIHEAP cash and crisis grants. Typically, customers who receive crisis grants also receive cash grants.

Natural Gas CARES-LIHEAP - 2016-2018

Low-Income Households who Utility Received LIHEAP Cash Grants		who R	Low-Income Households who Received LIHEAP Crisis Grants			Total LIHEAP Grants for Low-Income Customers*			
	2016	2017	2018	2016	2017	2018	2016	2017	2018
Columbia	19,559	19,100	18,703	5,385	4,013	3,905	\$7,366,395	\$7,220,611	\$6,817,598
NFG	16,831	17,509	16,637	3,300	3,013	3,054	\$5,780,651	\$6,069,920	\$5,996,477
PECO-Gas	15,743	10,821	10,116	1,445	1,024	1,821	\$2,437,174	\$2,102,727	\$2,522,819
Peoples	31,643	17,994	31,167	5,615	4,618	4,021	\$7,141,239	\$6,460,971	\$8,776,860
Peoples- Equitable	20,823	12,044	21,312	4,642	4,841	3,419	\$4,839,611	\$4,673,506	\$6,218,299
PGW	47,159	60,960	60,782	14,472	8,054	12,588	\$20,049,783	\$22,340,502	\$23,666,457
UGI South	9,808	12,441	17,342	2,008	957	1,029	\$3,854,194	\$3,538,766	\$3,365,556
UGI North	10,353	10,847	15,623	1,553	707	845	\$3,641,270	\$3,164,107	\$3,240,268
Total	171,919	161,716	191,682	38,420	27,227	30,682	\$55,110,317	\$55,571,110	\$60,604,334

^{*}Total LIHEAP grants include both LIHEAP cash and crisis grants. Typically, customers who receive crisis grants also receive cash grants.

The estimated LIHEAP participation rate is determined by dividing the number of LIHEAP cash grants by the number of confirmed low-income customers for each public utility. As LIHEAP participants may only assign their LIHEAP cash grant to one energy vendor, low-income customers with non-electric heating could assign the LIHEAP grant to either their heating supplier (e.g., gas, oil) or their electric utility. Therefore, this participation rate may under-count the actual number of confirmed low-income customers that actually participated in LIHEAP for each utility.

Estimated Electric LIHEAP Participation Rate - 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Duquesne	10.1%	20.3%	32.8%	224.8%
Met-Ed	12.3%	12.0%	11.7%	-4.9%
PECO-Electric	57.1%	42.7%	39.2%	-31.3%
Penelec	13.5%	14.0%	12.2%	-9.6%
Penn Power	16.7%	15.5%	14.0%	-16.2%
PPL	14.8%	11.9%	20.3%	37.2%
West Penn	19.0%	18.9%	16.8%	-11.6%
Total/Industry Average	25.9%	21.3%	22.9%	-11.6%

Estimated Natural Gas LIHEAP Participation Rate - 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Columbia	28.7%	28.1%	27.7%	-3.5%
NFG	64.7%	68.4%	74.2%	14.7%
PECO-Gas	48.9%	38.9%	39.4%	-19.4%
Peoples	53.0%	30.0%	45.0%	-15.1%
Peoples-Equitable	47.5%	27.0%	50.2%	5.7%
PGW	31.7%	41.6%	40.7%	28.4%
UGI South	28.6%	37.1%	49.8%	74.1%
UGI North	44.9%	49.4%	71.1%	58.4%
Total/Industry Average	39.4%	37.8%	51.8%	31.5%

CARES Costs, Direct Dollars and Net Benefits

The regulations define⁴⁰ direct dollars as the total of all dollars applied to a CARES customer's public utility account, from all sources of energy assistance such as LIHEAP, hardship fund grants, and local agencies' grants. However, in our report, the column "Direct Dollars in Addition to LIHEAP for CARES Participants" shows the total dollar benefits not related to LIHEAP. These non-LIHEAP additional dollars come from hardship fund grants and other sources (*i.e.*, charities, community programs, etc).

Gross CARES benefits, therefore, includes all LIHEAP cash and crisis grants, plus any additional non-LIHEAP direct dollars. The administrative costs of CARES are then deducted from the total/gross CARES benefits to yield net CARES benefits. The net CARES benefits reflect the effectiveness of the program in connecting customers with programs and resources that provide financial assistance.

⁴⁰ 52 Pa. Code § 54.72. Definitions.

Electric CARES Benefits - 2018

Utility	CARES Administrative Costs	Direct Dollars in Addition to LIHEAP for CARES Participants	Net CARES Benefits (Includes LIHEAP)
Duquesne	\$135,000	\$184,181	\$3,921,086
Met-Ed	\$4,033	\$1,725	\$3,395,033
PECO-Electric	\$1,400,187	\$127,415	\$13,023,199
Penelec	\$7,832	\$4,518	\$4,939,834
Penn Power	\$2,489	\$1,703	\$1,319,014
PPL	\$0	\$54,000	\$9,055,842
West Penn	\$6,489	\$1,206	\$5,079,975
Total/Industry Average	\$1,556,030	\$374,748	\$40,733,983

Electric CARES Benefits - 2017

Utility	CARES Administrative Costs	Direct Dollars in Addition to LIHEAP for CARES Participants	Net CARES Benefits (Includes LIHEAP)
Duquesne	\$135,000	\$216,397	\$3,045,240
Met-Ed	\$2,659	\$851	\$3,327,718
PECO-Electric	\$1,704,431	\$200,103	\$11,412,427
Penelec	\$3,696	\$4,350	\$5,034,033
Penn Power	\$428	\$875	\$1,274,087
PPL	\$0	\$300	\$7,777,624
West Penn	\$3,737	\$3,380	\$5,106,946
Total/Industry Average	\$1,849,951	\$426,256	\$36,978,075

Electric CARES Benefits - 2016

Utility	CARES Administrative Costs	Direct Dollars in Addition to LIHEAP for CARES Participants	Net CARES Benefits (Includes LIHEAP)
Duquesne	\$135,000	\$419,197	\$1,624,228
Met-Ed	\$8,226	\$348	\$2,895,134
PECO-Electric	\$1,351,996	\$460,245	\$14,079,462
Penelec	\$3,124	\$760	\$4,375,514
Penn Power	\$696	\$0	\$1,265,297
PPL	\$0	\$5,131	\$8,822,066
West Penn	\$2,855	\$2,811	\$4,234,849
Total/Industry Average	\$1,501,897	\$888,492	\$37,296,550

Natural Gas CARES Benefits - 2018

Utility	CARES Administrative Costs	Direct Dollars in Addition to LIHEAP for CARES Participants	Net CARES Benefits (Includes LIHEAP)
Columbia	\$336,931	\$54,255	\$6,534,922
NFG	\$4,523	\$4,263	\$5,996,217
PECO-Gas	\$247,092	22485	\$2,298,212
Peoples	\$128,834	\$70,060	\$8,718,086
Peoples-Equitable	\$89,543	\$29,265	\$6,158,021
PGW	\$434,669	\$101,044	\$23,332,832
UGI South	\$146,449	\$15,847	\$3,234,954
UGI North	\$31,713	\$20,852	\$3,229,407
Total/Industry Average	\$1,419,754	\$318,071	\$59,502,651

Natural Gas CARES Benefits - 2017

Utility	CARES Administrative Costs	Direct Dollars in Addition to LIHEAP for CARES Participants	Net CARES Benefits (Includes LIHEAP)
Columbia	\$397,491	\$86,071	\$6,909,191
NFG	\$4,206	\$7,459	\$6,073,173
PECO-Gas	\$277,466	\$32,575	\$1,857,836
Peoples	\$111,455	\$57,247	\$6,406,763
Peoples-Equitable	\$80,496	\$16,351	\$4,609,361
PGW	\$424,669	\$76,338	\$21,992,171
UGI South	\$70,454	\$30,494	\$3,498,806
UGI North	\$40,413	\$11,598	\$3,135,292
Total/Industry Average	\$1,406,650	\$318,133	\$54,482,593

Natural Gas CARES Benefits - 2016

Utility	CARES Administrative Costs	Direct Dollars in Addition to LIHEAP for CARES Participants	Net CARES Benefits (Includes LIHEAP)
Columbia	\$241,037	\$110,972	\$7,236,330
NFG	\$4,141	\$1,504	\$5,778,014
PECO-Gas	\$220,092	\$67,779	\$2,284,861
Peoples	\$120,010	\$86,659	\$7,107,888
Peoples-Equitable	\$85,398	\$36,996	\$4,791,209
PGW	\$665,128	\$23,377	\$19,408,032
UGI South	\$68,108	\$42,734	\$3,828,820
UGI North	\$36,617	\$26,164	\$3,630,817
Total/Industry Average	\$1,440,531	\$396,185	\$54,065,971

Hardship Fund Programs

Public utility hardship funds provide cash assistance to residential customers who need help in paying their public utility bills, often after other resources (e.g., LIHEAP) have been exhausted. The public utility or its agent will apply hardship fund payments directly to the public utility account of eligible customers.

Ratepayer and Shareholder Contributions

The USRR requires public utilities to report data on the amount of ratepayer and public utility contributions to hardship funds. Shareholders contribute a large portion of public utility contributions. The Commission considers ratepayer contributions as contributions from public utility employees, ratepayers, and special contributions. Special contributions include monies from formal complaint settlements, overcharge settlements, off-system sales, and special solicitations of business corporations. However, the average voluntary ratepayer contribution per customer does not include special contributions — only voluntary ratepayer contributions. The Commission defines public utility contributions as shareholder or public utility grants for program administration, outright grants to the funds, and grants that match contributions of ratepayers.

Electric Hardship Fund Contributions - 2017-18

Utility	Voluntary Ratepayer Contributions	Average Voluntary Ratepayer Contribution per Customer	Public Utility & Shareholder Contributions
Duquesne	\$203,115	\$0.38	\$468,295
Met-Ed	\$116,836	\$0.23	\$116,836
PECO-Electric	\$134,770	\$0.07	\$371,099
Penelec	\$72,441	\$0.14	\$72,441
Penn Power	\$34,517	\$0.24	\$33,907
PPL	\$374,214	\$0.30	\$755,769
West Penn	\$149,602	\$0.24	\$109,000
Total/Industry Average	\$1,085,495	\$0.22	\$1,927,347

Natural Gas Hardship Fund Contributions - 2017-18

Utility	Voluntary Ratepayer Contributions	Average Voluntary Ratepayer Contribution per Customer	Public Utility & Shareholder Contributions
Columbia	\$375,000	\$0.94	\$150,000
NFG	\$43,541	\$0.21	\$67,000
PECO-Gas	\$23,783	\$0.04	\$65,488
Peoples	\$234,752	\$0.70	\$1,210,000
Peoples-Equitable*	\$0	\$0.00	\$0
PGW	\$1,182	\$0.00	\$529,203
UGI South	\$68,261	\$0.19	\$123,354
UGI North	\$12,255	\$0.08	\$66,000
Total/Industry Average	\$758,774	\$0.29	\$2,211,045

^{*}Peoples-Equitable's Hardship Fund Grant data is combined with Peoples' Hardship Fund Grant data and cannot be separated.

Hardship Fund Benefits

The USRR requires public utilities to also report data on hardship fund benefits. The Commission defines hardship fund benefits⁴¹ as, "the total number and dollar amount of cash benefits or bill credits." The cumulative total number and dollar amount of the grants disbursed for the program year are reported as of the end of the program year.

Electric Public Utility Hardship Fund Grant Benefits - 2016-2018

Utility	Ratepayers Receiving Grants		Average Grant		Total Benefits Disbursed	
	2016-17	2017-18	2016-17	2017-18	2016-17	2017-18
Duquesne	1,584	2,020	\$377	\$377	\$597,785	\$762,512
Met-Ed	626	651	\$374	\$359	\$234,000	\$234,000
PECO-Electric	773	450	\$518	\$566	\$400,205	\$254,814
Penelec	412	420	\$354	\$348	\$146,000	\$146,000
Penn Power	192	214	\$375	\$336	\$72,000	\$72,000
PPL	2,744	2,530	\$335	\$354	\$919,542	\$896,452
West Penn	610	665	\$357	\$329	\$218,000	\$218,500
Total/Industry Average	6,941	6,950	\$373	\$372	\$2,587,532	\$2,584,278

Natural Gas Public Utility Hardship Fund Grant Benefits - 2016-2018

Utility	Ratepayers Receiving Grants		Average Grant		Total Benefits Disbursed	
	2016-17	2017-18	2016-17	2017-18	2016-17	2017-18
Columbia	1,438	1,200	\$396	\$406	\$569,828	\$487,716
NFG	302	393	\$253	\$368	\$76,463	\$144,638
PECO-Gas	124	79	\$525	\$569	\$65,150	\$44,967
Peoples	3,160	3,054	\$349	\$360	\$1,101,526	\$1,100,000
Peoples-Equitable*	0	0	\$0	\$0	\$0	\$0
PGW	1,344	912	\$1,088	\$1,161	\$1,461,742	\$1,058,407
UGI South	468	527	\$281	\$265	\$131,506	\$139,838
UGI North	335	339	\$259	\$290	\$86,913	\$98,317
Total/Industry Average	7,171	6,504	\$487	\$473	\$3,493,128	\$3,073,883

^{*}Peoples-Equitable's Hardship Fund Grant data is combined with Peoples' Hardship Fund Grant data and cannot be separated.

Total Universal Service Program Spending

Total annual Universal Service program spending is calculated by adding the total program costs for CAP, LIURP and CARES. Stakeholder and voluntary contributions to hardship fund grants are not recovered in public utility base

⁴¹ 52 Pa. Code **§** 54.72 and **§** 62.5

rates. Only hardship fund administrative costs are recoverable for most utilities, so hardship fund program costs are not included in the Total Universal Service Program Spending tables below.⁴²

Total Annual Electric Universal Service Program Spending - 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Duquesne	\$23,079,521	\$24,407,415	\$28,297,392	22.6%
Met-Ed	\$18,588,313	\$19,455,470	\$21,755,946	17.0%
PECO-Electric	\$99,321,130	\$78,354,961	\$69,290,716	-30.2%
Penelec	\$23,224,130	\$24,089,756	\$26,480,948	14.0%
Penn Power	\$6,692,707	\$6,714,043	\$7,242,197	8.2%
PPL	\$96,306,051	\$90,908,486	\$90,264,489	-6.3%
West Penn	\$29,038,484	\$32,014,170	\$28,300,622	-2.5%
Total/Industry Average	\$296,250,779	\$275,850,752	\$271,632,310	-8.3%

Total Annual Natural Gas Universal Service Program Spending - 2016-2018

Utility	2016	2017	2018	Percent Change 2016-18
Columbia	\$18,786,181	\$24,628,083	\$27,253,047	45.1%
NFG	\$2,313,269	\$2,250,979	\$3,186,234	37.7%
PECO-Gas	\$5,327,754	\$4,885,302	\$5,092,676	-4.4%
Peoples	\$7,976,736	\$9,464,197	\$10,351,124	29.8%
Peoples-Equitable	\$4,711,659	\$6,209,416	\$7,583,997	61.0%
PGW	\$55,613,766	\$54,930,489	\$68,093,074	22.4%
UGI South	\$3,392,125	\$4,474,618	\$5,600,907	65.1%
UGI North	\$3,055,000	\$3,055,613	\$3,767,180	23.3%
Total/Industry Average	\$101,176,490	\$109,568,964	\$130,928,239	29.4%

⁴² Only PGW is permitted to recover all utility expenses related to its hardship fund program from its ratepayers. As a city-owned natural gas distribution utility, PGW receives no shareholder contributions for this program. Only voluntary contributions to PGW's hardship fund program are not recovered.

4. Small Public Utilities' Universal Service Programs

The USRR has fewer data requirements⁴³ for small public utilities. EDCs with fewer than 60,000 residential customers and NGDCs with fewer than 100,000 residential customers must file universal service plans every three years, but the plans are not subject to the Commission's formal approval process. Instead, the plans are informally reviewed by the Bureau of Consumer Services (BCS). In the plans, small public utilities must describe the level of services provided by their plans as well as the expenses associated with the programs.

As a result of the Electricity Generation Customer Choice and Competition Act and the Natural Gas Choice and Competition Act, seven small public utilities now have various universal service programs for their low-income customers.

Citizens' Electric (Citizens), Valley Energy (Valley), and Wellsboro Electric (Wellsboro) operate hardship funds through the Dollar Energy Fund.

Pike County Power & Light (Pike) operates its own hardship fund program (Neighbor Fund Program).

Peoples Gas LLC (formerly Peoples TWP) operates hardship funds through the Dollar Energy Fund and offers a full-scale CAP program. As of December 31, 2018, the program enrollment was approximately 3,167 customers. The public utility also operates a LIURP program, which completed 36 jobs in 2018.

UGI Central (formerly UGI Central Penn Gas) offers a full-scale CAP program. As of December 31, 2018, the program enrollment was approximately 2,328 customers. UGI Central also administers a LIURP program, completing 57 jobs in 2018.

UGI Utilites Inc. (UGI Electric) offers a full-scale CAP program. As of December 31, 2018, the program enrollment was approximately 2,521 customers. The public utility operates its own hardship fund and also administers a LIURP program, completing 47 jobs in 2018.

UGI Central and UGI Electric also operate CARES and Hardship Funds (Operation Share).

The small public utilities also differ significantly from each other in the total number of residential customers each serves. For example, UGI Central, UGI Electric, and Peoples Gas LLC each serve more than 50,000 residential customers. Meanwhile, Citizens', Pike, Wellsboro, and Valley each serve fewer than 7,000 residential customers.

In addition to the public utility-sponsored programs, LIHEAP benefits are available to all low-income households meeting the income guidelines for LIHEAP eligibility.

⁴³ 52 Pa. Code, Chapter 54, § 54.77 for EDCs and at 52 Pa. Code, Chapter 62, § 62.7 for NGDCs

5. Appendices

Appendix 1 - When is an Account Considered to be Overdue

As mentioned previously in the sections dealing with "Debt", two factors affect the uniformity of the data reported regarding the number of overdue customers and the dollars in debt associated with those customers. First, public utilities use different methods for determining when an account is overdue. Public utilities consider either the due date of the bill or the transmittal date of the bill to be day zero. The transmittal date is 20 days before the due date. For USRR comparative purposes, public utilities are requested to consider the due date as day zero and to report debt that is at least 30 days overdue. Appendix 1 shows the different methods public utilities use to determine overdue accounts and how they compare to the preferred method (30 days overdue).

Utility	When is Day Zero (0)	How Many Days Overdue	Days of Variance from BCS Interpretation*
Duquesne	Bill Due Date	30 Days	0 Days
Met-Ed and Penelec	Bill Due Date	30 Days	0 Days
PECO-Electric	Bill Transmittal Date	30 Days	20 Days Sooner
Penn Power	Bill Due Date	30 Days	0 Days
PPL	Bill Transmittal Date	30 Days	20 Days Sooner
West Penn	Bill Due Date	30 Days	0 Days
Columbia	Bill Due Date	30 Days	0 Days
NFG	Bill Rendition Date**	60 Days	9 Days Later
PECO-Gas	Bill Transmittal Date	30 Days	20 Days Sooner
Peoples	Bill Due Date	30 Days	0 Days
Peoples-Equitable	Bill Due Date	30 Days	0 Days
PGW	Bill Transmittal Date	30 Days	20 Days Sooner
UGI South	Bill Due Date	30 Days	0 Days
UGI North	Bill Due Date	30 Days	0 Days

^{*}The PUC considers day zero to be the bill due date and the applicable regulations require companies to report arrearages beginning at 30 days overdue.

^{**}Bill Rendition Date is one day prior to the Bill Transmittal Date.

Appendix 2 - When Does an Account Move from Active to Inactive Status

The second factor affecting the arrearage data uniformity is when a public utility moves a terminated or discontinued account from active status (included in the reporting) to inactive status (excluded from the reporting). Moving an account to inactive status is one of the last steps in the collections cycle. Appendix 2 shows the methods public utilities use to determine when an account is removed from active status, after termination of service or discontinuance of service.

Utility	After an Account is Terminated	After an Account is Discontinued	
Duquesne	7 Days after Termination Date	3 to 5 Days after Discontinuance	
Met-Ed and Penelec	10 Days after Termination Date	Same Day as Discontinuance	
PECO-Electric	30 to 32 Days after Termination Date	Same Day as Discontinuance	
Penn Power	10 Days after Termination Date	Same Day as Discontinuance	
PPL	15 Days after Termination Date	Bill Transmittal Date	
West Penn	10 Days after Termination Date	Same Day as Discontinuance	
Columbia	5 to 7 Days after Termination Date	Same Day as Discontinuance	
NFG	Same Day as Termination Date	Same Day as Discontinuance	
PECO-Gas	30 to 32 Days after Termination Date	Same Day as Discontinuance	
Peoples	10 Days after Termination Date	10 Days after Discontinuance	
Peoples-Equitable	10 Days after Termination Date	10 Days after Discontinuance	
PGW	0 to 30 Days after Termination Date	0 to 1 Day after Final Bill Transmittal Date	
UGI South	Same Day as Termination Date	Same Day as Discontinuance	
UGI North	Same Day as Termination Date	Same Day as Discontinuance	

Appendix 3 – 2018 and 2019 Federal Poverty Guidelines

2018 Annual Federal Poverty Income Guidelines*					
Size of Household	0-50% of Poverty	51-100% of Poverty	101-150% of Poverty	151-200% of Poverty	
1	\$6,070	\$12,140	\$18,210	\$24,280	
2	\$8,230	\$16,460	\$24,690	\$32,920	
3	\$10,390	\$20,780	\$31,170	\$41,560	
4	\$12,550	\$25,100	\$37,650	\$50,200	
5	\$14,710	\$29,420	\$44,130	\$58,840	
6	\$16,870	\$33,740	\$50,610	\$67,480	
7	\$19,030	\$38,060	\$57,090	\$76,120	
8	\$21,190	\$42,380	\$63,570	\$84,760	
For each additional person, add	\$2,160	\$4,320	\$6,480	\$8,640	

^{*} Income reflects upper limit of the poverty guideline for each column.

Effective: January 13, 2018. SOURCE: Federal Register, Vol. 83, January 18, 2018, pp. 2642-2644.

2019 Annual Federal Poverty Income Guidelines*					
Size of Household	0-50% of Poverty	51-100% of Poverty	101-150% of Poverty	151-200% of Poverty	
1	\$6,245	\$12,490	\$18,735	\$24,980	
2	\$8,455	\$16,910	\$25,365	\$33,820	
3	\$10,665	\$21,330	\$31,995	\$42,660	
4	\$12,875	\$25,750	\$38,625	\$51,500	
5	\$15,085	\$30,170	\$45,255	\$60,340	
6	\$17,295	\$34,590	\$51,885	\$69,180	
7	\$19,505	\$39,010	\$58,515	\$78,020	
8	\$21,715	\$43,430	\$65,145	\$86,860	
For each additional person, add	\$2,210	\$4,420	\$6,630	\$8,840	

^{*} Income reflects upper limit of the poverty guideline for each column.

Effective: January 11, 2019. SOURCE: Federal Register, Vol. 84, February 1, 2019, pp. 1167-1168.

Appendix 4 - Instructions to Access Universal Service Reports, Plans and Evaluations on PUC Website

To Access Universal Service Programs & Collections Performance Reports:

- Go to the PUC website at: www.puc.pa.gov. On the PUC's website, locate and click on the "Filings & Resources" tab on the headings bar.
- In the column of options on the left side of the page, locate and click on "Universal Service Reports".
- Choose the desired year of the Universal Service Programs & Collections Performance Report and click to access the report.

To Access Universal Service Plans and Evaluations:

- Go to the PUC website at: www.puc.pa.gov. On the PUC's website, locate and click on the "Consumer Info" tab on the headings bar.
- On the right side of the page, locate and click on "Consumer Information on Energy Efficiency, Assistance Programs, Safety, Shopping, & More" in the column of options. Click "Read More" to access the page.
- Under the header titled "Energy Assistance Information," click on "Energy Assistance" to access the Energy Assistance Programs page.
- Under the header "Universal Service Plans & Evaluations" you will find the most current Universal Service Plan and Evaluation for each major EDC and NGDC.

Appendix 5 - Universal Service Programs 2018 Cost Recovery Mechanisms

Riders and USEC/USP Surcharges for CAP costs are recovery mechanisms, in addition to base rates, that are adjusted quarterly or annually. This list is provided to show general recovery mechanisms, which may not apply to all Universal Service programs and may not reflect actual costs per ratepayer.

Utility	CAP Cost Recovery Mechanism	CAP & Universal Service Spending Assessed on Residential Ratepayers		
Duquesne	USC Rider & Base Rates	100%		
Met-Ed	USC Rider-Annual	100%		
PECO-Electric	Univ. Service Fund Charge & Base Rates	100%		
Penelec	USC Rider-Annual	100%		
Penn Power	USC Rider-Annual	100%		
PPL	US Rider-Annual	100%		
West Penn	USC Rider & Base Rates	100%		
Columbia	USP Rider	100%		
NFG	Rider F	100%		
PECO-Gas	Univ. Service Fund Charge & Base Rates	100%		
Peoples	USC Rider F	100%		
Peoples-Equitable	USC Rider D 100%			
PGW*	USEC Surcharge 71.3%			
UGI South	USP Rider F	100%		
UGI North	USP Rider F	100%		

^{*} PGW's 2018 CAP, LIURP and CARES program costs were assessed in the following manner: residential (71.3 percent), commercial (23.4 percent), industrial (2.0 percent), municipal service (2.1 percent) and Philadelphia Housing Authority (PHA) (1.2 percent).

Appendix 6 - Universal Service Programs Annual CAP Spending Levels

	2018 Annual CAP Spending	2018 Average Number of Ratepayers Paying CAP Costs	Estimated Annual CAP Spending			
Utility			per Ratepayer – 2016-2018			
			2016	2017	2018	Percent Change 2016-18
Duquesne*	\$25,820,755	499,412	\$43.57	\$46.67	\$51.70	18.7%
Met-Ed	\$16,128,557	502,110	\$28.88	\$29.56	\$32.12	11.2%
PECO-Electric	\$62,290,529	1,476,268	\$63.66	\$48.28	\$42.19	-33.7%
Penelec	\$20,282,993	501,456	\$36.38	\$37.59	\$40.45	11.2%
Penn Power	\$4,720,719	145,285	\$29.79	\$30.74	\$32.49	9.1%
PPL	\$80,034,598	1,227,683	\$70.22	\$66.16	\$65.19	-7.2%
West Penn	\$23,885,800	626,454	\$39.45	\$43.65	\$38.13	-3.3%
Total/Industry Average	\$233,163,951	4,978,668	\$53.00	\$48.47	\$46.83	-11.6%
Columbia*	\$22,396,085	373,235	\$36.72	\$53.09	\$60.01	63.4%
NFG*	\$1,849,773	189,380	\$6.18	\$6.35	\$9.77	58.1%
PECO-Gas	\$2,595,584	480,731	\$6.08	\$4.91	\$5.40	-11.2%
Peoples*	\$8,927,521	317,365	\$21.18	\$25.68	\$28.13	32.8%
Peoples- Equitable*	\$6,703,377	235,214	\$16.65	\$22.68	\$28.50	71.2%
PGW**	\$42,458,903	477,533	\$70.21	\$72.84	\$88.91	26.6%
UGI South*	\$4,253,550	352,814	\$7.32	\$9.25	\$12.06	64.8%
UGI North*	\$2,671,047	150,810	\$14.57	\$14.05	\$17.71	21.6%
Total/Industry Average**	\$91,885,840	2,577,082	\$26.04	\$29.91	\$35.65	36.9%

2016 and 2017 data were calculated based on CAP cost recovery mechanisms. This is a change from previous reports.

^{*} Utilities who recover CAP costs from non-CAP ratepayers rather than all residential ratepayers. For those utilities, the Average Number of Ratepayers reflects non-CAP ratepayers only.

^{**} The NGDC Industry Averages for Universal Service Spending per Ratepayer reflect only the assessed amount (71.3%) of PGW's \$59,549,654 total CAP costs.

Appendix 7 - Universal Service Programs Total Annual Spending Levels

	2018 Annual Total	2018 Average Number of	Estimated Annual Universal Service Spending per Ratepayer – 2016-2018			•
Utility	Universal Service Spending***	Ratepayers Paying Universal Service Costs	2016	2017	2018	Percent Change 2016-18
Duquesne*	\$28,297,392	499,412	\$47.34	\$49.35	\$56.66	19.7%
Met-Ed	\$21,755,946	502,110	\$37.50	\$38.91	\$43.33	15.5%
PECO-Electric	\$69,290,716	1,476,268	\$68.45	\$53.55	\$46.94	-31.4%
Penelec	\$26,480,948	501,456	\$46.28	\$47.99	\$52.81	14.1%
Penn Power	\$7,242,197	145,285	\$46.63	\$46.45	\$49.85	6.9%
PPL	\$90,264,489	1,227,683	\$78.22	\$74.33	\$73.52	-6.0%
West Penn	\$28,300,622	626,454	\$46.55	\$51.11	\$45.18	-2.9%
Total/Industry Average	\$271,632,310	4,978,668	\$60.04	\$55.71	\$54.56	-9.1%
Columbia*	\$27,253,047	373,235	\$50.93	\$66.29	\$73.02	43.4%
NFG*	\$3,186,234	189,380	\$12.22	\$11.91	\$16.82	37.6%
PECO-Gas	\$5,092,676	480,731	\$11.33	\$10.17	\$10.59	-6.5%
Peoples*	\$10,351,124	317,365	\$25.57	\$29.99	\$32.62	27.6%
Peoples-Equitable*	\$7,583,997	235,214	\$20.50	\$26.43	\$32.24	57.3%
PGW**	\$48,621,661	477,533	\$82.54	\$81.26	\$101.82	23.4%
UGI South*	\$5,600,907	352,814	\$10.05	\$12.99	\$15.87	57.9%
UGI North*	\$3,767,180	150,810	\$20.83	\$20.56	\$24.98	19.9%
Total/Industry Average**	\$111,456,826	2,577,082	\$33.47	\$36.54	\$43.25	29.2%

2016 and 2017 data were calculated based on CAP cost recovery mechanisms. This is a change from previous reports.

^{*} Utilities who recover Total Universal Service costs from non-CAP ratepayers rather than all residential ratepayers. For those utilities, the Average Number of Ratepayers reflects non-CAP ratepayers only.

^{**} The NGDC Industry Averages for Universal Service Spending per Ratepayer reflect only the assessed amount (71.3%) of PGW's \$68,093,074 total universal service program costs.

^{***} Universal Service costs include CAP costs, LIURP costs and CARES costs.



