

**Ameren Keeping Current Program
Bill Payment Assistance Design Study
Final Report**

November 2020

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Executive Summary

Ameren Missouri introduced the Keeping Current Program in October 2010. The energy assistance program has two components – the Keeping Current year-round program and the Keeping Cooling summer assistance program. The Keeping Current Program provides monthly bill credits and arrearage reduction for customers who continue to make monthly bill payments. The Keeping Cooling Program provides bill credits in the summer months, primarily June, July, and August to offset the costs of air conditioning usage.

APPRISE has conducted four process and impact evaluations of the Keeping Current and Keeping Cooling programs. These evaluations assessed program design, implementation, participation, retention, and impacts; and made recommendations for program improvements. The evaluations found that the program has been successful in enrolling low-income households, improving energy affordability, improving participants' bill payment regularity and coverage rates, and reducing collections actions. The evaluations made recommendations for program refinements that Ameren implemented and that resulted in improved outcomes for the participants. This report presents the results from a program design review requested by stakeholders to assess whether alternative program designs could lead to improved outcomes.

Design Study

The following research activities were conducted.

- **Needs Assessment:** We analyzed the number and characteristics of customers potentially eligible for Keeping Current within Ameren's service territory under various assumptions about eligibility criteria.
- **Goal Setting:** We assessed potential goals for bill payment assistance programs. There are many different goals that can conflict with one another, so the program should acknowledge how these goals are incorporated and prioritized.
- **Parameter Selection:** We reviewed program parameters that can impact the success of Keeping Current and that have been implemented by other low-income bill payment assistance programs around the country.
- **Outcomes:** We analyzed the outcomes of other bill payment assistance programs that have been evaluated.
- **Best Practices:** We assessed the best practices for low-income energy bill payment assistance programs based on the other research in this study.
- **Recommendations:** We offer guidance for Ameren's Keeping Current Program based upon a synthesis of this study's findings, stakeholder feedback, and the current and expected economic impact of the Coronavirus.

Needs Assessment

This section provides an analysis of the characteristics of customers in Ameren Missouri's electric service territory who had income at various poverty levels. Key findings from the analysis are summarized below.

- *Service Type:* The majority of households in Ameren's service territory had non-electric heating service. Non-electric heating was especially prevalent among low-income households in the St. Louis area, northeast Missouri, and St. Charles. Electric heating customers were more likely to have income at lower poverty levels.
- *Households at or Below Indicated Poverty Levels:* Ten percent of the households in Ameren Missouri's service territory had income at or below the poverty level and 17 percent had income at or below 150 percent of the poverty level. If Keeping Current eligibility was expanded to 250 percent of the poverty level, 34 percent of Ameren's customers would be income eligible.

Households at or below 150 percent of the poverty level were more heavily concentrated in the southeast part of Ameren's service territory, the city of St. Louis, and northeast Missouri.

- *Vulnerable Households:* Thirty-six percent of households at or below 150 percent of the poverty level had a child under 18, 31 percent had a household member over 62, and 39 percent had a disabled household member. These vulnerable households may have the greatest need for bill assistance.
- *Language:* Approximately eight percent of low-income households spoke a language other than English, and approximately three percent spoke Spanish. Spanish-speaking households were most heavily concentrated in the southeast part of Ameren's territory. Households that spoke languages other than English and Spanish were most heavily concentrated in the St. Louis area, Boone, and St. Charles. These are the areas where multilingual outreach is most needed.
- *Energy Burden:* The mean energy burden ranged from four percent for households between 250 and 300 percent of the poverty level to 19 percent for households at or below 100 percent of the poverty level. The mean energy burden was consistently higher for electric heating households.
- *Keeping Current Participation:* Only 1.2 percent of households at or below 150 percent of the poverty level participated in Ameren's Keeping Current or Keeping Cooling Programs.

However, the Keeping Current program is targeted to those households who agencies feel will be able to make their monthly payments, remain on the program, and receive arrearage forgiveness, so this is only a subset of the income-eligible population.

If eligibility was increased to 250 percent of the Federal Poverty Level (FPL) and households participated at the same rate as the currently eligible participate, expected participation would be 1.2 percent of 368,418 households or 4,421 households. However, the number of households at these poverty levels has probably increased due to the economic downturn.

Goal Setting

This section assesses potential goals for bill payment assistance programs. Key information on potential goals for utility bill payment assistance programs is summarized below.

- *Participation*: Given a set or limited budget, the program may prioritize affordability, with fewer participants; participation rates, with lower benefit levels; or a balance between these two goals.
- *Retention*: Goals for program retention may include enrollment for a specified duration, until pre-program arrearages are removed, until customers can afford the full bill, or as long as customers are eligible for the program.
- *Energy Burden*: Programs may aim for a fixed benefit level, potentially varying by income or poverty level; a fixed post-benefit energy burden for all participants; or a post-benefit energy burden that varies by poverty level.
- *Equity*: Goals for equity may relate to equal benefits or equal post-benefit energy burdens.
- *Arrearages*: Some programs focus on the current bill and others also aim to eliminate arrearages that were developed prior to program participation.
- *Other Needs*: Some programs focus strictly on the energy bill, others provide referrals with a goal of increasing the affordability of other household expenses, and others provide energy efficiency services or repair referral services to improve the home condition and energy efficiency.
- *Incentives*: Programs sometimes design benefits with the goal of improving bill payment compliance or stabilizing or reducing energy usage.
- *Other Benefits*: Programs may have goals for other benefit receipt including LIHEAP, the Weatherization Assistance Program (WAP), or other needed services or assistance.

Parameter Selection

APPRISE conducted a program design review to characterize the parameters of bill payment assistance programs around the country. Key findings from the review are summarized below.

- *Administration and Enrollment:* Customer intake for the bill payment assistance programs is conducted by many different organizations, including local agencies, state government departments, community-based organizations, contractors, and utility companies.

Intake for these programs is often conducted by local community agencies. These agencies interact with the low-income households on other program benefits and have often already developed a trusted relationship with the client.

- *Budget:* Most of the programs are funded by ratepayers, but there are significant differences between the programs in terms of the budget, number of customers served, and benefit levels. These differences will impact the type of administration that is needed for the program.

The annual budget ranges from \$37,769 for a small utility program to \$220.8 million for a statewide electric program. The mean budget is \$38 million. The number of households served ranges from 180 to 359,655 households with a mean of 55,588. The average annual benefit ranges from \$72 to \$1,206 with a mean of \$600 and can depend on the customer's fuel type.

- *Outreach:* The programs use a variety of outreach methods to spread awareness to potential clients. These methods include utility bill inserts; mailings to targeted groups; partnering with local agencies; and providing information at community events, on the company's website, through company representatives, or the United Way. The most common outreach methods are postings on the company website and partnering with local agencies.
- *Intake:* Customers can submit their application in-person, via email, mail, online, telephone, and other methods, such as fax. The most common intake method is in-person, with 18 programs that use this method, followed by mail, with 13 programs that use this method. Online application is becoming more common and participants are more frequently requesting this option if it is not available.
- *Income Eligibility:* Nineteen programs determine eligibility based on percent of the Federal Poverty Level (FPL), two use percent of the State Median Income (SMI), and others base eligibility on household income, energy usage, or LIHEAP eligibility. The FPL values range from 125 to 200 percent, and the most common is 150 percent of the FPL.
- *Other Eligibility Requirements:* Some programs require customers to be payment-troubled, enroll in budget billing, enroll in LIHEAP, and/or receive weatherization

services to participate. It is most common for a program to require a customer to enroll in a utility low-income energy efficiency program.

- *Targeting*: About 25 percent of participants have income at or below 50 percent of the poverty level, 50 percent have income between 51 and 100 percent of the poverty level, and 25 percent have income between 101 and 150 percent of the poverty level.
- *Bill Subsidy Determination*: The programs utilize a variety of methods to determine the bill subsidy. These include a percent discount, rate discount, percentage of income program, fixed credit program, monthly subsidy, and annual subsidy. Percentage of income is the most common subsidy type, with 16 out of 27 programs using this subsidy type.
- *Bill Subsidy Benefit Levels*: The mean subsidy amount ranges from \$40 to \$1,206 with an average of \$600 across the programs. Several programs provide different subsidy amounts based on the household's heating type.
- *Minimum Monthly Payment & Maximum Credit*: Programs may require a minimum monthly payment amount or a maximum credit to control program costs. These restrictions can depend on fuel type, household size, income, or poverty level. The mean minimum monthly bill is \$23, and the mean annual maximum credit is \$1,345.
- *Bill Consistency*: Customers tend to prefer fixed monthly bills and report that predictable bills are easier to pay. Fifteen programs offer fixed bills through a percentage of income payment plan and three offer fixed bills through budget billing.
- *Arrearage Forgiveness Parameters*: Most programs offer arrearage forgiveness over 12 to 36 months. This arrearage forgiveness is received every month that the customer pays their bill in full, however most programs provide forgiveness for previous months when customers make up missed payments. A few programs require a co-pay of five dollars per month toward the accumulated arrearages.
- *LIHEAP Coordination*: Eleven of the assistance programs offer referrals to LIHEAP. These referrals were commonly made by utility representatives or staff at local agencies. One common requirement for participating in the bill payment assistance programs is applying for LIHEAP. Twelve utilities reported that this was a requirement for their bill payment assistance program.
- *Program Removal*: Non-payment, failure to recertify, and failure to seek other services such as LIHEAP or weatherization were common removal reasons. Other removal reasons included being income ineligible for the program, moving, failing to provide income or

household documentation, establishing multiple accounts, failing to allow access to meter reads, and successfully completing the program.

- *Holistic Service Delivery and Case Management:* Referrals to weatherization services was the most common type, made by 15 programs, followed by referrals to hardship services, made by ten programs, and referrals to special needs assistance by nine programs.
- *Other Challenges:* In response to the Coronavirus, about half of the states implemented a shutoff moratorium. Additional moratoriums were implemented at the utility level. Many utilities also introduced additional assistance programs during the emergency.

Outcomes

This section reviews the outcomes that were assessed to determine the success of bill payment assistance programs based on available program evaluation reports. Key findings are summarized below.

- *Participation:* The number of participants varied widely, ranging from 2,515 to 359,655 with an average of 70,986.
- *Participant Characteristics:* Across all programs, 18 percent of households had someone aged 65 years or older, 44 percent had a child aged 18 years or younger, 30 percent were employed, two percent received unemployment income, and 22 percent received disability income. Programs that conducted outreach at community events had a higher share of participants with a child in the household. Programs that conducted outreach through United Way, company representatives, and bill inserts had a higher share of participants with an elderly household member.
- *Retention:* The percent of participants who remained in the program for a full year ranged from 46 to 86 percent with a mean of 65 percent. The percent of participants who re-certified to continue their enrollment in the program ranged from 43 to 72 percent with an average of 57 percent. The mean number of years participants remained in the program ranged from 2.0 to 4.6 years with a mean of 3.2 years.
- *Affordability:* The bill declined from the pre-period to the post-period for all 13 programs with information. The energy burden declined for all ten programs with information. The discount received by the customers ranged from \$191 to \$1,054 with an average of \$467. The net change for customers' energy burden ranged from a decline of nine percentage points to a decline of two percentage points, with an average decline of six percentage points.

Customers below 50 percent of the FPL were more likely to have a greater energy burden than those in the other poverty level groups. Therefore, programs that do a better job of targeting this group can have a greater impact on energy burden. While those with income at or below 50 percent of the FPL had an average reduction of 12 percentage points, those

between 51 and 100 percent had an average reduction of five percentage points, and those between 101 and 150 percent had an average reduction of two percentage points.

- *Bill Payment:* The total charges increased for one program and decreased for 12 programs. The total payments and credits increased for nine programs and decreased for four programs. The net change for customers' total charges ranges from a decline of \$272 to an increase of \$29, with an average decline of \$98. The net change for customers' payments and credits ranged from a decline of \$115 to an increase of \$538, with an average increase of \$166.
- *Arrearages:* Participants' shortfall decreased for all 13 programs with information. Participants' ending balance increased for one program and decreased for eight programs. A decrease in the ending balance was characteristic of programs that provided high levels of discounts and included an arrearage forgiveness component. The amount of arrearage forgiveness ranged from \$26 to \$720, with a mean of \$230.
- *Collections Actions:* The number of collections actions increased for two programs and decreased for six programs. The cost of collections actions increased for one program and decreased for six programs. The average net change in collections cost was a decline of \$38.
- *Other Benefits:* The percent of customers who received LIHEAP increased from 42 percent to 51 percent following program enrollment, with a net change of four percent. Programs that required customers to enroll in LIHEAP were more likely to have a positive and significant net change in the percentage of customers who received LIHEAP in the post period.
- *Other Affordability Issues:* All bill payment assistance programs were effective at helping customers with non-energy related issues according to survey responses. These non-energy related issues included helping households with food and medical expenses. Programs that used a percent of income or a percent discount bill subsidy with budget billing were more likely to help customers meet other financial obligations.
- *Satisfaction:* Eighty-five percent of participants across all programs said that the program was very important in helping them make ends meet and eighty-six percent of participants across all programs were very satisfied with the programs. Program satisfaction was loosely related to the change in energy burden.

Best Practices

This section provides a discussion of program design advantages, disadvantages, and best practices for low-income energy bill payment assistance programs across the country. Key findings are summarized below.

- *Outreach:* Programs are most effective at reaching the eligible population when they employ a variety of outreach techniques that reach customers with various characteristics and when they partner with trusted community organizations.
- *Intake:* As with outreach, intake methods should differ based on participants' characteristics and programs that offer several options will be the most successful.
- *Income Eligibility:* Most programs reviewed use 150 percent of the Federal Poverty Level (FPL) as an eligibility guideline. Some programs use a percent of the state median income or base eligibility on LIHEAP. Income eligibility should be determined to ensure that customers in need are served at a level of benefits that impacts their energy affordability.
- *Other Eligibility Requirements:* The program should consider requirements that incentivize customers to participate in other assistance programs and increase the probability of success but avoid requirements that can pose barriers to participation.
- *Enrollment Level:* Programs should balance enrollment and benefit levels to ensure that they significantly impact participants and do not adversely impact the ratepayer due to a large bill adder.
- *Bill Subsidy Determination:* Percent of income programs provide more equitable benefits based on energy burden, result in fixed monthly payments, serve lower-income households, and have greater impacts on energy burden.
- *Energy Burden Target:* Furnishing a benefit level to achieve a set energy burden target provides the greatest assurance that customers will receive benefits in proportion to their need for assistance.
- *Bill Consistency:* Customers have expressed a preference for predictable monthly energy bills that do not fluctuate over the course of the year, and such equalized billing provides greater opportunity for bill management.
- *Arrearage Forgiveness:* Arrearage forgiveness allows participants to remove debt built up prior to program participation and meet current bill payment obligations. Customers who were unable to afford their bills prior to program participation are unlikely to afford the discounted bill if they also have responsibility for paying off large, accumulated arrearages.

Educating customers about the arrearage forgiveness benefit can help incentivize customers to pay their bills. Providing arrearage forgiveness when customers make up their missed payments enables customers to receive the benefit even if they cannot stay current and provides an additional opportunity for customers to become current on their utility bills.

- *LIHEAP Coordination:* Coordination with LIHEAP can increase benefit receipt and provide additional potential for customers to succeed on the bill payment assistance program.
- *Energy Efficiency Services:* Energy efficiency services should be targeted to high-usage payment program participants. Additional funding can be provided to remediate conditions that prevent measure installation and additional efforts can be made to provide outreach to landlords to obtain agreement for service delivery.
- *Program Removal:* Allowing customers to remain on the bill payment assistance program until service termination for nonpayment will provide another opportunity for customers to make up their bills at the lower payment rate and remain in the program.
- *Recertification:* Recertification ensures that customers remain eligible for the program, but the process should not be too burdensome.
- *Other Challenges:* Shutoff moratoriums can provide customers with time to make their payments but can lead to reduced need for assistance that has been made available during a crisis such as COVID-19 or extreme weather. Requiring customers to apply for available assistance can help to ensure that available assistance is leveraged.

Recommendations

Key recommendations for various program design parameters are summarized below.

1. *Administration:* Ameren should continue to administer Keeping Current with assistance from the agencies on outreach, intake, and data management.
2. *Outreach:* Ameren should conduct additional outreach for Keeping Current through agencies and their own call center representatives.
3. *Intake:* Agencies should continue to encourage customers to visit offices for in-person Keeping Current intake but should also provide flexibility to customers who are unable to visit the office.
4. *Income Eligibility:* Ameren should maintain the current income eligibility level of 150 percent of the FPL. They should base eligibility on one month of income to ensure that customers who recently became unemployed due to COVID-19 are eligible.

5. *Other Eligibility Requirements:* Ameren should continue the following additional eligibility requirements.
 - Weatherization: Apply for the program.
 - LIHEAP: Apply for the program (continued) and apply benefits to Ameren bill if an Ameren gas or Ameren electric heating customer (new).
 - Consistent Bill: Enroll in budget billing (in the absence of a new Percentage of Income Program that provides a fixed monthly bill).
6. *Additional Populations:* Ameren should consider enhanced benefits for formerly homeless customers to help them pay off past balances and open a new Ameren account.
7. *Recertification:* Ameren should continue to require participants to re-certify their eligibility every two years. This will be especially important if they move to a Percentage of Income Payment Program (PIPP).
8. *Enrollment Level:* Ameren and their agencies should provide additional outreach as discussed above to reach more customers with this program.
9. *Bill Subsidy Determination:* Ameren should consider moving to a PIPP to provide participants with a fixed energy burden at an affordable level.
10. *Target Energy Burden:* Ameren should consider targeting a three percent energy burden for alternative electric heat participants and a six percent energy burden for electric heat participants. If the cost of these energy burden targets is beyond a target program budget, Ameren should consider a somewhat higher energy burden to reduce costs.
11. *Minimum Payments and Maximum Credits:* Ameren should consider a minimum monthly payment and a maximum annual credit to limit program costs. Customers who reach the maximum annual credit should be targeted for weatherization.
12. *Arrearage Forgiveness:* Ameren should continue the arrearage forgiveness program. We recommend that forgiveness be provided for bills that are made up following the initial bill due date. Participants should receive education so that they understand that this is an important benefit of the program.
13. *LIHEAP:* Ameren and the agencies should provide additional education and outreach to ensure that participants apply for LIHEAP assistance. They should send reminders to participants to re-apply to LIHEAP and emphasize that they can receive benefits from both LIHEAP and Keeping Current at the same time.
14. *Energy Efficiency:* Ameren should prioritize high usage Keeping Current participants for weatherization. They should educate landlords about the program and encourage landlords to provide authorization for program measures.

15. *Program Removal*: Participants are currently removed from Keeping Current if they are not current within two billing cycles. We recommend that customers remain on Keeping Current as long as they remain customers and are not terminated due to nonpayment. We also recommend that customers receive monthly bill credits for all made up past due monthly bills.

Projected PIPP Costs

We recommended that Ameren consider a Percentage of Income Program (PIPP) to better target those most in need, provide more equitable energy burdens across program participants, and reach the goal of affordable energy. Therefore, it is important to understand the potential costs of a PIPP. This section provides projections of average participant credits by poverty level and total subsidy costs for various levels of program participation. These are only the costs for the bill subsidy, so there would be additional costs for arrearage forgiveness and program administration.

Program Credits

Modelled PIPP credits are significantly greater than the Ameren Keeping Current Program credits.

- Keeping Current annual credits averaged \$575 for electric heat participants at or below 50 percent of the Federal Poverty Level (FPL) and \$199 for Alternative Heat participants at or below 50 percent of the FPL.
- The six percent burden target for Electric Heat participants at or below 50 percent of the FPL provided a mean annual credit of \$1,843 with no minimum payment or maximum credit and a mean credit of \$1,484 with the minimum payment and maximum credit.
- The ten percent burden target for Electric Heat participants at or below 50 percent of the FPL provided a mean credit of \$1,622 with no minimum payment or maximum credit and a mean credit of \$1,332 with the minimum payment and maximum credit.
- Differences in annual credits between the current program structure and the PIPP are smaller for the higher poverty level groups, and the credits for Electric Heat participants between 101 and 150 percent of the FPL are greater under Ameren's current program than under the higher burden PIPP structure.

Bill Credit Costs

- With the current level of program participation (as of July 2020), total credit costs under the Keeping Current structure are projected to be \$681,953 compared to costs of \$2.1 million for the six and three percent PIPP burden targets with no minimum payment or maximum credit and \$1.8 million with a minimum payment and maximum credit.
- With a ten percent participation level, total credit costs under the current structure are projected to be \$2.4 million compared to costs of \$22.2 million for the six and three percent PIPP burden targets with no minimum payment or maximum credit and \$19.7 million with a minimum payment and maximum credit.

I. Introduction

Ameren Missouri introduced the Keeping Current Program in October 2010. The energy assistance program has two components – The Keeping Current year-round program and the Keeping Cooling summer assistance program. The Keeping Current Program provides monthly bill credits and arrearage reduction for customers who continue to make monthly bill payments. The Keeping Cooling Program provides bill credits in the summer months, primarily June, July, and August to offset the costs of air conditioning usage.

A. *Keeping Current Program*

The objectives of the Keeping Current program are as follows.

- Improve affordability of utility payments for very low-income customers.
- Promote a level of usage that ensures health and safety.
- Minimize program costs and maximize efficiencies by working with agencies that serve low-income households.
- Minimize program costs and maximize efficiency by linking program participation to application for Weatherization and LIHEAP.

APPRISE has conducted four process and impact evaluations of the Keeping Current and Keeping Cooling programs. These evaluations assessed program design, implementation, participation, retention, and impacts; and made recommendations for program improvements. The evaluations found that the program has been successful in enrolling low-income households, improving energy affordability, improving participants' bill payment regularity and coverage rates, and reducing collections actions. The evaluations made recommendations for program refinements that Ameren implemented and that resulted in improved outcomes for the participants.

B. *Research Activities*

The stakeholder group has requested that Ameren conduct a program design review to assess alternative bill payment designs and make recommendations for refinement or redesign of Ameren's program. The following research activities were conducted.

- Needs Assessment – We analyzed the number and characteristics of customers potentially eligible for Keeping Current within Ameren's service territory under various assumptions about eligibility criteria.
- Goal Setting – We assessed potential goals for bill payment assistance programs. There are many different goals that can conflict with one another, so the program should acknowledge how these goals are incorporated and prioritized.
- Parameter Selection – We reviewed program parameters that can impact the success of Keeping Current, and which parameters have been selected in other low-income bill payment assistance programs that are offered around the country.

- Outcomes – We analyzed the outcomes of other bill payment assistance programs that have been evaluated.
- Best Practices – We assessed the best practices for low-income energy bill payment assistance programs based on the other research in this study.
- Recommendations – We offer guidance for Ameren’s Keeping Current Program based upon a synthesis of this study’s findings, stakeholder feedback, and the current and expected economic impact of the Coronavirus.

C. Organization of the Report

Six sections follow this introduction.

- Section II – Needs Assessment: This section presents the findings of the needs assessment.
- Section III – Goal Setting: This section assesses the various goals of the bill payment assistance programs.
- Section IV – Parameter Selection: This section reviews program parameters from bill payment assistance programs across the country.
- Section V – Outcomes: This section reviews outcomes that were assessed to determine the success of bill payment assistance programs based on available program evaluation reports.
- Section VI – Best Practices: This section provides a discussion of best practices for low-income energy bill payment assistance programs across the country.
- Section VII – Recommendations: This section presents key recommendations for Ameren Missouri’s Keeping Current Program based on all of the research conducted in this study and the findings from previous Ameren Keeping Current evaluations. The section also provides projected costs for a Percentage of Income Payment Program under various assumptions about targeted energy burden and program participation levels.

APPRISE prepared this report under contract to Ameren Missouri. Ameren facilitated this research by furnishing data and information to APPRISE. Any errors or omissions in this report are the responsibility of APPRISE. Further, the statements, findings, conclusions, and recommendations are solely those of analysts from APPRISE and do not necessarily reflect the views of Ameren.

II. Needs Assessment

This section provides a profile of low-income households in Ameren Missouri's electric service territory using data from the 2016-2018 American Community Survey (ACS). These data were used to estimate the number of households, poverty level distribution, demographic characteristics, and energy burden. These data represent Ameren's electric service territory in 2018.

A. *Introduction and Methodology*

The ACS data are organized into Public Use Microdata Areas (PUMAs), which may comprise part of a county, a whole county, or parts of several counties. Several of the PUMAs in Missouri are comprised of a mixture of counties that are and are not included in Ameren's service territory. We used a detailed map of Ameren's electric service territory to determine which PUMAs to include in the analysis. Group Quarters, vacant units, and non-head of household records were not included in the analysis.

Tables II-1A and II-1B display the counties in Ameren Missouri's electric service territory. Counties were combined in the tables when they were included together in one ACS PUMA and could not be separately analyzed. For each group of counties, the tables show the ACS estimate of the number of households, an indicator of whether or not the counties were included in the analysis, and a brief explanation of why that determination was made. In general, counties or PUMAs were included in the analysis if at least half of their total area was contained within Ameren's service territory.

Table II-1A
Ameren Missouri Electric Service Territory Analysis
PUMAs Included in Analysis

Counties in PUMA		ACS Household Estimate	Included in Analysis	Reason for Inclusion
Served by Ameren	Not Served			
Adair, Clark, Knox, Lewis, Marion, Monroe, Ralls, Schuyler, Scotland	Macon Shelby	47,690	Yes	Ameren covers about half the area. PUMA represents northeastern part of Ameren's territory.
Lincoln, Warren, Audrain, Pike, Montgomery		52,220	Yes	Ameren covers the entirety of these counties.
Cole, Callaway, Moniteau, Osage		55,717	Yes	Ameren covers the entirety of these counties.
Boone		70,473	Yes	Ameren covers the entire county.
Franklin		40,222	Yes	Ameren covers most of the county.
St. Charles		146,144	Yes	Ameren covers the entire county.
St. Louis County		406,079	Yes	Ameren covers the entire county.
City of St. Louis		140,602	Yes	Ameren covers the entire independent city.
Jefferson		84,649	Yes	Ameren covers the entire county.
St. Francois, Washington, Ste. Genevieve	Perry	47,366	Yes	At least half in Ameren. Washington, St. Francois served, all Perry and most Ste. Genevieve not.
Dunklin, Stoddard, New Madrid, Pemiscot, & Mississippi		42,302	Yes	Ameren covers the entirety of all counties.
Included Household Estimate		1,133,464		

**Table II-1B
Ameren Missouri Electric Service Territory Analysis
PUMAs Not Included in Analysis**

Counties in PUMA		ACS Household Estimate	Included in Analysis	Reason for Exclusion
Served by Ameren	Not Served by Ameren			
Daviess, Gentry, Livingston, Linn, & Sullivan	Atchison, Grundy, Harrison, Holt, Mercer, Nodaway, Putnam, & Worth	42,606	No	Daviess, Gentry, Livingston, Linn, and Sullivan counties are all only partially within Ameren territory. The other counties are not served by Ameren.
Dekalb	Buchanan & Andrew	44,214	No	Dekalb County is only partially in Ameren territory. Buchanan and Andrew counties are not served by Ameren.
Pettis, Randolph, Saline, Cooper, Howard, Carroll, & Chariton		47,762	No	Ameren serves most of Cooper, Howard, and Randolph, but only a very small portions of the remaining counties, and none of Saline County.
Ray, Clinton, & Caldwell	Johnson & Lafayette	52,826	No	All of Lafayette and Johnson counties, and most of Ray county, are not in Ameren territory.
Clay		86,678	No	Only a small portion of the county is in Ameren territory.
Camden, Miller, & Morgan	Pulaski	47,336	No	Ameren serves most of Morgan and Miller counties, but only serves a small portion of Camden and does not serve Pulaski at all.
Crawford, Gasconade, & Maries	Dent & Phelps	43,384	No	All of Gasconade is in Ameren service territory, but most of Crawford and Marie counties are not. Dent and Phelps counties only receive gas service from Ameren.
Cape Girardeau, Scott, & Bollinger		48,822	No	All of Scott and half of Gape Girardeau are in Ameren territory, but Bollinger is not.
Madison, Iron, & Reynolds	Carter, Butler, Ripley, & Wayne	39,785	No	Ameren serves all of Butler County, half of Wayne County, and a small portion of Reynolds County. Carter and Ripley counties are not in Ameren territory.
Excluded Household Estimate			453,413	

B. Ameren's Electric Service Territory Analysis

This section provides information on the number of households, poverty level, demographic characteristics, and energy burden for all households within Ameren's electric service territory.

Table II-2A displays the number of households in the analyzed area with direct electric service as well as the number of households without direct electric service, either because their utilities were included in their rent or because they did not use electricity. The table shows that 96 percent of the households had direct electric service, three percent had their utilities included in their rent, and one percent did not use electricity. All subsequent tables only include households with direct electric service.

**Table II-2A
Ameren Electric Service Territory
Electric Service Status**

Service Status	Number of Households	Percent of Households
Direct Electric Service	1,093,350	96%
Electric Charge Included in Rent	29,333	3%
No Electric Charges	10,782	1%
Total	1,133,465	100%

Table II-2B breaks down the number of households with direct electric service into those who heat their home with electricity and those who heat their home with another fuel. The majority of these households, 67 percent, do not heat with electricity.

**Table II-2B
Ameren Electric Service Territory
Electric Service Type**

Service Type	Number of Households	Percent of Households
Electric Heating	365,982	33%
Non-Electric Heating	727,368	67%
Total	1,093,350	100%

Table II-3 displays the number and percent of households with income at or below each of the indicated poverty levels by service type. The table shows the following.

- 10 percent had income at or below the poverty level.
- 17 percent had income at or below 150 percent of the poverty level.
- 25 percent had income at or below 200 percent of the poverty level.
- 34 percent had income at or below 250 percent of the poverty level.
- 42 percent had income at or below 300 percent of the poverty level.

Households with electric heat had lower poverty levels.

Table II-3
Ameren Electric Service Territory
Households Below Indicated Poverty Levels

Poverty Level	Service Type					
	Electric Heating		Non-Electric Heating		Total	
	#	%	#	%	#	%
All Households	365,982	100%	727,368	100%	1,093,350	100%
100% FPL	45,639	12%	60,893	8%	106,532	10%
150% FPL	78,375	21%	110,547	15%	188,922	17%
200% FPL	113,599	31%	164,976	23%	278,575	25%
250% FPL	144,870	40%	223,548	31%	368,418	34%
300% FPL	178,978	49%	281,967	39%	460,945	42%

Table II-4 displays the poverty level distribution by service type only for households at or below 300 percent of the poverty level. The table shows that 23 percent had income at or below the poverty level.

Table II-4
Ameren Electric Service Territory
Poverty Level Distribution at or Below 300% of Poverty

Poverty Group	Service Type					
	Electric Heating		Non-Electric Heating		Total	
	#	%	#	%	#	%
0% - 100%	45,639	26%	60,893	22%	106,532	23%
101% - 150%	32,736	18%	49,654	18%	82,390	18%
151% - 200%	35,224	20%	54,430	19%	89,653	19%
201% - 250%	31,271	17%	58,571	21%	89,842	19%
251% - 300%	34,108	19%	58,420	21%	92,527	20%
Total	178,978	100%	281,967	100%	460,945	100%

Table II-5 displays the number and percent of households at or below each of the indicated poverty levels that included a child under 18, an individual older than 62, or a disabled member. Among households at or below 100 percent of the poverty level, 36 percent included a child under 18, 25 percent included an elderly member, and 38 percent included a disabled member.

Table II-5
Ameren Electric Service Territory
Vulnerable Households Below Indicated Poverty Levels

Poverty Level	Households	Vulnerable Households					
		Child Under 18		Elderly		Disabled	
		#	%	#	%	#	%
100% FPL	106,532	38,198	36%	26,761	25%	41,003	38%
150% FPL	188,922	67,263	36%	59,383	31%	74,296	39%
200% FPL	278,575	96,848	35%	93,576	34%	105,292	38%
250% FPL	368,418	126,056	34%	129,446	35%	132,753	36%
300% FPL	460,945	154,410	34%	161,860	35%	158,217	34%

Table II-6 displays the language spoken by households with income at or below each of the indicated poverty levels. The table shows that at all the poverty levels listed, 92 percent of households spoke English, three percent spoke Spanish, two percent spoke a different Indo-European language, and three percent spoke some other language.

Table II-6
Ameren Electric Service Territory
Language Spoken Below Indicated Poverty Levels

Poverty Level	Households	Language							
		English		Spanish		Indo-European		Other	
		#	%	#	%	#	%	#	%
100% FPL	106,532	97,821	92%	2,806	3%	2,250	2%	3,654	3%
150% FPL	188,922	174,024	92%	5,114	3%	3,848	2%	5,937	3%
200% FPL	278,575	256,117	92%	7,656	3%	6,837	2%	7,965	3%
250% FPL	368,418	340,018	92%	10,162	3%	8,694	2%	9,544	3%
300% FPL	460,945	425,803	92%	12,357	3%	11,198	2%	11,587	3%

Table II-7 displays the mean annual energy bill and mean annual electric energy burden for households with income at or below each of the indicated poverty levels by service type. The mean burden ranged from six percent for households at or below 300 percent of poverty to 19 percent for households at or below 100 percent of poverty. The mean electric energy burden was higher for electric heating households than non-electric heat households at all indicated poverty levels.

**Table II-7
Ameren Electric Service Territory
Mean Annual Energy Bills and Burden Below Indicated Poverty Levels**

Poverty Level	Service Type								
	Electric Heating			Non-Electric Heating			Total		
	#	Energy Exp.	Energy Burden	#	Energy Exp.	Energy Burden	#	Energy Exp.	Energy Burden
100% FPL	45,639	\$1,919	21%	60,893	\$1,629	17%	106,532	\$1,753	19%
150% FPL	78,375	\$1,914	13%	110,547	\$1,615	10%	188,922	\$1,739	11%
200% FPL	113,599	\$1,944	10%	164,976	\$1,601	8%	278,575	\$1,741	9%
250% FPL	144,870	\$1,953	8%	223,548	\$1,588	6%	368,418	\$1,732	7%
300% FPL	178,978	\$1,960	7%	281,967	\$1,583	5%	460,945	\$1,729	6%

Table II-8 provides a breakdown of the mean annual energy bill and mean annual electric energy burden by poverty level and service type for households at or below 300 percent of the poverty level. The mean electric bill among all households with electric service below 300 percent of the poverty level was \$1,729 and the mean electric burden was roughly six percent. Electric heating households had a mean electric bill of \$1,960 and a mean electric burden of seven percent, while non-electric heating households had a mean bill of \$1,583 and a mean burden of five percent. While electric heating households below the poverty level had a mean electric burden of 21 percent, those between 101 and 150 percent of the poverty level had a mean burden of nine percent. This shows the importance of targeting assistance to those in the lowest poverty level group.

**Table II-8
Ameren Electric Service Territory
Mean Annual Energy Bills and Burden by Poverty Level**

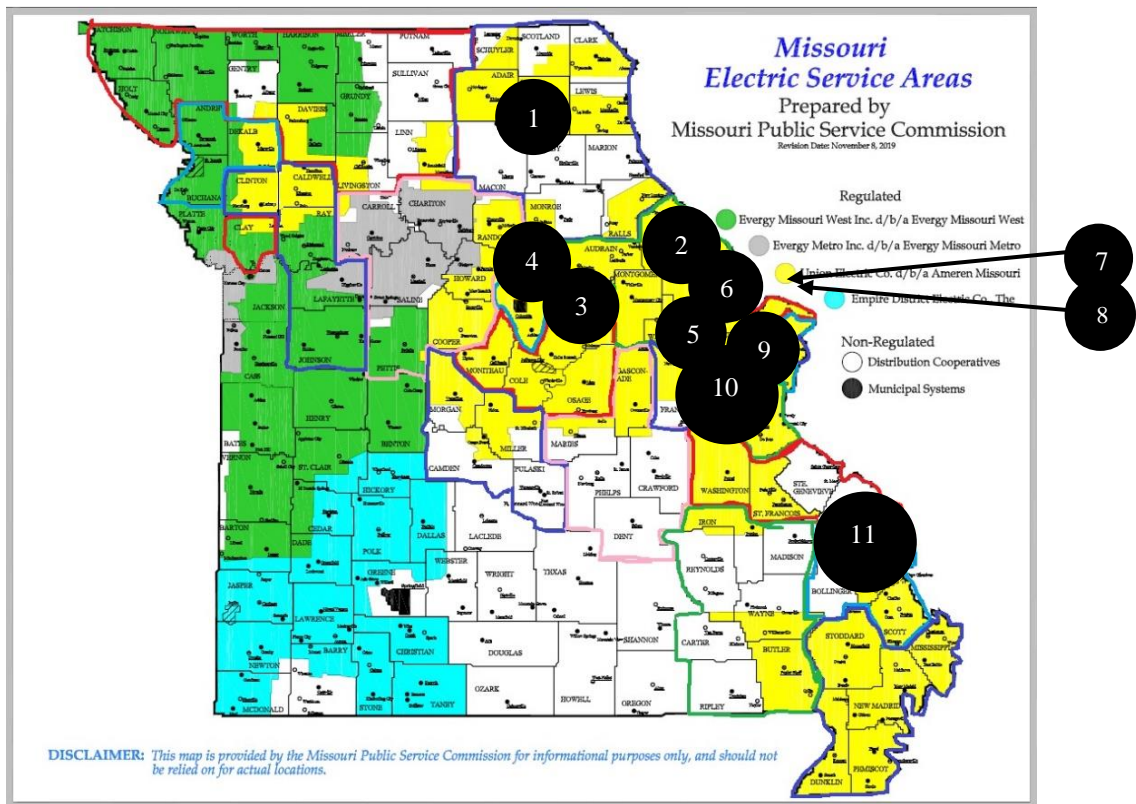
Poverty Group	Service Type								
	Electric Heating			Non-Electric Heating			Total		
	#	Energy Exp.	Energy Burden	#	Energy Exp.	Energy Burden	#	Energy Exp.	Energy Burden
All Households Below 300%	178,978	\$1,960	7%	281,967	\$1,583	5%	460,945	\$1,729	6%
0% - 100%	45,639	\$1,919	21%	60,893	\$1,629	17%	106,532	\$1,753	19%
101% - 150%	32,736	\$1,908	9%	49,654	\$1,597	7%	82,390	\$1,721	8%
151% - 200%	35,244	\$2,011	7%	54,430	\$1,574	5%	89,653	\$1,746	6%
201% - 250%	31,271	\$1,985	5%	58,571	\$1,552	4%	89,842	\$1,703	4%
251% - 300%	34,108	\$1,990	4%	58,420	\$1,561	3%	92,527	\$1,719	4%

C. Public Use Microdata Area / County Group Level Analysis

This section provides information on the number of eligible households, poverty level, demographic characteristics, and energy burden by PUMA for all households within the defined analysis territory. This provides information on how household characteristics vary across Ameren Missouri’s service territory.

Figure II-1 and Table II-9 display the counties that were included in each PUMA Group in the analysis territory. While many counties were within a single PUMA, other counties included multiple PUMAs. Thus, while most of the PUMA Groups contained only a single PUMA, Group 6 included the three PUMAs that make up St. Charles County, Group 7 included the eight PUMAs that make up St. Louis County, Group 8 included the two PUMAs that make up the City of St. Louis, and Group 9 included the two PUMAs that make up Jefferson County.

Figure II-1
PUMA Groups in Ameren’s Service Territory



**Table II-9
PUMA Groups in Ameren's Service Territory**

PUMA Group	Counties	Number of PUMAs
PUMA 1	Adair, Clark, Knox, Lewis, Macon, Marion, Monroe, Ralls, Schuyler, Scotland, & Shelby	1
PUMA 2	Lincoln, Warren, Audrain, Pike, & Montgomery	1
PUMA 3	Cole, Callaway, Moniteau, & Osage	1
PUMA 4	Boone	1
PUMA 5	Franklin	1
PUMA 6	St. Charles	3
PUMA 7	St. Louis (County)	8
PUMA 8	St. Louis (City)	2
PUMA 9	Jefferson	2
PUMA 10	St. Francois, Washington, Perry, & Ste. Genevieve	1
PUMA 11	Dunklin, Stoddard, New Madrid, Pemiscot, & Mississippi	1

Table II-10 displays the heating type for households with income at or below 300 percent of the poverty level. There were more households with non-electric heat than households with electric heating in the St. Louis area, northeast Missouri, and St. Charles. A few regions in central Missouri had more households with electric heat than households with another heating source.

**Table II-10
Service Type by PUMA
Households at or Below 300% of Federal Poverty Level**

Service Type	Electric Service Households in Analyzed Territory					
	PUMA 1	PUMA 2	PUMA 3	PUMA 4	PUMA 5	PUMA 6
	Northeast Missouri	Lincoln, Warren, Audrain, Pike, Montgomery	Cole, Callaway, Moniteau, & Osage	Boone	Franklin	St. Charles
# Households ≤ 300%	25,063	25,139	23,281	30,031	17,603	39,225
Electric Heat	34%	61%	53%	46%	72%	35%
Non-Electric Heat	66%	39%	47%	54%	28%	65%
Total	100%	100%	100%	100%	100%	100%

Service Type	Electric Service Households in Analyzed Territory				
	PUMA 7	PUMA 8	PUMA 9	PUMA 10	PUMA 11
	St. Louis (County)	St. Louis (City)	Jefferson	St. Francois, Washington, Perry, Ste. Genevieve	Dunklin, Stoddard, New Madrid, Pemiscot, Mississippi
# Households ≤ 300%	143,804	68,574	34,889	25,081	28,255
Electric Heat	23%	32%	61%	60%	38%
Non-Electric Heat	77%	68%	39%	40%	62%
Total	100%	100%	100%	100%	100%

Table II-11 displays the percent of households with income at or below the indicated poverty levels in each PUMA Group. The table shows that eligibility varied significantly across PUMA Groups. St. Charles County had a lower percentage of low poverty level households and Group 11 in the southeast had a higher percentage of low poverty level households. For example, while only eight percent of households in St. Charles County had income at or below 150 percent of the FPL, 36 percent of those in Group 11 had income at or below 150 percent of the FPL.

Table II-11
Ameren Electric Service Territory by PUMA
Households Below Indicated Poverty Levels

Poverty Level	Electric Service Households in Analyzed Territory					
	PUMA 1	PUMA 2	PUMA 3	PUMA 4	PUMA 5	PUMA 6
	Northeast Missouri	Lincoln, Warren, Audrain, Pike, Montgomery	Cole, Callaway, Moniteau, & Osage	Boone	Franklin	St. Charles
Total # Households	44,930	50,624	53,868	65,625	39,592	143,211
100% FPL	14%	9%	10%	11%	8%	4%
150% FPL	25%	19%	17%	19%	16%	8%
200% FPL	37%	29%	26%	29%	26%	14%
250% FPL	46%	39%	35%	38%	34%	20%
300% FPL	56%	50%	43%	46%	44%	27%

Poverty Level	Electric Service Households in Analyzed Territory				
	PUMA 7	PUMA 8	PUMA 9	PUMA 10	PUMA 11
	St. Louis (County)	St. Louis (City)	Jefferson	St. Francois, Washington, Perry, Ste. Genevieve	Dunklin, Stoddard, New Madrid, Pemiscot, Mississippi
Total # Households	391,801	132,558	83,834	45,788	41,519
100% FPL	8%	17%	8%	12%	21%
150% FPL	14%	27%	14%	25%	36%
200% FPL	21%	36%	23%	37%	48%
250% FPL	29%	44%	32%	47%	58%
300% FPL	37%	52%	42%	55%	68%

Table II-12 displays the poverty level distributions for households with income at or below 300 percent of the poverty level in each of the PUMA Groups. There was notable variability in the distribution across PUMA Groups.

Table II-12
Ameren Electric Service Territory by PUMA
Poverty Level Distribution

Poverty Group	Electric Service Households in Analyzed Territory					
	PUMA 1	PUMA 2	PUMA 3	PUMA 4	PUMA 5	PUMA 6
	Northeast Missouri	Lincoln, Warren, Audrain, Pike, Montgomery	Cole, Callaway, Moniteau, & Osage	Boone	Franklin	St. Charles
# Households ≤ 300%	25,063	25,139	23,281	30,031	17,603	39,225
0% - 100%	24%	18%	23%	25%	17%	16%
101% - 150%	21%	19%	17%	17%	18%	14%
151% - 200%	21%	20%	20%	22%	22%	20%
201% - 250%	17%	20%	22%	18%	19%	22%
251% - 300%	17%	22%	19%	18%	23%	28%
Total	100%	100%	100%	100%	100%	100%

Poverty Group	Electric Service Households in Analyzed Territory				
	PUMA 7	PUMA 8	PUMA 9	PUMA 10	PUMA 11
	St. Louis (County)	St. Louis (City)	Jefferson	St. Francois, Washington, Perry, Ste. Genevieve	Dunklin, Stoddard, New Madrid, Pemiscot, Mississippi
# Households ≤ 300%	143,804	68,574	34,889	25,081	28,255
0% - 100%	21%	32%	20%	22%	32%
101% - 150%	16%	21%	15%	24%	21%
151% - 200%	19%	17%	20%	22%	18%
201% - 250%	22%	16%	22%	17%	15%
251% - 300%	22%	15%	24%	15%	14%
Total	100%	100%	100%	100%	100%

Table II-13 displays the percent of households at or below 300 percent of the poverty level that included a child under 18, an elderly member, or a disabled member by PUMA Group.

- Children Under 18: The percentage ranged from 29 percent in the city of St. Louis to 40 percent in Jefferson County and in Cole, Callaway, Moniteau, and Osage counties combined.
- Elderly: Boone County had only 24 percent of households with an elderly member and St. Charles County had 43 percent of households with an elderly member.
- Disabled: PUMA Groups 10 and 11 in the southeast had the highest proportion of households with a disabled member.

Table II-13
Ameren Electric Service Territory by PUMA
Vulnerable Households

Vulnerable Households	Electric Service Households in Analyzed Territory					
	PUMA 1	PUMA 2	PUMA 3	PUMA 4	PUMA 5	PUMA 6
	Northeast Missouri	Lincoln, Warren, Audrain, Pike, Montgomery	Cole, Callaway, Moniteau, & Osage	Boone	Franklin	St. Charles
# Households ≤ 300%	25,063	25,139	23,281	30,031	17,603	39,225
Child Under 18	31%	39%	40%	33%	38%	34%
Elderly Member	39%	35%	35%	24%	36%	43%
Disabled Member	34%	38%	27%	28%	39%	30%

Vulnerable Households	Electric Service Households in Analyzed Territory				
	PUMA 7	PUMA 8	PUMA 9	PUMA 10	PUMA 11
	St. Louis (County)	St. Louis (City)	Jefferson	St. Francois, Washington, Perry, Ste. Genevieve	Dunklin, Stoddard, New Madrid, Pemiscot, Mississippi
# Households ≤ 300%	143,804	68,574	34,889	25,081	28,255
Child Under 18	32%	29%	40%	31%	33%
Elderly Member	37%	28%	36%	40%	36%
Disabled Member	32%	33%	36%	48%	48%

Table II-14 displays the language spoken at home by PUMA Group among households with income at or below 300 percent of the poverty level. There was little variability in the languages spoken across Ameren's service territory and more than 90 percent of households spoke English in all but two of the PUMA Groups. Spanish speaking households were most heavily concentrated around St. Louis, in St. Charles, and in the southeast region.

Table II-14
Ameren Electric Service Territory by PUMA
Language Spoken at Home

Language	Electric Service Households in Analyzed Territory					
	PUMA 1	PUMA 2	PUMA 3	PUMA 4	PUMA 5	PUMA 6
	Northeast Missouri	Lincoln, Warren, Audrain, Pike, Montgomery	Cole, Callaway, Moniteau, & Osage	Boone	Franklin	St. Charles
# Households ≤ 300%	25,063	25,139	23,281	30,031	17,603	39,225
English	96%	97%	97%	92%	97%	93%
Spanish	1%	1%	2%	1%	2%	4%
Indo-European	2%	<1%	1%	3%	1%	1%
Other	1%	1%	1%	4%	<1%	2%
Total	100%	100%	100%	100%	100%	100%

Language	Electric Service Households in Analyzed Territory				
	PUMA 7	PUMA 8	PUMA 9	PUMA 10	PUMA 11
	St. Louis (County)	St. Louis (City)	Jefferson	St. Francois, Washington, Perry, Ste. Genevieve	Dunklin, Stoddard, New Madrid, Pemiscot, Mississippi
# Households ≤ 300%	143,804	68,574	34,889	25,081	28,255
English	89%	89%	95%	98%	95%
Spanish	3%	3%	2%	<1%	5%
Indo-European	4%	3%	3%	1%	1%
Other	4%	4%	<1%	1%	<1%
Total	100%	100%	100%	100%	100%

Table II-15 displays the mean annual energy bill and mean annual energy burden for households at or below each of the indicated poverty levels by PUMA Group. There was only slight variation among the PUMA Groups and every Group’s mean burden for those below 100 percent of the FPL was within three points of the overall mean burden of 19 percent.

Table II-15
Ameren Electric Service Territory by PUMA
Mean Energy Bills and Burden

Poverty Level	Electric Service Households in Analyzed Territory											
	PUMA 1		PUMA 2		PUMA 3		PUMA 4		PUMA 5		PUMA 6	
	Northeast Missouri		Lincoln, Warren, Audrain, Pike, Montgomery		Cole, Callaway, Moniteau, & Osage		Boone		Franklin		St. Charles	
	\$	Burden	\$	Burden	\$	Burden	\$	Burden	\$	Burden	\$	Burden
100% FPL	\$1,846	18%	\$1,966	19%	\$1,888	21%	\$1,773	18%	\$2,083	22%	\$1,668	18%
150% FPL	\$1,879	12%	\$2,086	11%	\$1,801	12%	\$1,713	11%	\$2,005	12%	\$1,635	11%
200% FPL	\$1,937	9%	\$2,097	9%	\$1,804	9%	\$1,789	8%	\$1,958	9%	\$1,670	8%
250% FPL	\$1,973	8%	\$2,042	7%	\$1,849	7%	\$1,759	7%	\$1,947	7%	\$1,646	6%
300% FPL	\$1,981	7%	\$2,040	6%	\$1,853	6%	\$1,792	6%	\$1,947	6%	\$1,636	5%

Poverty Level	Electric Service Households in Analyzed Territory									
	PUMA 7		PUMA 8		PUMA 9		PUMA 10		PUMA 11	
	St. Louis (County)		St. Louis (City)		Jefferson		St. Francois, Washington, Perry, Ste. Genevieve		Dunklin, Stoddard, New Madrid, Pemiscot, Mississippi	
	\$	Burden	\$	Burden	\$	Burden	\$	Burden	\$	Burden
100% FPL	\$1,543	17%	\$1,784	21%	\$1,870	19%	\$1,942	16%	\$1,869	18%
150% FPL	\$1,542	10%	\$1,757	13%	\$1,868	12%	\$1,925	11%	\$1,789	12%
200% FPL	\$1,527	8%	\$1,700	10%	\$1,912	9%	\$1,949	9%	\$1,825	9%
250% FPL	\$1,499	6%	\$1,686	8%	\$1,959	7%	\$1,923	8%	\$1,910	8%
300% FPL	\$1,489	5%	\$1,654	7%	\$2,018	6%	\$1,950	7%	\$1,909	7%

D. Participation

Table II-16 displays the number of participants in Keeping Current and Keeping Cooling as of July 2020.

Table II-16
Keeping Current Participation, July 2020

Keeping Current Electric Heating	Keeping Current Alternative Heating	Keeping Current Total	Keeping Cooling	All Participants
1,266	291	1,557	739	2,296

Eligibility for Keeping Current and Keeping Cooling is 150 percent of the FPL, although Keeping Cooling participants between 100 and 150 percent of the FPL must also use electricity for cooling and be elderly, disabled, have a chronic medical condition, or live in a household with children five years of age or younger.

Table II-17 shows that only 1.2 percent of households at or below 150 percent of the FPL participated in Ameren's Keeping Current or Keeping Cooling Programs. However, the Keeping Current program is targeted to those households who agencies feel will be able to make their monthly payments, remain on the program, and receive arrearage forgiveness, so this is only a subset of the income-eligible population.

Table II-17
Keeping Current Participation Rate, July 2020

	Keeping Current – Electric Heating	Keeping Current – Alternative Heating	Keeping Current & Keeping Cooling
Participants	1,266	291	2,296
≤150% FPL	78,375	110,547	188,922
Participation Rate	1.6%	0.3%	1.2%

If eligibility was increased to 250 percent of the FPL and households participated at the same rate as the currently eligible do, expected participation would be 1.2 percent of 368,418 households or 4,421 households. However, the number of households at these poverty levels has probably increased due to the economic downturn.

E. Summary

This section provided an analysis of the characteristics of customers in Ameren Missouri's electric service territory who had income at various poverty levels. Key findings from the analysis are summarized below.

- *Service Type:* The majority of households in Ameren's service territory had non-electric heating service. Non-electric heating was especially prevalent among low-income households in the St. Louis area, northeast Missouri, and St. Charles. Electric heating customers were more likely to have income at lower poverty levels.
- *Households at or Below Indicated Poverty Levels:* Ten percent of the households in Ameren Missouri's service territory had income at or below the poverty level and 17 percent had income at or below 150 percent of the poverty level. If Keeping Current eligibility was expanded to 250 percent of the poverty level, 34 percent of Ameren's customers would be income eligible.

Households at or below 150 percent of the poverty level were more heavily concentrated in the southeast part of Ameren's service territory, the city of St. Louis, and Northeast Missouri.

- *Vulnerable Households:* Thirty-six percent of households at or below 150 percent of the poverty level had a child under 18, 31 percent had a household member over 62, and 39 percent had a disabled household member. These vulnerable households may have the greatest need for bill assistance.
 - Jefferson County and in Cole, Callaway, Moniteau, and Osage counties combined were most likely to have households with children under 18.
 - St. Charles County was most likely to have households with an elderly member.
 - The southeastern part of Ameren's service territory was mostly like to have households with a disabled member.
- *Language:* Approximately eight percent of low-income households spoke a language other than English, and approximately three percent spoke Spanish. Spanish-speaking households were most heavily concentrated in the southeast part of Ameren's territory. Households that spoke languages other than English and Spanish were most heavily concentrated in the St. Louis area, Boone, and St. Charles. These are the areas where multilingual outreach is most needed.
- *Energy Burden:* The mean energy burden ranged from four percent for households between 250 and 300 percent of the poverty level to 19 percent for households at or below 100 percent of the poverty level. The mean energy burden was consistently higher for

electric heating households. There was only slight variation in energy burden across geographic regions.

- *Keeping Current Participation:* Only 1.2 percent of households at or below 150 percent of the poverty level participated in Ameren's Keeping Current or Keeping Cooling Programs.

However, the Keeping Current program is targeted to those households who agencies feel will be able to make their monthly payments, remain on the program, and receive arrearage forgiveness, so this is only a subset of the income-eligible population.

If eligibility was increased to 250 percent of the FPL and households participated at the same rate as the currently eligible participate, expected participation would be 1.2 percent of 368,418 households or 4,421 households. However, the number of households at these poverty levels has probably increased due to the economic downturn.

III. Goal Setting

This section reviews various goals that should be considered when assessing whether and how Ameren's Keeping Current Program should be refined. There are many different goals that can conflict with one another, so the program design needs to acknowledge how these goals are prioritized. While many programs do not explicitly define their goals in each of these areas, it is important to consider the alternatives and the choices that are explicitly or implicitly made.

The following specific areas are explored.

- Participation
- Retention
- Energy Burden
- Equity
- Arrearages
- Other Needs
- Incentives
- Other Benefit

A. *Participation*

Goals for participation will relate to program funding and budgeting decisions. In some cases, there is a set budget that can be utilized for bill payment assistance. In other cases, there is a projected budget, but actual expenditures will depend on the number of enrollments and actual benefit amounts. In this case, if enrollments are higher than expected and result in expenditures that are higher than budgeted, the utility is usually able to recover the additional costs for the program from ratepayers.

If there is a set program budget, the specific goals for participation may include the following.

- Prioritize Affordability: To meet this goal, the program would enroll those customers who are most in need of assistance and provide as much assistance as needed to reach an affordable bill. This method would prioritize affordability for those who are most in need and who choose to enroll in the program. Need for assistance would be defined as the highest energy burdens (energy bills as a percentage of income), highest energy bills, and/or lowest poverty levels. Potentially large assistance amounts would be provided to achieve affordable energy bills (this may be defined as a particular energy burden) for the participants. With a fixed program budget, this participation strategy would prioritize affordable bills for the participants over high participation rates for all eligible customers.
- Prioritize Participation Rate: To meet this goal, the program would provide extensive outreach and work to enroll all eligible and interested customers. This method would prioritize participation rates over higher bill payment assistance. Assistance levels would be set lower, if needed, to serve a higher expected number of participants within the available budget.
- Balance Competing Priorities: To meet this goal, the program would set benefits at a level that was expected to assist low-income households in need, while still assisting a certain

number of customers who requested assistance. The program would provide moderate benefits and aim for moderate participation levels.

If there is a flexible program budget that could expand as needed to accommodate higher program costs, the program would not need to choose between the options listed above. The program could aim to enroll all eligible customers and provide benefits at the level needed to meet the targeted affordability level. Given current economic conditions due to the COVID pandemic and the potential need for higher assistance among a greater number of customers, it is more likely that these decisions will need to be made.

B. Retention

Bill payment assistance programs have various strategies for assisting customers. Some are viewed as a temporary fix to pay off past due balances and meeting a short-term need for help with current bills, and others are seen as a longer-term strategy to keep low-income households connected and paying their bills for as long as the assistance is needed. Goals for program retention may include the following.

- **Specified Duration**: The program may aim to retain customers in the program for a fixed duration as defined by the program, such as a year or two years. The program would aim to help customers pay off past due amounts or reduce bills for a specified period time until customers were back on their feet. This goal may be appropriate for customers who experienced a temporary crisis such as an illness or a period of unemployment, but it is unlikely to be successful for customers with longer-term needs, such as those on fixed incomes or those who are not able to obtain employment that fully meets their income requirements.
- **Arrearage Removal**: The program may aim to retain customers until the accumulated pre-program arrearages are paid off. This type of program would only enroll customers who were behind on their bills, specify a period of time over which the customer and/or the company would pay off the arrearages, set specific conditions for company arrearage forgiveness, and remove the customer from the program once all past due amounts had been paid off. The potential success of a program designed with this goal would again depend on the customers' needs, and this design would also have the greatest chance of success for customers who faced temporary financial hardship. Under this design, customers who manage to pay off their arrears may question why they are being removed from the program, and state that they are still unable to afford the full monthly bill. If customers are told that they can re-enroll if they build up arrearages again, the design creates an adverse incentive for bill payment. This policy would not be beneficial for the customer or the ratepayers.
- **Full Bill Affordability**: The program may aim to retain customers in the program until they can afford their utility bills without a subsidy. Full bill affordability may be reached prior to the time that the customer's income exceeds the program's guidelines if the customer participates in an energy efficiency program that reduces usage to an affordable level, the customer begins to regularly apply for LIHEAP assistance, or the customer's bill is gradually increased over a period of time until the customer pays the full monthly bill.

- **Income Eligible:** The program may aim to have customers continue to participate in the program until their income exceeds the eligibility level. The goal is to provide an affordable payment level through a reduced bill as long as the customer is eligible for the program.
- **Program Compliant:** Regardless of which retention goal is chosen, the program may keep the customer on as a program participant as long as the customer is not terminated due to nonpayment, or the customer may be removed after a certain number of missed payments.

C. *Energy Burden*

Energy burden, the percentage of income that is spent on energy, has been found to be a useful indicator of energy affordability. Programs that aim to achieve a specific affordability level often set a goal for the post-benefit energy burden. Other program assistance goals relate to the amount of benefits provided.

- **Benefit Level:** Some programs aim to provide a fixed benefit amount to participants, which may vary by income or by poverty level. Table III-1 provides an example where the benefit level is fixed. This results in a higher burden for the household in the lowest poverty level group.

**Table III-1
Fixed Benefit**

Poverty Level	Income	Pre-Benefit		Benefit	Post-Benefit	
		Bill	Burden		Bill	Burden
<=50%	\$10,000	\$2,000	20.0%	\$700	\$1,300	13.0%
51%-100%	\$20,000	\$2,000	10.0%	\$700	\$1,300	6.5%
101%-150%	\$35,000	\$2,000	5.7%	\$700	\$1,300	3.7%

- **Fixed Burden:** Other programs aim to reduce the energy burden for all participants to a specified level, such as six percent for electric heating customers. Table III-2 shows an example where a customer in the two lowest poverty level groups would reach a six percent burden and a customer with income between 100 and 150 percent of the poverty level would not receive a benefit because that customer's pre-benefit energy burden was only 5.7 percent. Note that energy burden goals may not be reached if the customer does not participate in the program for the full year, if the program is not structured as a percentage of income plan, or if the program has a minimum monthly bill or a maximum annual credit.

**Table III-2
Fixed Burden Target**

Poverty Level	Income	Pre-Benefit		Benefit	Post-Benefit	
		Bill	Burden		Bill	Burden
≤50%	\$10,000	\$2,000	20.0%	\$1,400	\$600	6.0%
51%-100%	\$20,000	\$2,000	10.0%	\$800	\$1,200	6.0%
101%-150%	\$35,000	\$2,000	5.7%	\$0	\$2,000	5.7%

- **Burden by Poverty Level:** Other programs aim to reach a lower targeted energy burden for the lowest poverty level customers. Table III-3 shows an example where a customer with income below 50 percent of the poverty level would have a post-benefit burden of four percent, a customer with income between 51 and 100 percent of poverty would have a post-benefit burden of six percent, and the customer with income between 101 and 150 percent of the poverty level would not receive a benefit because that customer's pre-benefit energy burden was only 5.7 percent.

**Table III-3
Burden Varying by Poverty Level**

Poverty Level	Income	Pre-Benefit		Burden Target	Benefit	Post-Benefit	
		Bill	Burden			Bill	Burden
≤50%	\$10,000	\$2,000	20.0%	4.0%	\$1,600	\$400	4.0%
51%-100%	\$20,000	\$2,000	10.0%	6.0%	\$800	\$1,200	6.0%
101%-150%	\$35,000	\$2,000	5.7%	8.0%	\$0	\$2,000	5.7%

- **Varying Assistance:** Some programs have a goal to provide additional assistance to high-burden customers depending on their needs. This additional assistance may come in the form of energy efficiency, other types of financial assistance, or case management.

D. Equity

Equity goals may relate to equality of the benefit amount for customers with similar characteristics or equality of the post-benefit energy burden for customers with similar characteristics. Discussion and examples are provided below.

- **Benefit Equality:** With this goal, a program would aim to provide the same benefit level for all customers in a poverty level group, or with other similar characteristics. Table III-4 provides an example for customers below 50 percent of the poverty level. The table shows that there can be considerable variation in energy burden within a poverty level group. The examples in the table show a pre-benefit energy burden ranging from 15.4 percent to 66.7 percent and a post-benefit energy burden ranging from 7.7 percent to 33.3 percent. The table shows that while this structure of equal benefits provides a significant burden reduction for each customer, the two customers with the lower income levels, and

especially the customer with the \$3,000 annual income, have a high energy burden following receipt of program assistance.

**Table III-4
Benefit Equality**

Poverty Level	Income	Pre-Benefit		Benefit	Post-Benefit	
		Bill	Burden		Bill	Burden
<=50%	\$3,000	\$2,000	66.7%	\$1,000	\$1,000	33.3%
<=50%	\$8,000	\$2,000	25.0%	\$1,000	\$1,000	12.5%
<=50%	\$13,000	\$2,000	15.4%	\$1,000	\$1,000	7.7%

- Energy Burden Equality: With this goal, a program would aim to achieve the same energy burden target for customers within a poverty level group or with other similar characteristics. Table III-5 shows that benefit levels would need to vary considerably to achieve the equalized post-benefit burden and that the benefit for the lowest-income customer would be very high, at \$1,820. Even programs that have an equal burden goal sometimes place a limit on the maximum benefit or minimum monthly payment to control program costs.

**Table III-5
Energy Burden Equality**

Poverty Level	Income	Pre-Benefit		Benefit	Post-Benefit	
		Bill	Burden		Bill	Burden
<=50%	\$3,000	\$2,000	66.7%	\$1,820	\$180	6.0%
<=50%	\$8,000	\$2,000	25.0%	\$1,520	\$480	6.0%
<=50%	\$13,000	\$2,000	15.4%	\$1,220	\$780	6.0%

E. Arrearages

Programs may aim to prevent the accumulation of additional arrearages for program participants, or to eliminate arrearages that have been developed prior to program participation.

- Arrearage Accumulation: Programs sometimes focus on helping the customer to pay the current energy bill, without addressing pre-program arrearages that have been built up. Such a program would only provide assistance on the current bill.
- Arrearage Elimination: Other programs aim to eliminate arrearages that were developed prior to program participation. Programs that have an arrearage reduction goal typically provide a set percentage reduction of pre-program arrearages each month (sometimes with a small participant co-pay), sometimes with a requirement that the participant pay the monthly obligation on time, and in full, in order to receive the arrearage forgiveness.

F. Other Needs

Some programs focus strictly on the energy bill, and others have additional goals for assisting the participant.

- Other Household Expenses: Some programs aim to increase the affordability of household expenses in addition to the energy bill. These programs may provide holistic case management or referral services to educate customers about additional benefits and services for which they may be eligible.
- Comfort, Health, and Safety: Other programs focus on participants' housing needs and refer or enroll customers in the utility's low-income energy efficiency program, the state Weatherization Assistance Program (WAP), and/or home repair programs. Some of these services can reduce the customers' energy bills and further improve bill affordability or reduce the ratepayer cost for participant bill subsidies.

G. Incentives

Bill payment assistance programs sometimes consider other incentives that the program benefit structure may or may not provide.

- Bill Payment: Programs may aim to incentivize customers to make regular and timely bill payment. This is often done by providing forgiveness of pre-program arrearages when customers make their payments on time and in full. If payment is required to obtain the arrearage forgiveness, it is important to ensure that participants understand those program parameters and potential forgiveness of a large debt to the utility.
- Usage Stabilization: Program designers are often concerned that the program structure could lead to an increase in energy usage. The literature has not shown a relationship between Percentage of Income Payment Programs (PIPPs) (where customers' bills relate to their income rather than their energy usage) and increased energy usage. However, program designers are often concerned that a PIPP will result in increased energy usage.
- Usage Reduction: Programs sometimes aim to incentivize customers to reduce energy usage. While not commonly seen, programs have included a conservation incentive bonus to customers who reduce their usage by a certain percentage. Programs that aim to reduce usage should focus on participants with high energy usage and refer those customers to the utility's low-income energy efficiency program. Sometimes such programs require bill payment assistance participants to accept energy efficiency services as a condition for continued participation in the bill payment assistance program.

H. Other Benefits

Programs can improve their potential for success by assisting customers to receive other services. Some bill payment assistance programs provide specific goals for other benefit receipt.

- LIHEAP: Customers who participate in the utility's bill payment assistance program may not apply for LIHEAP or stop applying for LIHEAP because they no longer need that assistance. Programs that do not provide extensive LIHEAP outreach often experience a

reduction in LIHEAP participation following enrollment in the utility's bill payment assistance program.

- WAP: Programs may have a goal for WAP or utility energy efficiency program participation. Bill payment assistance programs with that goal may require their high-usage participants to accept the utility's energy efficiency services to continue receiving the utility discount or credit.
- Case Management: Some programs aim to assist customers with needs outside of energy bill payment. These programs may provide holistic case management to help customers receive other needed assistance.

I. Summary

Key information on potential goals for utility bill payment assistance programs is summarized below.

- *Participation*: Given a set or limited budget, the program may prioritize affordability, with fewer participants; participation rates, with lower benefit levels; or a balance between these two goals.
- *Retention*: Goals for program retention may include enrollment for a specified duration, until pre-program arrearages are removed, until customers can afford the full bill, or as long as customers are eligible for the program.
- *Energy Burden*: Programs may aim for a fixed benefit level, potentially varying by income or poverty level; a fixed post-benefit energy burden for all participants; or a post-benefit energy burden that varies by poverty level.
- *Equity*: Goals for equity may relate to equal benefits, or equal post-benefit energy burdens.
- *Arrearages*: Some programs focus on the current bill and others also aim to eliminate arrearages that were developed prior to program participation.
- *Other Needs*: Some programs focus strictly on the energy bill, others provide referrals with a goal of increasing the affordability of other household expenses, and others provide energy efficiency services or repair referral services to improve the home condition and energy efficiency.
- *Incentives*: Programs sometimes design benefits with the goal of improving bill payment compliance, or stabilizing or reducing energy usage.
- *Other Benefits*: Programs may have goals for other benefit receipt including LIHEAP, WAP, or other needed services or assistance.

IV. Parameter Selection

This section reviews program parameters from bill payment assistance programs around the country.

A. Administration and Enrollment

Table IV-1 shows how the program administration and enrollment responsibilities are divided between the utility and/or state, contractor(s), and/or community-based organizations. Customer intake for the bill payment assistance programs is conducted by local agencies, state government agencies, community-based organizations, contractors, and utility companies.

- **Utility Administration:** Eighteen programs have the utility company as the program administrator. Utility companies have the advantage of complete access to customer billing and payment histories and direct application of benefits.
- **State Agencies:** Nine programs have a state agency as the program administrator. State agencies that administer these programs usually administer LIHEAP as well, so they have the potential advantage of access to other program participation and application information. This could allow for enrollment without the collection of additional data or documentation.

Intake for these programs is often conducted by local community agencies. These agencies interact with the low-income households on other program benefits and have often already developed a trusted relationship with the client.

**Table IV-1
Program Administration**

State	Program Name	Administrator Type	Program Administrator	Intake	Benefit Award
CA	Energy Assistance Program Rate (EAPR) ¹	Municipal Utility	Sacramento Municipal Utility-District	Local Agencies Contractors	-
CO	Colorado Natural Gas Customer Assistance Program (CAP) ²	Utility	Colorado Natural Gas Energy Outreach Colorado (EOC) Colorado LIHEAP	-	-
CO	SourceGas Percentage of Income Payment Plan (PIPP) ²	Utility	SourceGas Colorado LIHEAP	-	-
CO	Xcel Energy Affordability Program (EAP) ²	Utility	Xcel Energy Colorado LIHEAP	-	-
DC	Residential Aid Discount (RAD) ³	State Agency	Department of Energy & Environment	DOEE Local Agencies	PEPCO
DC	Residential Essential Service (RES) ⁴	State Agency	Department of Energy & Environment	DOEE Local Agencies	WGL

State	Program Name	Administrator Type	Program Administrator	Intake	Benefit Award
IL	Percentage of Income Payment Plan (PIPP) ²	State Agency	Department of Commerce & Economic Opportunity	Local Agencies	Ameren IL, ComEd, Nicor Gas, Peoples Gas/North Shore Gas
KY	LG&E-KU Home Energy Assistance Program (HEA) ¹	Utility	LG&E and KU	Local Agencies	LG&E and KU
MD	Electric Universal Services Program (EUSP) ⁵	State Agency	Maryland Department of Human Services	Local Agencies	-
ME	Central Maine Electric Lifeline Program (ELP) ²	State Agency	Maine State Housing Authority Local Agencies	Local Agencies	-
MN	CenterPoint Energy Gas Affordability Program (GAP) ²	Utility	CenterPoint Local Agencies	-	-
MN	Great Plains Natural Gas – Gas Affordability Program (GAP) ²	Utility	Great Plains Natural Gas Local Agencies	-	-
MN	IPL/MERC Gas Affordability Program (GAP) ²	Utility	IPL/MERC Local Agencies	-	-
MN	Xcel Energy Gas Affordability Program (GAP) ²	Utility	Xcel Energy Local Agencies	-	-
NH	Electric Assistance Program (EAP) ²	State Agency	Office of Energy & Planning	Local Agencies	-
NJ	Universal Service Fund (USF) ²	State Agency	Department of Community Affairs	Department of Community Affairs	-
NV	Fixed Annual Credit (FAC) ²	State Agency	Department of Health & Human Services	Department of Health & Human Services Local Agencies	-
OH	Percentage of Income Payment Plan Plus (PIPP) ¹	State Agency	Ohio Development Services Agency	Local Agencies State of Ohio	-
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP) ¹	Utility	Allegheny	Dollar Energy Local Agencies	Allegheny
PA	Duquesne Light Customer Assistance Program (CAP) ¹	Utility	Duquesne Light	Holy Family Institute (HFI) Catholic Charities	Duquesne Light
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP) ¹	Utility	FirstEnergy	Local Agencies	FirstEnergy
PA	NFG Low-Income Residential Assistance Program (LIRA) ¹	Utility	National Fuel Gas	Contractor	National Fuel Gas
PA	PECO Customer Assistance Program (CAP) ¹	Utility	PECO	PECO	PECO
PA	People’s Gas Customer Assistance Program (CAP) ¹	Utility	People’s Gas	Dollar Energy Fund Local Agencies	People’s Gas

State	Program Name	Administrator Type	Program Administrator	Intake	Benefit Award
PA	PGW Customer Responsibility Program (CRP) ¹	Utility	PGW	PGW	PGW
PA	PPL OnTrack (CAP) ¹	Utility	PPL	Local Agencies	PPL
PA	UGI Customer Assistance Program (CAP) ¹	Utility	UGI Local Agencies	Local Agencies	UGI

Sources: 1) APPRISE Evaluation 2) LIHEAP Clearinghouse: Ratepayer Funded Programs 3) Pepco's RAD Tariff – Revised (Docket FC1120-59) 4) WGL's Annual RES Surcharge Current Factor (Docket FC1127-114) 5) EUSP. 2019. Annual Administrative Report.

B. Budget and Participants

Table IV-2 displays the program funding source and budget, the number of households served, and the average annual benefit. Most of the programs are funded by ratepayers, but there are significant differences between the programs in terms of the budget, number of customers served, and benefit levels. These differences will impact the type of administration that is needed for the program.

- **Budget:** The amount of funding varies widely, ranging from \$37,769 for a small utility program, to \$220.8 million for a statewide electric program. The mean funding across all programs is \$38 million.
- **Participants:** The number of households served ranges from 180 to 359,655 households with a mean of 55,588.
- **Benefit Level:** The average annual benefit ranges from \$72 to \$1,206 and can depend on the customer's fuel type. The mean benefit across all programs and fuel types is \$600.

Table IV-2
Program Funding & Households Served

State	Program Name	Funding Source	Budget (Millions)	Participants	Mean Annual Benefit
CA	Energy Assistance Program Rate (EAPR, 2010) ¹	Ratepayers	\$33.6	100,849	\$343
CO	Colorado Natural Gas Customer Assistance Program (CAP, 2015) ²	Ratepayers	< \$0.1	180	-
CO	SourceGas Percentage of Income Payment Plan (PIPP, 2015) ²	Ratepayers	\$0.2	4,375	-
CO	Xcel Energy Affordability Program (EAP, 2015) ²	Ratepayers	\$6.8	24,009	-
DC	Residential Aid Discount (RAD, 2019) ³	Electric Ratepayers	\$5.8	20,565	\$272
DC	Residential Essential Service (RES, 2019) ⁴	Natural Gas Ratepayers	\$0.5	6,877	\$72
IL	Percentage of Income Payment Plan (PIPP, 2015) ²	Ratepayers	\$72.7	55,863	-
KY	LG&E-KU Home Energy Assistance Program (HEA, 2013) ¹	Ratepayers & Donations	\$2.1	LG&E: 2,515 KU: 3,511	LG&E: \$641 KU: \$391
MD	Electric Universal Services Program (EUSP, FY 2019) ⁵	Ratepayers & State	\$60.8	93,523	\$650
ME	Central Maine Electric Lifeline Program (ELP, 2015) ²	Ratepayers	\$8.0	11,500	\$285 ⁵

State	Program Name	Funding Source	Budget (Millions)	Participants	Mean Annual Benefit
MN	CenterPoint Energy Gas Affordability Program (GAP, 2015) ²	Ratepayers	\$10.2	27,177	-
MN	IPL/MERC Gas Affordability Program (GAP, 2015) ²	Ratepayers			
MN	Great Plains Natural Gas – Gas Affordability Program (GAP, 2015) ²	Ratepayers			
MN	Xcel Energy Gas Affordability Program (GAP, 2015) ²	Ratepayers			
NH	Electric Assistance Program (EAP, 2014) ²	Electric Ratepayers	\$13.6	33,444	-
NJ	Universal Service Fund (USF, FY 2018) ⁶	Ratepayers	\$105.4	162,000	-
NV	Fixed Annual Credit (FAC, 2015) ²	Ratepayers	\$9.2	27,370	\$776
OH	Percentage of Income Payment Plan Plus-Electric (PIPP, 2014) ¹	Ratepayers	\$220.8	359,655	Elec Heat: \$1,206 Non-Elec Heat: \$689
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP, 2009) ¹	Ratepayers & Shareholders	\$5.9	29,957	\$201
PA	Duquesne Light Customer Assistance Program (CAP, 2013) ¹	Ratepayers	\$31.2	31,379	Elec Heat: \$354 Non-Elec Heat: \$253
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP, 2015) ¹	Ratepayers	\$43.1	68,351	Elec Heat: \$914 Non-Elec Heat: \$592
PA	NFG Low-Income Residential Assistance Program (LIRA, 2019) ¹	Ratepayers	\$2.4	9,856	\$219
PA	PECO Customer Assistance Program (CAP, 2018) ¹	Ratepayers	\$97.8	120,122	Elec & Gas: \$457 Elec Only: \$431
PA	People’s Gas Customer Assistance Program (CAP, 2015) ¹	Ratepayers	\$9.8	36,426	\$467
PA	PGW Customer Responsibility Program (CRP, 2017) ¹	Ratepayers	\$58.4	62,200	\$703
PA	PPL OnTrack (CAP, 2018) ¹	Ratepayers	\$106.0	82,661	Elec Heat: \$1,087 Non-Elec Heat: \$626
PA	UGI Customer Assistance Program (CAP, 2011) ¹	Ratepayers	\$7.2	15,333	\$294
Mean		-	\$38.0	55,588	\$600

Sources: 1) APPRISE Evaluation Report 2) LIHEAP Clearinghouse Ratepayer Funded Programs 3) Pepco’s RAD Tariff – Revised (Docket FC1120-59) 4) WGL’s Annual Residential Essential Service Surcharge Current Factor (Docket FC1127-114) 5) EUSP. 2019. Annual Administrative Report 6) Communication with Maureen Clerc, Utility, Program Manager, NJ BPU. 2020

Note: See 2018 Report on Universal Service Programs & Collections Performance for most recent estimates on Pennsylvania CAP Program Discounts

C. Outreach

Table IV-3 shows that the programs use a variety of outreach methods to develop awareness among potential clients. Use of many different types of outreach methods provides the opportunity to reach the various segments of the population that prefer one type of contact over another.

Outreach methods include the following.

- Utility Bill Inserts: Used by nine programs.
- Mailed Information to Targeted Groups: Used by five programs.
- Community Events: Used by ten programs.
- Company's Website: Used by 13 programs.
- Company Representatives: Used by ten programs.
- Partnering with Local Agencies: Used by 12 programs.
- United Way Outreach: Used by four programs.

Other outreach methods include posting information at mass transit sites and partnering with elected officials to spread awareness of the programs. The most common outreach methods are posting on the company website and partnering with local agencies.

**Table IV-3
Program Outreach**

State	Program Name	Outreach Methods ¹							
		Bill Inserts	Targeted Mailings	Community Events	Company Website	Company Reps	Local Agencies	United Way	Other
CA	Energy Assistance Program Rate (EAPR) ¹	X	-	X	X	X	X	-	-
KY	LG&E-KU Home Energy Assistance Program (HEA) ¹	-	-	-	X	-	X	X	-
OH	Percentage of Income Payment Plan Plus (PIPP) ¹	X	-	X	X	X	-	-	-
NH	Electric Assistance Program (EAP) ²	-	X	-	X	-	X	-	-
NV	Fixed Annual Credit (FAC) ³	-	-	X	X	-	X	-	X
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP) ¹	-	-	X	X	X	X	-	X
PA	Duquesne Light Customer Assistance Program (CAP) ¹	X	-	X	X	X	X	X	X
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP) ¹	X	-	-	X	X	X	-	-
PA	NFG Low-Income Residential Assistance Program (LIRA) ¹	-	X	X	X	X	X	X	X
PA	PECO Customer Assistance Program (CAP) ¹	X	X	X	X	X	X	-	X
PA	People's Gas Customer Assistance Program (CAP) ¹	X	-	X	X	X	X	X	-

¹Only programs with available information are included in the table.

State	Program Name	Outreach Methods ¹							
		Bill Inserts	Targeted Mailings	Community Events	Company Website	Company Reps	Local Agencies	United Way	Other
PA	PGW Customer Responsibility Program (CRP) ¹	X	X	X	X	X	X	-	-
PA	PPL OnTrack (CAP) ¹	X	X	X	X	X	X	-	X
PA	UGI Customer Assistance Program (CAP) ¹	X	-	-	-	-	-	-	X
Total		9	5	10	13	10	12	4	7

Sources: 1) APRISE Evaluation Report 2) NH EAP. 2015. CAA Procedures Manual 3) NV Department of Welfare and Social Services 2019. Energy Assistance Programs Evaluation.

In addition to the program review, we conducted in-depth telephone interviews with four of Ameren's administering agencies to understand the outreach challenges faced in different parts of the service territory and the types of outreach that work best for the individual agencies. The following agencies were interviewed.

- East Missouri Action Agency (EMAA): EMAA serves eight rural counties in southeast Missouri. They provide housing, weatherization, and women's wellness assistance in addition to Head Start and community services.
- Good Samaritan Center (GSC): GSC serves two rural counties in northwest Missouri. They cater specifically to low-income and homeless senior citizens. They provide a variety of resources for families and individuals, including assistance with budgeting, rent, food, shelter, utilities, and transportation.
- Jefferson Franklin Community Action Corporation (JFCAC): JFCAC serves Jefferson and Franklin counties in eastern Missouri. This area is a mixture of suburban and rural. They provide recovery support, behavioral health, Women Infants and Children (WIC), and Head Start services. They additionally provide assistance for housing, weatherization, and energy.
- People's Community Action Corporation (PCAC): PCAC serves the city of St. Louis and the small, neighboring city of Wellston. They offer a wide range of services including food services, youth programs and youth employment programs, school-based counseling programs, job readiness for young adults and adults, homeless prevention, energy assistance, and rental assistance.

Table IV-4 provides a summary of the characteristics of the interviewed agencies and the populations they serve.

**Table IV-4
Agency Service Area Characteristics**

Agency	Areas Served	Area Characteristics	Poverty Rate	Racial Diversity
EMAA	8 counties in Southeast MO	Very rural	15%	6% non-white
GSC	2 counties in Northwest MO	Mostly rural	<10%	12% non-white
JFCAC	2 counties in Mideast MO	Mix of suburban and rural	<10%	1% non-white
PCAC	St. Louis	Urban	25%	52% non-white

The agencies conduct outreach in a variety of ways. These methods consist of providing information during client intake, at community events, with flyers, at senior centers and complexes, through websites and social media, and by word of mouth. All four agencies conduct outreach through client intake and community events.

**Table IV-5
Agency Outreach Methods**

Agency	Client Intake	Community Events	Flyers	Senior Centers	Website/Social Media	Word of Mouth
EMAA	X	X	X		X	
GSC	X	X	X	X		X
JFCAC	X	X		X		X
PCAC	X	X	X	X	X	

All four agencies will recommend Keeping Current to clients if they believe the client will be a good fit for the program. The agencies use different criteria to determine if the client will be right for the program. All four agencies see if the client is an Ameren customer, three determine if the client can make timely payments, and two require the client to have an income.

**Table IV-6
Keeping Current Client Eligibility Assessments**

Agency	Ameren Customer	Timely Payment Ability	Income Source
EMAA	X	X	X
GSC	X	X	X
JFCAC	X	X	
PCAC	X		

Prior to the Coronavirus, all four agencies required most clients come in person to their offices to apply for Keeping Current (with some exceptions). During the Coronavirus, the agencies utilized a mixture of in-person and virtual application methods, which include phone, email, and text.

Table IV-7
Agency Keeping Current Application Process

Agency	Application Process					
	Prior to Coronavirus	During Coronavirus				
	In-Person	In-Person	Phone	Email	Text	Dropbox
EMAA	X	X				X
GSC	X	X	X	X		
JFCAC	X		X	X		
PCAC	X	X		X	X	

We also conducted telephone interviews with homeless shelters to assess whether they work with formerly homeless individuals and provide access to Ameren's Keeping Current program. It appears that homeless shelters are a good opportunity for increased access to Keeping Current.

- St. Patrick Center: St. Patrick Center works with individuals transitioning out of shelters and places them into permanent housing. St. Patrick Center provides wraparound services to help these individuals maintain their current homes. While clients are not responsible for rent payments, they are responsible for utility bill payment. St. Patrick partners with Ameren Missouri and Spire Inc. to provide resources to individuals transitioning from a homeless shelter to permanent housing. Ameren Missouri and Spire both allow case managers to log into a portal system to review clients' bill histories and make pledges to prevent disconnection of services. Clients can complete an application and St. Patrick Center can perform the intake.
- The Haven of Grace refers individuals to St. Patrick Center's rapid rehousing program that provides support for individuals to quickly exit homelessness. However, they felt it would also be helpful to partner with Ameren because some of the women who have come through The Haven of Grace have had past due utility bills and would benefit from energy assistance. The Haven of Grace is potentially interested in working with Ameren to provide energy assistance to formerly homeless individuals. They reported that while clients do not reside at the shelter for very long, they remain connected through the childcare service. They felt that Ameren could increase outreach for the Keeping Current/Keeping Cooling programs among homeless shelters.
- Gateway180 connects homeless individuals to resources and programs that reduce housing barriers. Their rapid rehousing case manager prioritizes helping individuals to secure housing and connects these individuals to utility assistance programs. Gateway180 has

spoken with Ameren but currently does not have a formal partnership. They are interested in such a partnership with their rapid rehousing program. Currently they refer clients to St. Patrick Center and the Urban League for enrollment in Keeping Current.

D. Intake

Table IV-8 shows that the programs provide different ways for customers to submit their applications. The method that will work best for a particular household will depend on the household characteristics and individual preferences.

- **In-Person Enrollment:** Some households may prefer to come into an office and can receive the additional benefit of assessment of other needs and referral to additional programs. Other households may have difficulty visiting an office due to work schedules or childcare responsibilities. Individuals who live in rural areas may reside too far from the office to visit, homebound clients will need other options, and other households may have transportation barriers. Eighteen programs reported that they offer in-person intake appointments.
- **Email and Online Enrollment:** These methods provide more flexibility and can work very well for clients who are comfortable with the technologies and have computer access at home or at a nearby public facility. Two programs allow clients to enroll via e-mail and eight allow clients to enroll online. Online application is becoming more common and participants are more frequently suggesting this option if it is not available.
- **Mail Enrollment:** This method allows clients to complete paperwork at their convenience but may result in delayed enrollment and several iterations if potential participants do not initially submit all required documentation. Thirteen programs offer clients the opportunity to enroll by mail. This was the second most common intake method.
- **Telephone and Fax:** These methods also provide flexibility and may provide greater assistance to clients that have questions about the application process. Six programs offered this intake method.

The most common intake method is in-person, followed by mail.

**Table IV-8
Program Intake**

State	Program Name	Intake Methods ²					# of Methods
		In-Person	Email	Mail	Online	Phone	
CA	Energy Assistance Program Rate (EAPR) ¹	X	-	X	X	-	3
DC	Residential Aid Discount (RAD) ²	X	-	-	X	X	3
DC	Residential Essential Service (RES) ³	X	-	-	-	-	1
KY	LG&E-KU Home Energy Assistance Program (HEA) ¹	X	-	X	-	-	2

²Only programs with available information are included in the table.

State	Program Name	Intake Methods ²					# of Methods
		In-Person	Email	Mail	Online	Phone	
MD	Electric Universal Services Program (EUSP) ⁴	X	-	-	X	-	2
ME	Central Maine Electric Lifeline Program (ELP) ¹	X	-	-	-	X	2
MN	CenterPoint Energy Gas Affordability Program (GAP) ⁵	-	-	X	X	-	2
MN	Great Plains Natural Gas – Gas Affordability Program (GAP) ⁶	-	-	X	-	-	1
MN	IPL/MERC Gas Affordability Program (GAP) ⁷	-	-	X	-	-	1
MN	Xcel Energy Gas Affordability Program (GAP) ⁸	-	-	X	-	-	1
NH	Electric Assistance Program (EAP) ⁹	X	-	-	-	-	1
NJ	Universal Service Fund (USF) ¹⁰	X	-	-	-	-	1
NV	Fixed Annual Credit (FAC) ¹¹	X	X	X	-	-	3
OH	Percentage of Income Payment Plan Plus (PIPP) ¹	X	-	X	X	-	3
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP) ¹	X	-	X	-	X	3
PA	Duquesne Light Customer Assistance Program (CAP) ¹	X	-	-	X	-	2
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP) ¹	X	-	-	-	X	2
PA	NFG Low-Income Residential Assistance Program (LIRA) ¹	-	-	X	-	X	2
PA	PECO Customer Assistance Program (CAP) ¹	X	X	X	X	-	4
PA	PPL OnTrack (CAP) ¹	X	-	X	-	X	3
PA	People’s Gas Customer Assistance Program (CAP) ¹	X	-	-	-	-	1
PA	PGW Customer Responsibility Program (CRP) ¹	X	-	X	X	-	3
PA	UGI Customer Assistance Program (CAP) ¹	X	-	-	-	-	1
Total		18	2	13	8	6	-
Average		-					2

Sources: 1) APPRISE Evaluation Report 2) PEPCO RAD Program 3) Washington Gas RES Program 4) MD DHS Applying for Energy Assistance 5) CenterPoint Energy Gas Affordability Program 6) Great Plains Natural Gas Co. Low-Income Assistance Program 7) MN Energy Resources Gas Affordability Program 8) Xcel Energy, PowerOn and Gas Affordability Program Application 9) NH EAP. 2019. Triennial Process Evaluation 10) NJ BPU USF 11) NV DHHS. Apply for Assistance.

E. Income Eligibility

Table IV-9 displays the income eligibility guidelines for the bill payment assistance programs.

- Nineteen programs determine eligibility based on percent of the Federal Poverty Level (FPL). The FPL values range from 125 to 200 percent.
 - 125% FPL: One program.
 - 130% FPL: One program.
 - 150% FPL: Thirteen programs.
 - 175% FPL: Two programs.
 - 200% FPL: Two programs.
- Two programs use 60 percent of the State Median Income (SMI).
- One program bases eligibility on household income and energy usage.
- Four programs base program eligibility on LIHEAP eligibility.

**Table IV-9
Program Income Eligibility**

State	Program Name	Income Eligibility ³			
		% FPL	% SMI	LIHEAP Receipt	Other
CA	Energy Assistance Program Rate (EAPR) ¹	200%	-	-	-
CO	Colorado Natural Gas Customer Assistance Program (CAP) ²	150%	-	-	-
CO	SourceGas Percentage of Income Payment Plan (PIPP) ²	125%	-	-	-
DC	Residential Aid Discount (RAD) ³	-	60%	-	-
DC	Residential Essential Service (RES) ³	-	60%	-	-
IL	Percentage of Income Payment Plan (PIPP) ²	150%	-	-	-
KY	LG&E-KU Home Energy Assistance Program (HEA) ²	130%	-	-	-
MD	Electric Universal Services Program (EUSP) ²	175%	-	-	-
ME	Central Maine Electric Lifeline Program (ELP) ²	-	-	-	X
MN	CenterPoint Energy Gas Affordability Program (GAP) ²	-	-	X	-
MN	Great Plains Natural Gas – Gas Affordability Program (GAP) ²	-	-	X	-
MN	IPL/MERC Gas Affordability Program (GAP) ²	-	-	X	-
MN	Xcel Energy Gas Affordability Program (GAP) ²	-	-	X	-
NH	Electric Assistance Program (EAP) ²	200%	-	-	-
NJ	Universal Service Fund (USF) ²	175%	-	-	-
NV	Fixed Annual Credit (FAC) ²	150%	-	-	-
OH	Percentage of Income Payment Plan Plus (PIPP) ¹	150%	-	-	-
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP) ¹	150%	-	-	-
PA	Duquesne Light Customer Assistance Program (CAP) ¹	150%	-	-	-
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP) ¹	150%	-	-	-
PA	NFG Low-Income Residential Assistance Program (LIRA) ¹	150%	-	-	-
PA	PECO Customer Assistance Program (CAP) ¹	150%	-	-	-
PA	PPL OnTrack (CAP) ¹	150%	-	-	-
PA	People’s Gas Customer Assistance Program (CAP) ¹	150%	-	-	-
PA	PGW Customer Responsibility Program (CRP) ¹	150%	-	-	-
PA	UGI Customer Assistance Program (CAP) ⁴	150%	-	-	-
Total		19	2	4	1

Sources: 1) APPRISE Evaluation Report 2) LIHEAP Clearinghouse: Ratepayer Funded Programs 3) Department of Energy & Environment – Receive Discounts on Your Utility Bills.

³Only programs with available information are included in the table.

F. Other Eligibility Requirements

Table IV-10 displays other eligibility requirements, including demonstration of payment issues, budget billing participation, LIHEAP application, WAP application, and utility low-income energy efficiency program participation.

- **Payment-Troubled:** Payment-troubled customers are defined in different ways, those that have an arrearage on their account, are enrolled or have defaulted on a payment program, or have high housing and utility costs compared to their income. Some programs strictly enforce the requirement, while others list it, but allow others to enroll. Requiring customers to miss payments to enroll in a program could provide adverse incentives to potential enrollees or former participants. Three of the studied programs have this requirement. Some previously had the requirement but eliminated it.
- **Budget Billing:** Customers on budget billing pay a set amount each month that may be adjusted on a quarterly or less frequent basis. Customers prefer to have predictable energy bills and report that the consistent monthly bills make them easier to pay. Four of the listed programs require customers to enroll in budget billing.
- **LIHEAP Application:** Twelve programs, all run by utilities, require customers to enroll in LIHEAP. This benefit makes it easier for customers to meet their monthly utility payment obligations. However, some customers stop participating in LIHEAP following enrollment in the bill payment assistance program, because they feel that they no longer need the LIHEAP benefit.
- **WAP Application:** Two programs require customers to apply for the Weatherization Assistance Program (WAP), a low-income energy efficiency program run by the state.
- **Utility Low-Income Energy Efficiency Program:** Eleven of the programs report that they enforce this requirement.

Table IV-10
Other Eligibility Requirements

State	Program Name	Payment Troubled	Budget Billing	LIHEAP	WAP	Utility LI EE Program ⁴	Total
CO	Xcel Energy Affordability Program (EAP) ¹	-	-	X*	-	-	1
IL	Percentage of Income Payment Plan (PIPP) ²	-	X	-	X	-	2
KY	LG&E-KU Home Energy Assistance Program (HEA) ³	-	-	X	-	X	2
ME	Central Maine Electric Lifeline Program (ELP) ³	-	-	-	-	X	1
MN	CenterPoint Energy Gas Affordability Program (GAP) ¹	-	-	X*	-	-	1
MN	Great Plains Natural Gas – Gas Affordability Program (GAP) ¹	-	-	X*	-	-	1
MN	IPL/MERC Gas Affordability Program (GAP) ¹	-	-	X*	-	-	1

⁴Only programs with available information are included in the table.

State	Program Name	Payment Troubled	Budget Billing	LIHEAP	WAP	Utility LI EE Program ⁴	Total
MN	Xcel Energy Gas Affordability Program (GAP) ¹	-	-	X*	-	-	1
OH	Percentage of Income Payment Plan Plus (PIPP) ³	-	-	-	X	-	1
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP) ³	-	-	X	-	X	2
PA	Duquesne Light Customer Assistance Program (CAP) ³	X	X	X	-	X	4
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP) ³	-	X	X	-	X	3
PA	NFG Low-Income Residential Assistance Program (LIRA) ³	X	X	X	-	X	4
PA	PECO Customer Assistance Program (CAP) ³	-	-	-	-	X	1
PA	People's Gas Customer Assistance Program (CAP) ³	X	-	-	-	X	2
PA	PGW Customer Responsibility Program (CRP) ³	-	-	X	-	X	2
PA	PPL OnTrack (CAP) ³	-	-	-	-	X	1
PA	UGI Customer Assistance Program (CAP) ³	-	-	X	-	X	2
Total		3	4	12	2	11	-
Average				-			2

Sources: 1) LIHEAP Clearinghouse: Ratepayer Funded Programs 2) Illinois General Assembly. Energy Assistance Act 3) APPRISE Evaluation report
* Customers must be LIHEAP recipients to enroll in program.

G. Enrollment Level

Table IV-11 shows that some of the programs target particular enrollment levels. Some have set goals for enrollment through a minimum or maximum number of participants. However, it has become increasingly common for bill payment assistance programs to serve all applicants.

**Table IV-11
Target Enrollment Levels**

State	Program Name	Enrollment Level Target ⁵
NH	Electric Assistance Program (EAP) ¹	<ul style="list-style-type: none"> Approximately 30,000 customers.
OH	Percentage of Income Payment Plan Plus (PIPP) ²	<ul style="list-style-type: none"> Maximize customer participation.
PA	NFG Low-Income Residential Assistance Program (LIRA) ²	<ul style="list-style-type: none"> No cap on enrollment. Target participation rate of 9,000.
PA	PGW Customer Responsibility Program (CRP) ²	<ul style="list-style-type: none"> No limit on the number of customers that can enroll.
PA	UGI Customer Assistance Program (CAP) ²	<ul style="list-style-type: none"> Maximum enrollment up to 17,500 participants through 2013. If exceeded, utilities will file a petition to increase.

Sources: 1) NH EAP. 2019. Triennial Process Evaluation. 2) APPRISE Evaluation Report.

⁵Only programs with available information are included in the table.

H. Targeting

Table IV-12 displays the distribution of participants by percent of the Federal Poverty Level for the bill payment assistance programs.

- The number of customers at or below 50 percent of the FPL ranges from 18 percent to 38 percent. The mean percent at this level is 26 percent.
- The number of customers between 51 and 100 percent of the FPL ranges from 41 to 60 percent. The mean percent at this level is 48 percent.
- The number of customers between 101 and 150 percent ranges from 12 to 36 percent and the number of customers greater than 150 percent ranges from zero to five percent. The mean percent at the 101 to 150 percent level is 25 percent.

Forty-eight percent of participants are within the 51 to 100 percent of FPL category.

Table IV-12
Participant Poverty Level

State	Program Name	Year	Percent of Participants by Poverty Level ⁶			
			≤ 50%	51%-100%	101%-150%	> 150%
KY	LG&E-KU Home Energy Assistance Program (HEA) ¹	2013	24%	60%	16%	0%
OH	Percentage of Income Payment Plan Plus (PIPP) ¹	2014	38%	41%	19%	0%
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP) ¹	2009	29%	45%	24%	1%
PA	Duquesne Light Customer Assistance Program (CAP) ¹	2013	23%	49%	23%	5%
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP) ¹	2015	22%	46%	31%	2%
PA	NFG Low-Income Residential Assistance Program (LIRA) ¹	2019	18%	47%	35%	0%
PA	PECO Customer Assistance Program (CAP) ¹	2018	25%	45%	30%	0%
PA	People's Gas Customer Assistance Program (CAP) ¹	2015	26%	47%	27%	0%
PA	PGW Customer Responsibility Program (CRP) ¹	2017	32%	55%	12%	<1%
PA	PPL OnTrack (CAP) ¹	2018	19%	45%	36%	0%
PA	UGI Customer Assistance Program (CAP) ¹	2011	26%	52%	22%	0%
Mean			26%	48%	25%	1%

Sources: 1) APPRISE Evaluation Report.

Table IV-13 provides information on the percent of participants in vulnerable groups with various sources of income. This information provides an understanding of whether programs are serving the working poor, the elderly, families, the unemployed, or households with disabled members.

- Elderly: The percent of participants who are at least 65 years of age ranges from six to 36 percent with a mean of 18 percent.

⁶Only programs with available information are included in the table.

- Children: The percent of participants who have a child under 18 years old in the household ranges from 16 to 62 percent with a mean of 44 percent.
- Employed: The percent of employed participants ranges from 20 to 49 percent with a mean of 31 percent.
- Unemployment: The percent of participants receiving unemployment income ranges from one to five percent with a mean of three percent.
- Disability Income: The percent of customers receiving disability income ranges from less than one percent to 35 percent with a mean of 24 percent.

Table IV-13
Participant Characteristics

State	Program Name	Year	% of Participants in Vulnerable Groups		% of Participants Income Type ⁷		
			Senior	Children	Employed	Unemployed	Disability
KY	LG&E-KU Home Energy Assistance Program (HEA) ¹	2013	31%	36%	20%	2%	23%
OH	Percentage of Income Payment Plan Plus (PIPP) ¹	2014	16%	48%	33%	4%	10%
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP) ¹	2009	11%	62%	49%	1%	<1%
PA	Duquesne Light Customer Assistance Program (CAP) ¹	2013	15%	51%	35%	5%	30%
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP) ¹	2015	36%	16%	23%	3%	35%
PA	NFG Low-Income Residential Assistance Program (LIRA) ¹	2019	6%	38%	32%	1%	-
PA	PECO Customer Assistance Program (CAP) ¹	2018	-	-	28%	2%	23%
PA	People's Gas Customer Assistance Program (CAP) ¹	2015	27%	46%	20%	2%	11%
PA	PGW Customer Responsibility Program (CRP) ¹	2017	7%	37%	21%	2%	27%
PA	PPL OnTrack (CAP) ¹	2018	15%	58%	49%	3%	29%
Mean			18%	44%	31%	3%	24%

Sources: 1) APPRISE Evaluation Report.

I. Bill Subsidy Determination

Table IV-14 displays the bill subsidy type, the subsidy amount, and how the subsidy was calculated. The programs provide a variety of bill subsidy types, which include a percent discount, rate discount, a percentage of income, a fixed credit, a monthly subsidy, and an annual subsidy.

- Percent Discount: Under this method, the bill is discounted by a specified percentage, which may depend on household size and income. Five programs use the percent discount subsidy type with the discount ranging from eight percent to a maximum of 80 percent.
- Percentage of Income Program: Participants in this type of program pay a fixed amount equal to a specified percentage of the annual household income, where the percentage may vary based upon the household's poverty level. Sixteen programs use this subsidy type,

⁷Only programs with available information are included in the table.

but the percentage of income paid varies drastically. Participants pay as little as two percent of income up to 17 percent of income.

- Fixed Credit Program: Participants receive a credit each month so that the energy cost does not exceed a targeted energy burden, where the credit is based on household size, income, or usage. Two programs use this subsidy type.
- Monthly or Annual Subsidy: This type of program provides a credit to customers, where the subsidy may depend on energy burden. Two programs use this subsidy type.
- Rate Discount: The RAD rate discount program covers the full customer charge for distribution, the energy distribution charge, and a few surcharges. The RES rate discount program reduces the distribution charge and covers certain surcharges.

Percentage of income is the most common subsidy type, with 16 out of 27 programs using this subsidy type.

Table IV-14
Program Bill Subsidy Determination

State	Program Name	Subsidy Type				
		% Discount	% of Income	Annual/Monthly Credit	Fixed Credit	Rate Discount
CA	Energy Assistance Program Rate (EAPR) ¹	X	-	-	-	-
CO	Colorado Natural Gas Customer Assistance Program (CAP) ²	-	X	-	-	-
CO	SourceGas Percentage of Income Payment Plan (PIPP) ²	-	X	-	-	-
CO	Xcel Energy Affordability Program (EAP) ²	-	X	-	-	-
DC	Residential Aid Discount (RAD) ³	-	-	-	-	X
DC	Residential Essential Service (RES) ³	-	-	-	-	X
IL	Percentage of Income Payment Plan (PIPP) ²	-	X	-	-	-
KY	LG&E-KU Home Energy Assistance Program (HEA) ¹	-	-	-	X	-
MD	Electric Universal Services Program (EUSP) ⁴	-	-	X	-	-
ME	Central Maine Electric Lifeline Program (ELP) ²	-	X	-	-	-
MN	CenterPoint Energy Gas Affordability Program (GAP) ²	-	X	-	-	-
MN	Great Plains Natural Gas – Gas Affordability Program (GAP) ²	-	X	-	-	-
MN	IPL/MERC Gas Affordability Program (GAP) ²	-	X	-	-	-
MN	Xcel Energy Gas Affordability Program (GAP) ²	-	X	-	-	-
NH	Electric Assistance Program (EAP) ²	X	-	-	-	-
NJ	Universal Service Fund (USF) ⁵	-	X	-	-	-
NV	Fixed Annual Credit (FAC) ²	-	-	X	-	-
OH	Percentage of Income Payment Plan Plus (PIPP) ²	-	X	-	-	-
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP) ¹	-	X	-	-	-
PA	Duquesne Light Customer Assistance Program (CAP) ¹	X	-	-	-	-

State	Program Name	Subsidy Type				
		% Discount	% of Income	Annual/Monthly Credit	Fixed Credit	Rate Discount
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP) ¹		X	-	-	-
PA	NFG Low-Income Residential Assistance Program (LIRA) ¹	X	-	-	-	-
PA	PECO Customer Assistance Program (CAP) ¹	-	-	-	X	-
PA	People's Gas Customer Assistance Program (CAP) ¹	-	X	-	-	-
PA	PGW Customer Responsibility Program (CRP) ¹	-	X	-	-	-
PA	PPL OnTrack (CAP) ¹	X	-	-	-	-
PA	UGI Customer Assistance Program (CAP) ¹	-	X	-	-	-
Total		5	16	2	2	2

Sources: 1) APPRISE Evaluation Report 2) LIHEAP Clearinghouse: Ratepayer Funded Programs 3) DC Public Service Commission: Low-Income Discount Programs & Seniors and Disabled Residents Credit 4) EUSP. 2019. Annual Administrative Report 5) LIHEAP Clearinghouse: NJ State PBF/USF History, Legislation, Implementation.

Table IV-14B
Program Bill Subsidy Determination

State	Program Name	Amount	Subsidy Determination			
			HH Size	Income/Poverty Level	Usage	Other
CA	Energy Assistance Program Rate (EAPR) ¹	30-35% discount	X	X	X	-
CO	Colorado Natural Gas Customer Assistance Program (CAP) ²	2-3% of income	-	X	-	-
CO	SourceGas Percentage of Income Payment Plan (PIPP) ²	2-3% of income	-	X	-	-
CO	Xcel Energy Affordability Program (EAP) ²	3% of income	-	X	-	-
DC	Residential Aid Discount (RAD) ³	~30% discount	-	-	-	-
DC	Residential Essential Service (RES) ³	~25% discount	-	-	-	-
IL	Percentage of Income Payment Plan (PIPP) ²	6% of monthly income	-	X	-	-
KY	LG&E-KU Home Energy Assistance Program (HEA) ¹	\$200-\$1,000 annual subsidy	X	X	X	
MD	Electric Universal Services Program (EUSP) ⁴	~\$506 annual benefit	-	-	-	-
ME	Central Maine Electric Lifeline Program (ELP) ²	4% - 10% of income	-	X	-	-
MN	CenterPoint Energy Gas Affordability Program (GAP) ²	6% of income	-	X	-	-
MN	Great Plains Natural Gas – Gas Affordability Program (GAP) ²	4% of income	-	X	-	-
MN	IPL/MERC Gas Affordability Program (GAP) ²	6% of income	-	X	-	-
MN	Xcel Energy Gas Affordability Program (GAP) ²	4% of income	-	X	-	-
NH	Electric Assistance Program (EAP) ²	8-77% discount	X	X	-	-
NJ	Universal Service Fund (USF) ⁵	3-6% of income	X	X	-	-
NV	Fixed Annual Credit (FAC) ²	~\$776 annual benefit	-	X	-	X

State	Program Name	Amount	Subsidy Determination			
			HH Size	Income/ Poverty Level	Usage	Other
OH	Percentage of Income Payment Plan Plus (PIPP) ²	6-10% of monthly income	-	X	-	-
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP) ¹	5-17% of monthly income	X	X	-	X
PA	Duquesne Light Customer Assistance Program (CAP) ¹	~22% discount	X	X	-	-
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP) ¹	3-9% of income	X	X	X	X
PA	NFG Low-Income Residential Assistance Program (LIRA) ¹	10-80% monthly discount	X	X	-	-
PA	PECO Customer Assistance Program (CAP) ¹	\$0 - \$2,922 annual subsidy	X	X	X	-
PA	People's Gas Customer Assistance Program (CAP) ¹	8-10% of monthly income	X	X	-	-
PA	PGW Customer Responsibility Program (CRP) ¹	8-10% of monthly income	X	X	-	-
PA	PPL OnTrack (CAP) ¹	20-50% discount	X	X	-	-
PA	UGI Customer Assistance Program (CAP) ¹	7-9% of monthly income	-	X	-	-
Total		-	12	24	3	2

Sources: 1) APPRISE Evaluation Report 2) LIHEAP Clearinghouse: Ratepayer Funded Programs 3) DC Public Service Commission: Low-Income Discount Programs & Seniors and Disabled Residents Credit 4) EUSP. 2019. Annual Administrative Report 5) LIHEAP Clearinghouse: NJ State PBF/USF History, Legislation, Implementation.

J. Bill Subsidy Benefit Levels

Table IV-15 displays the mean subsidy level for the bill payment assistance programs. The subsidy amount ranges from \$40 to \$1,206 with a mean annual benefit of \$600. The table shows that several programs provide different subsidy amounts based on the household's heating type.

**Table IV-15
Mean Subsidy Level**

State	Program Name	Mean Subsidy Level (\$) ⁸
CA	Energy Assistance Program Rate (EAPR) ¹	\$343
DC	Residential Aid Discount (RAD) ²	\$272
DC	Residential Essential Service (RES) ³	\$72
KY	LG&E-KU Home Energy Assistance Program (HEA) ¹	LG&E: \$641 KU: \$391
MD	Electric Universal Services Program (EUSP) ⁴	\$650
ME	Central Maine Electric Lifeline Program (ELP) ¹	\$285
NV	Fixed Annual Credit (FAC) ⁵	\$776
OH	Percentage of Income Payment Plan Plus (PIPP) ¹	Elec Heat: \$1,206 Non-Elec Heat: \$689
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP) ¹	\$201

⁸Only programs with available information are included in the table.

State	Program Name	Mean Subsidy Level (\$)⁸
PA	Duquesne Light Customer Assistance Program (CAP)¹	Elec Heat: \$354 Non-Elec Heat: \$253
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP)¹	Elec Heat: \$914 Non-Elec Heat: \$592
PA	NFG Low-Income Residential Assistance Program (LIRA)¹	\$219
PA	PECO Customer Assistance Program (CAP)¹	Elec & Gas: \$457 Elec Only: \$431
PA	People's Gas Customer Assistance Program (CAP)¹	\$467
PA	PGW Customer Responsibility Program (CRP)¹	\$703
PA	PPL OnTrack (CAP)¹	Elec Heat: \$1,087 Non-Elec Heat: \$626
PA	UGI Customer Assistance Program (CAP)¹	\$294
Mean		\$600

Sources: 1) APPRISE Evaluation Report 2) Pepco's RAD Tariff – Revised (Docket FC1120-59) 3) WGL's Annual RES Surcharge Current Factor (Docket FC1127-114) 4) EUSP. 2019. Annual Administrative Report 5) LIHEAP Clearinghouse: Ratepayer Funded Programs.

K. Minimum Monthly Payment & Maximum Annual Benefit

Many programs have minimum monthly payment requirements and/or maximum annual benefit limits to control program costs. Table IV-16 shows that these parameters may vary by fuel type, household size, income, or poverty level. The maximum credit is listed per year, per month, per 18 months, or per heating season but is most commonly reported by year. The minimum monthly amount ranges from \$10 to \$50 and the maximum annual credit ranges from \$300 to \$2,922 per year. Across all programs, the average minimum monthly payment is \$23 and the average annual maximum credit is \$1,345.

**Table IV-16
Program Minimum Monthly Payment & Maximum Credit**

State	Program Name	Customer Type	Minimum Monthly Payment	Maximum Credit⁹
CA	Energy Assistance Program Rate (EAPR)¹	All	-	\$20 - \$60/month
DC	Residential Aid Discount (RAD)¹	Elec Heat	-	\$475/year
		Non-Elec Heat	-	\$300/year
DC	Residential Essential Service (RES)²	All	-	25% discount/heating season
IL	Percentage of Income Payment Plan (PIPP)³	All	\$10	\$1,800/year
KY	LG&E-KU Home Energy Assistance Program (HEA)¹	LG&E	-	\$1,000/year
		KU	-	\$616/year
NH	Electric Assistance Program (EAP)⁴	All	-	77% discount/year
NJ	Universal Service Fund (USF)⁵	All	-	\$1,800/year
NV	Fixed Annual Credit (FAC)⁶	All	-	\$1,152 - \$2,836/year

⁹Only programs with available information are included in the table.

State	Program Name	Customer Type	Minimum Monthly Payment	Maximum Credit ⁹
OH	Percentage of Income Payment Plan Plus (PIPP) ¹	All	\$10	-
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP) ¹	Elec Heat	\$50	\$1,400/year
		Non-Elec Heat	\$25	\$560-\$750/year
PA	Duquesne Light Customer Assistance Program (CAP) ¹	Elec Heat	-	\$1,800/year
		Non-Elec Heat	-	\$700/year
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP) ¹	Elec Heat	\$45	\$2,400/year
		Non-Elec Heat	\$12	\$960/year
PA	NFG Low-Income Residential Assistance Program (LIRA) ¹	All	\$12	-
PA	PECO Customer Assistance Program (CAP) ¹	Elec Heat	\$30	\$1,661 - \$2,922/year
		Non-Elec Heat	\$12	\$1,241 - \$2,048/year
PA	People's Gas Customer Assistance Program (CAP) ¹	All	\$25	\$1,000/year
PA	PGW Customer Responsibility Program (CRP) ¹	All	\$25	\$840/year
PA	PPL OnTrack (CAP) ¹	Elec Heat	\$30	\$3,328 - \$4,027/18 months
		Non-Elec Heat	\$12	\$1,310 - \$1,585/18 months
PA	UGI Customer Assistance Program (CAP) ¹	Elec Heat	\$25	-
		Non-Elec Heat	\$15	
Mean		-	\$23	\$1,345* per year

Sources: 1) APPRISE Evaluation Report 2) Washington Gas. n.d. RES Program 3) Illinois General Assembly. Energy Assistance Act 4) LIHEAP Clearinghouse: Ratepayer Programs 5) LIHEAP Clearinghouse: NJ State PBF/USF History, Legislation, Implementation 6) NV Department of Welfare and Social Services. 2019. Energy Assistance Programs Evaluation.

* Average only includes maximum credits reported per year. For programs that have a range of maximum credits, the credit with the highest value was taken to compute the average.

L. Bill Consistency

Customers tend to prefer fixed monthly bills and report that predictable bills are easier to pay. Table IV-17 shows whether programs provide that consistency and how it is achieved. Customers in three programs received a fixed amount every month through budget billing which is required to participate in those programs. Other customers receive a fixed amount by virtue of the percentage of income payment plan.

**Table IV-17
Bill Consistency**

State	Program Name	Fixed Monthly Bill	PIPP	Budget Billing ¹⁰
CO	Colorado Natural Gas Customer Assistance Program (CAP) ¹	X	X	-
CO	SourceGas Percentage of Income Payment Plan (PIPP; 2015) ¹	X	X	-
CO	Xcel Energy Affordability Program (EAP) ¹	X	X	-
IL	Percentage of Income Payment Plan (PIPP) ²	X	X	-
ME	Central Maine Electric Lifeline Program (ELP) ¹	X	X	-
MN	CenterPoint Energy Gas Affordability Program (GAP) ¹	X	X	-
MN	Great Plains Natural Gas – Gas Affordability Program (GAP) ¹	X	X	-
MN	IPL/MERC Gas Affordability Program (GAP) ¹	X	X	-
MN	Xcel Energy Gas Affordability Program (GAP) ¹	X	X	-
NJ	Universal Service Fund (USF) ⁴	X	X	-
OH	Percentage of Income Payment Plan Plus (PIPP) ³	X	X	-
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP) ³	X	X	-
PA	Duquesne Light Customer Assistance Program (CAP) ³	X	-	X
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP) ³	X	-	X
PA	NFG Low-Income Residential Assistance Program (LIRA) ³	X	-	X
PA	People’s Gas Customer Assistance Program (CAP) ³	X	X	-
PA	PGW Customer Responsibility Program (CRP) ³	X	X	-
PA	UGI Customer Assistance Program (CAP) ³	X	X	-
Total		18	15	3

Sources: 1) LIHEAP Clearinghouse: Ratepayer Funded Programs 2) Illinois General Assembly, Energy Assistance 3) APPRISE Evaluation Report 4) LIHEAP Clearinghouse: NJ State PBF/USF History, Legislation, Implementation.

M. Arrearage Forgiveness Parameters

Many programs provide arrearage forgiveness to help customers remove debt accumulated prior to program participation. Table IV-18 shows that most programs offer arrearage forgiveness over 12 to 36 months. This arrearage forgiveness is received every month that the customer pays their bill in full, however most programs provide forgiveness for previous months when customers make up missed payments. A few programs require a co-pay of \$5/month toward the accumulated arrearages.

¹⁰Only programs with available information are included in the table.

**Table IV-18
Arrearage Forgiveness**

State	Program Name	Forgiveness Period of Time	Forgiveness When Bill Paid in Full?	Forgiveness When Customers Make Up Missed Payments?	Co-payment Required? ¹¹
CA	Energy Assistance Program Rate (EAPR) ¹	36 months	X	-	-
CO	Colorado Natural Gas Customer Assistance Program (CAP) ²	12 months	-	-	-
CO	SourceGas Percentage of Income Payment Plan (PIPP) ²	12 months	-	-	-
CO	Xcel Energy Affordability Program (EAP) ²	12-24 months*	-	-	-
IL	Percentage of Income Payment Plan (PIPP) ³	36 months	X	-	-
MN	CenterPoint Energy Gas Affordability Program (GAP) ²	12 months	-	-	-
MN	Great Plains Natural Gas – Gas Affordability Program (GAP) ²	24 months	-	-	-
MN	IPL/MERC Gas Affordability Program (GAP) ²	24 months	-	-	-
MN	Xcel Energy Gas Affordability Program (GAP) ²	24 months	-	-	-
NJ	Universal Service Fund (USF) ⁴	12 months	-	-	-
NV	Fixed Annual Credit (FAC) ²	12 months	X	-	-
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP) ¹	2% per month	X	-	\$5/month
PA	Duquesne Light Customer Assistance Program (CAP) ¹	24 months	X	X	-
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP) ¹	-	X	-	-
PA	NFG Low-Income Residential Assistance Program (LIRA) ¹	36 months	X	X	-
PA	PECO Customer Assistance Program (CAP) ¹	12 months	X	X	-
PA	People’s Gas Customer Assistance Program (CAP) ¹	36 months	X	X	\$5/month
PA	PGW Customer Responsibility Program (CRP) ¹	36 months	X	X	\$5/month
PA	PPL OnTrack (CAP) ¹	18 months	X	X	\$5/month
PA	UGI Customer Assistance Program (CAP) ¹	30 months	X	X	-

Sources: 1) APPRISE Evaluation Report 2) LIHEAP Clearinghouse: Ratepayer Funded Programs 3) Illinois General Assembly. Energy Assistance Act 4) NJ State PBF/USF History.

* 12 months for customers with arrears of \$500 or less; 24 months for customers with arrears over \$500

¹¹Only programs with available information are included in the table.

N. LIHEAP Coordination

Table IV-19 shows how the bill payment assistance programs are connected to LIHEAP and how the LIHEAP grants are used in calculating the customers' bills. The table shows that 11 of the assistance programs offer referrals to LIHEAP. These referrals were commonly made by utility representatives or staff at local agencies. The table also shows that several utilities have staff members help customers with their LIHEAP application.

One common requirement for participating in the bill payment assistance programs is applying for LIHEAP. The table below shows that 12 utilities reported that this was a requirement for participating in their bill payment assistance program. Some utilities tell customers they are expected to apply for LIHEAP, but do not remove customers if they do not apply.

The last column in the table shows how LIHEAP grants were used in calculating a customer's bill. Some utilities applied the LIHEAP grant to the customer's asked to pay amount and applied any excess amount as a credit towards future bills. Other utilities applied the grant to delinquent bills before applying it to current bills.

**Table IV-19
LIHEAP Coordination**

State	Program Name	Referrals to LIHEAP?	Staff Assistance with LIHEAP?	Benefits Dependent on LIHEAP Application?	Benefit Calculation Assumes LIHEAP Receipt? ¹²
CA	Energy Assistance Program Rate (EAPR) ¹	X	-	-	-
CO	Xcel Energy Affordability Program (EAP) ²	-	-	X**	-
IL	Percentage of Income Payment Plan (PIPP) ³	-	-	-	<ul style="list-style-type: none"> • Cannot receive LIHEAP benefits if also receive PIPP benefits
KY	LG&E-KU Home Energy Assistance Program (HEA) ¹	X	-	X	<ul style="list-style-type: none"> • LIHEAP grant factored into the benefit amount
MN	CenterPoint Energy Gas Affordability Program (GAP) ²	-	-	X**	-
MN	Great Plains Natural Gas – Gas Affordability Program (GAP) ²	-	-	X**	-
MN	IPL/MERC Gas Affordability Program (GAP) ²	-	-	X**	-
MN	Xcel Energy Gas Affordability Program (GAP) ²	-	-	X**	-
OH	Percentage of Income Payment Plan Plus (PIPP) ¹	X	-	-	-
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP) ¹	-	-	X	<ul style="list-style-type: none"> • First applied against LIPURP shortfall • Next applied to pre-program arrearages

¹²Only programs with available information are included in the table.

State	Program Name	Referrals to LIHEAP?	Staff Assistance with LIHEAP?	Benefits Dependent on LIHEAP Application?	Benefit Calculation Assumes LIHEAP Receipt? ^{1,2}
PA	Duquesne Light Customer Assistance Program (CAP) ¹	X	-	X	-
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP) ¹	X	-	X	<ul style="list-style-type: none"> • First applied against delinquent bills • Next applied against current bills • Next applied against future bills
PA	NFG Low-Income Residential Assistance Program (LIRA) ¹	X	X	X*	<ul style="list-style-type: none"> • Applied to asked-to-pay amount • Next applied as a credit to future bills
PA	PECO Customer Assistance Program (CAP) ¹	X	X	-	-
PA	People's Gas Customer Assistance Program (CAP) ¹	X	X	-	<ul style="list-style-type: none"> • Grant used to calculate CAP Plus Amount • CAP Plus is equal to amount of LIHEAP from previous heating season divided by # of current active CAP participants
PA	PGW Customer Responsibility Program (CRP) ¹	X	-	X	<ul style="list-style-type: none"> • First applied to asked-to-pay amount • Next applied as a credit to future bills
PA	PPL OnTrack (CAP) ¹	X	X	-	-
PA	UGI Customer Assistance Program (CAP) ¹	X	-	X	<ul style="list-style-type: none"> • Applied to asked-to-pay amount

Sources: 1) APPRISE Evaluation Report 2) LIHEAP Clearinghouse: Ratepayer Funded Programs 3) Illinois Department of Commerce. Utility Bill Assistance.

* NFG informs LIRA participants that they are "required" to apply for LIHEAP but will not remove clients from the program if they fail to apply so long as they comply with the other LIRA requirements.

** Customers must be LIHEAP recipients to enroll in program.

O. Program Removal

Table IV-20 shows that common reasons for removal from the bill payment assistance programs are the following.

- Non-payment/Failure to maintain a current account/Missing consecutive payments: Seven programs.
- Failure to seek other services such as LIHEAP or weatherization: Five programs.
- Failure to recertify: Four programs.

Other removal reasons include being income ineligible for the program, moving, failing to provide income or household documentation, establishing multiple accounts, failing to allow access to meter reads, insufficient program funds, and successfully ending the program. Fewer than three programs cited each of these as common removal reasons.

**Table IV-20
Program Removal Reasons**

State	Program Name	Removal Reason ¹³					
		Non-Payment	Failure to Re-Certify	Not Eligible	Refused WX/LIHEAP	Non-Compliant	Other
CO	Colorado Natural Gas Customer Assistance Program (CAP) ¹	X	-	-	-	-	-
CO	SourceGas Percentage of Income Payment Plan (PIPP) ¹	X	-	-	-	-	-
CO	Xcel Energy Affordability Program (EAP) ¹	X	-	-	-	-	-
IL	Percentage of Income Payment Plan (PIPP) ²	X	-	-	-	-	-
KY	LG&E-KU Home Energy Assistance Program (HEA) ³	X	-	-	X	X	
ME	Central Maine Electric Lifeline Program (ELP) ³	-	-	-	-	-	X
MN	Xcel Energy Gas Affordability Program (GAP) ⁴	-	-	-	-	-	X
NH	Electric Assistance Program (EAP) ⁵		X	X	-	-	X
OH	Percentage of Income Payment Plan Plus (PIPP) ³	X	-	-	-	-	-
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP) ³	-	X	-	-	X	-
PA	Duquesne Light Customer Assistance Program (CAP) ³	-	-	-	X	X	X
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP) ³	-	X	-	X	X	-
PA	NFG Low-Income Residential Assistance Program (LIRA) ³	-	-	X	-	-	X
PA	PECO Customer Assistance Program (CAP) ³	-	-	X	-	X	X
PA	People's Gas Customer Assistance Program (CAP) ³	-	X		-	X	-
PA	PPL OnTrack (CAP) ³	X	-	-	X	X	-
PA	UGI Customer Assistance Program (CAP) ³		X		X	X	-
Total		7	5	3	5	8	6

Sources: 1) CO Department of Regularly Agencies. PUC. 4. CCR. 723-4. Part 4 2) Illinois Department of Commerce. Utility Bill Assistance 3) APPRISE Evaluation Report 4) MN PUC. September 27, 2012. Staff Briefing Papers 5) NH EAP. 2015. CAA Procedures Manual.

¹³Only programs with available information are included in the table.

P. Holistic Service Delivery and Case Management:

Table IV-21 shows the types of referrals made through the bill payment assistance programs. The table shows that referrals to weatherization services was the most common referral, followed by referrals to hardship services and to special needs services.

- Referrals to Weatherization Services: Fifteen programs.
- Referrals to Hardship Services: Ten programs.
- Referrals to Special Needs Services: Nine programs.

The table also shows that most referrals were made by community organizations. Several of these community organizations can perform intake for the bill payment assistance programs while simultaneously referring clients to other programs and services such as food assistance and counseling.

**Table IV-21
Service Delivery and Case Management**

State	Program Name	Referral Type ¹⁴			
		Weatherization Services	Hardship Services	Special Needs Services	Referrals Made By
CA	Energy Assistance Program Rate (EAPR) ¹	X	X	-	-
IL	Percentage of Income Payment Plan (PIPP) ²	X	-	-	-
KY	LG&E-KU Home Energy Assistance Program (HEA) ¹	X	-	-	• Intake agencies
NH	Electric Assistance Program (EAP) ³	X	-	-	• Intake agencies
NV	Fixed Annual Credit (FAC) ⁴	X	-	-	-
OH	Percentage of Income Payment Plan Plus (PIPP) ¹	X	-	-	• Local delegate agencies
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP) ¹	X	X	X	• Customer service representatives • Public Utilities Commission • Community based organizations • Social service agencies • Legislators
PA	Duquesne Light Customer Assistance Program (CAP) ¹	X	X	X	• Holy Family Institute
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP) ¹	X	X	X	• Community based organizations
PA	NFG Low-Income Residential Assistance Program (LIRA) ¹	X	X	X	• NFG call center • Intake agencies
PA	PECO Customer Assistance Program (CAP) ¹	X	X	X	• PECO call center • Local agencies

¹⁴Only programs with available information are included in the table.

State	Program Name	Referral Type ¹⁴			
		Weatherization Services	Hardship Services	Special Needs Services	Referrals Made By
PA	People's Gas Customer Assistance Program (CAP) ¹	X	X	X	<ul style="list-style-type: none"> • Conservation Consultants Inc. • Local agencies
PA	PGW Customer Responsibility Program (CRP) ¹	X	X	X	-
PA	PPL OnTrack (CAP) ¹	X	X	X	<ul style="list-style-type: none"> • PPL Customer Contact Center • Social agency caseworkers • Self-referrals
PA	UGI Customer Assistance Program (CAP) ¹	X	X	X	<ul style="list-style-type: none"> • Administering agencies
Total		15	10	9	-

Sources: 1) APPRISE Evaluation Report 2) Illinois General Assembly. Energy Assistance Act 3) NH EAP. 2019. Triennial Process Evaluation 4) NV Department of Welfare and Social Services. 2019. Energy Assistance Programs Evaluation.

Table IV-22 displays the specific weatherization, hardship, and special needs services. The table shows only those programs that referred customers to weatherization, hardship, or special needs services. The table shows that some common weatherization measures include the following.

- Energy Education
- CFLs
- Insulation
- Blower door-guided air sealing
- Health and safety measures
- Furnace repair/replacement
- Water heater repair/replacement
- Refrigerator and freezer repair/replacement

The table also shows that hardship grants range from \$200 to \$800 with multiple utilities offering grants of up to \$500. Clients were also provided with a combination of the following special needs services.

- Temporary protection from termination
- Personalized attention to help payment-troubled customers pay their bills
- Budget counseling
- Referrals to community programs and services such as:
 - Drug and Alcohol Programs
 - Food Assistance (Food Banks, SNAP)
 - Employment Assistance
 - Other Energy Assistance
 - Housing Assistance
 - Counseling
 - Alternative Schools

- Childcare
- Transportation
- Addiction Treatment
- Rent Assistance
- Job Training
- Social Security Disability

**Table IV-22
Weatherization, Hardship, and Special Needs Services
Programs Offering Referrals to Weatherization, Hardship, or Special Needs**

State	Program Name	Weatherization Measures	Hardship Services	Special Needs Services ¹⁵
CA	Energy Assistance Program Rate (EAPR) ¹	<ul style="list-style-type: none"> • Attic insulation • Weather stripping • Water heater blanket • Pipe wrap • Low flow showerheads • Faucet aerators • Compact fluorescent light bulbs • Fluorescent torchiere • Hardwired lighting fixtures • Ceiling fans • Microwaves • Bug Screens 	<ul style="list-style-type: none"> • Grant up to \$200 	-
IL	Percentage of Income Payment Plan (PIPP) ²	<ul style="list-style-type: none"> • Furnace repair & replacement 	-	-
KY	LG&E-KU Home Energy Assistance Program (HEA) ¹	X	-	-
NH	Electric Assistance Program (EAP) ³	X	-	-
NV	Fixed Annual Credit (FAC) ⁴	<ul style="list-style-type: none"> • Heating and cooling system repairs and replacement • Carbon monoxide monitors • Air sealing • Insulation • Lighting • Refrigerator replacement 	-	-
OH	Percentage of Income Payment Plan Plus (PIPP) ¹	X	-	-

¹⁵Only programs with available information are included in the table.

State	Program Name	Weatherization Measures	Hardship Services	Special Needs Services ¹⁵
PA	Allegheny Low Income Payment & Usage Reduction Program (LIPURP) ¹	<ul style="list-style-type: none"> • CFLs • Blower door tests • Air sealing • General repairs 	<ul style="list-style-type: none"> • Grant up to \$500 	<ul style="list-style-type: none"> • Affordable monthly payment based on LIPURP guidelines • Budget counseling • Home visit and/or phone call by CARES Representative • Referral to Allegheny Power programs (LIPURP/LIURP) • Referrals to community assistance such as: <ul style="list-style-type: none"> ○ Funding ○ Housing ○ Food programs ○ Employment ○ Counseling ○ Rehabilitation ○ Transportation ○ Assistance with program applications
PA	Duquesne Light Customer Assistance Program (CAP) ¹	<ul style="list-style-type: none"> • Blower door test • CFLs • Mattresses • Refrigerators and freezers • Electric hot water tanks • Tank wraps • Window and central air conditioning units • Heat pumps • Air infiltration measures • Smart strips • Insulation • Furnaces • Electric dryers, stoves, water pumps, and blankets 	<ul style="list-style-type: none"> • Grant up to \$500 • Protection against shutoffs • Restoration of electric service if terminated • Referrals to other programs and services 	<ul style="list-style-type: none"> • Drug and alcohol outpatient program • Family counseling • In home program to keep kids in their homes • Alternative schools • Food banks • SNAP • Childcare • Transportation • Addiction treatment • Shelter, if there is violence in the home • Rent assistance • Social Security • Public assistance • Social Security Disability (have helped clients work with lawyers) • Clothing bank • 211 connection to community resources
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP) ¹	<ul style="list-style-type: none"> • Air sealing and insulation • Heating and air conditioning • Appliance replacement • Hot water measures • Windows and doors • Lighting • Health and safety • Customer measures • Other (e.g. roof coating) 	<ul style="list-style-type: none"> • Grant of up to \$500 	<ul style="list-style-type: none"> • Dollar Energy Fund • PCAP • Payment plan • LIHEAP • Community action agency • 211 • Aging agency • LIURP • Church services • Cancer services

State	Program Name	Weatherization Measures	Hardship Services	Special Needs Services ¹⁵
PA	NFG Low-Income Residential Assistance Program (LIRA) ¹	<ul style="list-style-type: none"> • A heating system safety check • An energy audit, including energy education • Wall and/or attic insulation when appropriate • Blower door-guided air sealing • Other energy measures • Health and safety measures (up to \$250) • Incidental minor repairs such as window repair, venting/pipe issues, and chimney repair (up to \$100) • A post inspection by an NFG representative 	<ul style="list-style-type: none"> • Grant of up to \$400 for natural gas • Grant of up to \$200 for non-natural gas 	<ul style="list-style-type: none"> • Provides temporary protection from termination until financial assistance is found or payment arrangements can be made • NFG staff work individually with select payment-troubled customers to maximize their ability to pay their utility bills
PA	PECO Customer Assistance Program (CAP) ¹	X	<ul style="list-style-type: none"> • Grant of up to \$500 per fuel 	<ul style="list-style-type: none"> • Referral services including job training, budget counseling, and education workshops
PA	People’s Gas Customer Assistance Program (CAP) ¹	<ul style="list-style-type: none"> • Attic, sidewall, and other types of insulation • Caulking and weather-stripping • Air sealing • Hot water treatments including tank improvements, wrapping, and replacements • Minor repairs that relate to weatherization 	<ul style="list-style-type: none"> • Grant of up to \$500 	Referrals to: <ul style="list-style-type: none"> • Energy assistance programs • SNAP • Medicaid • Gatekeeper Program • Thermostat for vision-impaired customers • Earned Income Tax Credit Program • LIHEAP
PA	PGW Customer Responsibility Program (CRP) ¹	<ul style="list-style-type: none"> • Air sealing • Insulation heating system replacement • Equipment repair and replacement • Hot water reduction measures 	<ul style="list-style-type: none"> • Matching bill credit, generally up to \$750 	Referrals to: <ul style="list-style-type: none"> • Internal and external organizations and assistance programs
PA	PPL OnTrack (CAP) ¹	<ul style="list-style-type: none"> • Air Sealing • Appliances • Audit • Doors • HVAC • Health and safety • Lighting • Miscellaneous • Attic insulation • Floor insulation • Garage insulation • Heat pump water heater • Wall insulation • Water heating 	<ul style="list-style-type: none"> • Grant of up to \$750 • Customer can also receive up to \$375 in matching credits 	<ul style="list-style-type: none"> • Protection against shutoff of electric service • Referrals to other programs and services

State	Program Name	Weatherization Measures	Hardship Services	Special Needs Services ¹⁵
PA	UGI Customer Assistance Program (CAP) ¹	<ul style="list-style-type: none"> • Insulation • Furnace repair/replacement • Water heater repair/replacement • Furnace efficiency modification • Windows and baseboard caulking • Door and window weather stripping • Door sweeps and thresholds • Replacement of broken windowpanes • Storm windows • Attic ventilation • Electrical outlet and switch plate gaskets on outside walls • Water conservation measures • Energy education • Infiltration measures • Incidental repairs (necessary to the effective performance of weatherization materials) 	<ul style="list-style-type: none"> • Grant of up to \$400 for UGI Gas • Grant of up to \$800 for PNG 	<ul style="list-style-type: none"> • Assistance and referrals to payment-troubled customers to help improve their bill payment problems

Sources: 1) APPRISE Evaluation Report 2) Illinois General Assembly. Energy Assistance Act 3) NH EAP. 2019. Triennial Process Evaluation 4) NV Department of Welfare and Social Services. 2019. Energy Assistance Programs Evaluation.

Q. National Data on COVID-19 Related Moratoriums

This section provides information on State-mandated moratoriums that were put in place to help households deal with difficulties faced due to COVID-19. Information in this section was compiled by the National Energy and Utility Affordability Coalition.

Table IV-23 provides information on state mandated moratoriums on shutoffs due to the Coronavirus pandemic. About half of the states had a shutoff moratorium in place as of September 16th, 2020. Three states had moratoriums set to expire at the end of September 2020.

**Table IV-23
State Mandated Shutoffs**

State Mandated Shutoff*	# of States	% of States
Mandated Shutoff Moratorium	23	46%
No Mandated Shutoff/Expired Mandate	27	54%

Source: National Energy Assistance Directors’ Association. 2020. Summary of State Utility Shut-off Moratoriums due to COVID-19.

* As of 9/16/20

Table IV-24 displays the number under a gas, electric, or water shutoff moratorium. Roughly 59 percent of the U.S. population was covered by a gas, electric, or water moratorium as of August 3rd, 2020.

Table IV-24
Proportion of US Population Covered by Gas, Electric, or Water Moratoriums

State Mandated Shutoff*	# of US Population	% of US Population
Mandated Shutoff	194,405,105	59.2%
No Mandated Shutoff/Expired Mandate	133,834,418	40.8%

Source: National Energy Assistance Directors' Association. 2020. Summary of State Utility Shut-off Moratoriums due to COVID-19.

* As of 8/3/20

Table IV-25 displays information on when the shutoff moratoriums ended or will end as of September 9th, 2020. The median end date was September 9th, 2020. The minimum end date was May 14, 2020 and the maximum end date is March 31, 2021.

Table IV-25
Moratorium End Date

	N	Min	Median	Max
Moratorium End Date*	36	5/14/20	9/9/20	3/31/21

Source: National Energy Assistance Directors' Association. 2020. Summary of State Utility Shut-off Moratoriums due to COVID-19.

Table IV-26 provides information on start and end dates, and length of state mandated moratoriums. Many states originally mandated moratoriums in March and extended the length of the moratoriums in the summer. As of September 16th, 23 states and the District of Columbia had active moratoriums and 15 states had expired moratoriums.

Table IV-26
State-Mandated Shutoff Moratorium Duration

State	Disconnection	Late Fee	Moratorium Start Date*	Moratorium End Date	Moratorium Length
Alaska	X	X	3/11/20	11/15/20 or end of emergency	8 months
Arkansas	X	X	3/11/20	10/14/20	7 months
California	X	X	3/4/20	2021	Ongoing
Colorado	X	X	3/20/20	10/7/20	6 months + 2 weeks
Connecticut	X		3/13/20	10/1/20 (non-hardship)	6 months + 2 weeks
				10/31/20 (hardship)	7 months + 2 weeks
Delaware	X	X	3/12/20	10/3/20	6 months + 3 weeks
DC	X	X	3/17/20	Shutoff: 15 days after emergency	Ongoing
				Late Fee: Unknown	Unknown
Georgia	X	X	6/2/20	7/14/20	Unknown

State	Disconnection	Late Fee	Moratorium Start Date*	Moratorium End Date	Moratorium Length
Hawaii	X	X	5/4/20	12/31/20	7 months + 3 weeks
Illinois	X	X	3/18/20	7/26/20	4 months + 1 week
Indiana	X	X	3/19/20	Shutoff: 8/14/20	4 month + 3 weeks
				Late Fee: 10/12/20	6 months + 3 weeks
Iowa	X		3/13/20	7/1/20	3 months + 2 weeks
Kansas	X	X	3/16/20	Shutoff: 5/31/20	2 months + 2 weeks
				Late Fee: End of emergency	Ongoing
Kentucky	X	X	3/16/20	Until further notice	Until further notice
Louisiana	X	X	3/13/20	7/16/20	4 months
Maine	X		3/16/20	Until further notice	Until further notice
Maryland	X	X	3/16/20	9/15/20	5 months + 4 weeks
Massachusetts	X	X	3/13/20	11/16/20	8 months
Michigan	X	X	4/15/20	6/1/20 (LI and Senior)	1 month + 3 weeks
Mississippi	X		3/15/20	5/26/20	2 months + 1 week
Montana	X	X	3/30/20	5/24/20	1 month + 3 weeks
New Hampshire	X	X	3/13/20	10/16/20	7 months
				7/17/20	4 months
New Mexico	X	X	3/19/20	9/18/20	6 months
New York	X		3/23/20	3/31/21 or 180 days after emergency	12 months + 1 week
North Carolina	X	X	3/16/20	Shutoff: 9/1/20	5 months + 2 weeks
				Late Fee: End of emergency	
Ohio	X	X	3/12/20	9/15/20	6 months
Pennsylvania	X		3/13/20	12/1/20	8 months + 2 weeks
Rhode Island	X	X	3/16/20	Shutoff: 9/30/20 (residential) 11/1/20 (LI)	6 months + 2 weeks (res)
			3/16/20	Late Fee: Ongoing	7 month + 2 weeks (LI)
South Carolina	X	X	3/16/20	5/14/20	2 months
Tennessee	X	X	3/31/20	8/29/20	5 months
Texas	X	X	3/26/20	9/30/20	6 months
Vermont	X		3/18/20	9/30/20	6 months + 1 week
Virginia	X	X	3/16/20	Shutoff: 10/5/20	6 months + 2 weeks
				Late Fee: Until further notice	Until further notice
Washington	X	X	3/18/20	10/15/20	6 months + 2 weeks
Wisconsin	X	X	3/13/20	Shutoff: 10/1/20	6 months + 2 weeks
				Late Fee: 11/30/20	8 months + 2 weeks

State	Disconnection	Late Fee	Moratorium Start Date*	Moratorium End Date	Moratorium Length
Wyoming	X	X	3/26/20	Until further notice	Until further notice

Source: Edison Electric Institute (EEI) 2020. COVID-19-Related Ordered Moratoriums by State.

*As of 9/16/20

Table IV-27 provides information on voluntary utility moratoriums. The table shows the type of moratorium in place, and the moratorium start date, end date, and length as of September 16th. Many utilities voluntarily extended the state mandated shutoff order. Some utilities voluntarily extended the state-mandated shutoff. Some states, such as Arizona, Minnesota, New Jersey, Oklahoma, and West Virginia, did not enact a state-mandated shutoff but instead issued a call to electric companies to voluntarily enact their own moratoriums.

Table IV-27
Voluntary Utility Moratoriums

State	Utility	Disconnection	Late Fee	Moratorium Start Date*	Moratorium End Date	Moratorium Length
AZ	Arizona Public Service Electric	X	X	3/12/20	10/15/20	7 months
	Tucson Electric Power	X	X	3/12/20	10/15/20	7 months
IL	Several Large Utilities	X	X	3/18/20	9/10/20	5 months + 3 weeks
ME	Central Maine Power Company	X	X	3/16/20	Until further notice	
MN	Electric Utilities	X	X	3/25/20	10/12/20	6 months + 2 weeks
NJ	Public Gas & Electric Utilities	X		3/13/20	Until further notice	
NY	Con Edison		X	3/23/20	Emergency End	Ongoing
OK	Electric Utilities	X		3/16/20	7/20	About 4 months
SC	Dominion Energy	X	X	3/16/20	9/20	About 6 months
	Duke Energy	X	X	3/16/20	10/20	About 7 months
WV	All Utilities	X	X	3/13/20	7/1/20	3 months + 2 weeks

Source: Edison Electric Institute (EEI) 2020. COVID-19-Related Ordered Moratoriums by State.

* As of 9/16/20

** As of 7/16/20

Table IV-28 provides information on Coronavirus practices for other utilities around the country based on information compiled by the National Energy and Utility Affordability Coalition.

Table IV-28
Utility Policies During COVID-19

State	Utility / Program	Policy			
		Suspend/Refund Deposits	Suspension of Fees	Payment Assistance	Other
CA	Berkeley Electric Co-op	X	-	-	-
CA	Pacific Gas and Electric	X	-	-	-

State	Utility / Program	Policy			
		Suspend/Refund Deposits	Suspension of Fees	Payment Assistance	Other
CA	Southern California Edison	-	X	-	-
DC	Pepco Gift of Energy Program	-	-	X	-
FL	TECO	-	-	X	-
IN	Citizens Energy Group	-	X	-	-
MA	Eversource New Start Program	-	-	X	-
NY	ConEdison	-	X	-	-
TX	CenterPoint Energy	-	-	X	-
TX	PNM	-	-	-	X
WA	Tacoma Public Utilities	-	-	-	X
Total		2	3	4	2

Source: NEUAC. Energy Affordability and COVID-19: Exploring Promising Practices to Address Growing Need.

NEUAC also reported the following.

- According to the Electric Power Research Institute, more than 25 percent of those who lost jobs during the COVID-19 crisis reported skipping or intending to skip an electric or gas bill payment.
- According to the National Rural Electric Cooperative Association, an increase in unemployment along with an increase in suspended disconnections is expected to increase the balances of unpaid electric bills to \$2.6 billion through 2022 at co-op utilities.

R. Utility In-Depth Research on COVID-19 Related Programs

APPRISE conducted in-depth telephone interviews with low-income energy assistance program managers at three utility companies. This section provides a summary of the information on shutoff moratoriums and programs enacted in response to the Coronavirus

Table IV-29 provides information on Coronavirus shutoff moratoriums for three utilities that were interviewed as part of this study. The table shows the type of moratorium in place, and the moratorium start date, end date, and length. All the moratoriums started in mid-March but had varying end dates. PECO's moratoriums did not have an end date as of July 16th, 2020.

Table IV-29
Shutoff Moratorium Duration
Ameren IL, Evergy, PECO

State	Utility	Type of Moratorium	Start Date	End Date	Length of Shutoff Moratorium
IL	Ameren IL	Disconnection	3/16/20	8/11/20	4 months and 3 weeks
		Late Fee		7/27/20	4 months and 1 week
		Deposit		Unknown	Unknown
KS/MO	Evergy	Disconnection	3/13/20	7/16/20	4 months

State	Utility	Type of Moratorium	Start Date	End Date	Length of Shutoff Moratorium
		Late Fee		12/31/20	9 months and 2 weeks
PA	PECO	Disconnection	3/13/20	Ongoing*	Ongoing
		Late Fee		Ongoing*	Ongoing
		Deposit		Ongoing*	Ongoing

* Ongoing as of 7/16/20

Table IV-30 displays the bill payment assistance programs that three interviewed utilities, Ameren IL, Evergy, and PECO, implemented in response to the Coronavirus. Six of the programs provide a one-time benefit, four of the programs are payment arrangements for customers to pay off their arrearages, and one program provides a percent discount.

**Table IV-30
COVID Response Programs
Ameren IL, Evergy, PECO**

State	Utility	Program Name	Bill Subsidy Type		
			Payment Agreement	One Time Subsidy	Percent Discount
IL	Ameren IL	Flexible Payment Agreement	X	-	-
		Fresh Start	-	X	-
		AIMS	-	X	-
		Non-Residential Hardship	-	X	-
		Low-Income Residential Hardship	-	X	-
KS/MO	Evergy	COVID 12-Month Arrangement	X	-	-
		4-Month Arrangement	X	-	-
		Pay Your Balance Now	-	-	X
		Customer Service Credits	-	X	-
PA	PECO	COVID Payment Agreement	X	-	-
		LIHEAP Recovery Crisis Program	-	X	-
Total			4	6	1

Table IV-31 provides information on the duration of the bill payment assistance programs that were implemented by Ameren IL, Evergy, and PECO in response to the Coronavirus. The program start dates, end dates, and duration vary. The programs began between January and June 2020, with a majority of programs starting in May and June. The end dates range from June 2020 to May 2021, with most programs ending in August 2020. The program durations range from about one month to one year. One of PECO’s programs did not have an end date and was ongoing as of July 16th, 2020.

**Table IV-31
Duration of Programs
Ameren IL, Evergy, PECO**

State	Utility	Program Name	Start Date	End Date	Program Duration
IL	Ameren IL	Flexible Payment Agreement	3/16/20	1/31/21	10 months + 2 weeks
		Fresh Start	6/18/20	5/30/21	11 months + 1 week
		AIMS	1/1/20	12/31/20	12 months
		Non-Residential Hardship	5/18/20	6/30/20	1 month + 1 week
		Low-Income Residential Hardship	6/1/20	8/30/20	5 months
KS/MO	Evergy	COVID 12-Month Arrangement	5/26/20	12/31/20	7 months
		4-Month Arrangement	6/30/20	8/31/20	2 months
		Pay Your Balance Now	6/30/20	8/31/20	2 months
		Customer Service Credits	6/11/20	8/31/20	2 months + 2 weeks
PA	PECO	COVID Payment Agreement	3/13/20	Ongoing*	Ongoing
		LIHEAP Recovery Crisis Program	3/27/20	8/31/20	5 months

* Ongoing as of 7/16/20

Table IV-32 displays the program eligibility guidelines for the programs. Eligibility can be based on the Federal Poverty Level, the type of customer, arrearage balance, military status, or citizenship status. Many payment agreement programs require residential or small business customers to have a past-due balance to participate.

**Table IV-32
Program Eligibility
Ameren IL, Evergy, PECO**

State	Utility	Program Name	Income Eligibility	Residential Customers	Small Business	Other
IL	Ameren IL	Flexible Payment Agreement	-	X	-	• Must have past-due balance
		Fresh Start	350% FPL	X	-	• Undocumented customers are eligible
		AIMS	-	-	-	• Must be active duty or military veterans
		Non-Residential Hardship	-	-	X	• Non-profits are eligible
		Low-Income Residential Hardship	400% FPL	X	-	-
KS/MO	Evergy	COVID 12-Month Arrangement	-	X	X	• Must have past-due balance
		4-Month Arrangement	-	X	-	• Must have past-due balance >\$250
		Pay Your Balance Now	-	X	-	• Must have past-due balance >\$100
		Customer Service Credits	-	X	-	-

State	Utility	Program Name	Income Eligibility	Residential Customers	Small Business	Other
PA	PECO	COVID Payment Agreement	-	X	X*	• Must have past-due balance
		LIHEAP Recovery Crisis Program	150% FPL	X	-	-

* Only some small businesses are eligible for the COVID Payment Agreement.

Table IV-33 shows the Coronavirus program benefits. Six of the programs provide a one-time benefit, four of the programs are payment arrangements for customers to pay off their arrearages, and one program provides a percent discount.

- The one-time bill subsidies range from \$50 to \$800 and can depend on poverty level or fuel type.
- The arrearage payment agreement durations range from four months to 24 months and some do not require a down payment.

Table IV-33
Program Benefit Determination
Ameren IL, Evergy, PECO

State	Utility	Program Name	Bill Subsidy Type	Amount	Subsidy Determination
IL	Ameren IL	Flexible Payment Agreement	Payment Agreement	<ul style="list-style-type: none"> • Non-Low-Income Customers: 18-month payment plan with 10% down payment • Low-Income Customers: 24-month payment plan with no down payment 	Poverty Level
		Fresh Start	One Time Subsidy	<ul style="list-style-type: none"> • Low-Income Customers: up to \$400 for electric and \$300 for gas • Moderate Income/Undocumented Customers: up to \$200 for electric and \$150 for gas 	Poverty Level Citizenship Status Fuel Type
		AIMS	One Time Subsidy	• \$150 grant	
		Non-Residential Hardship	One Time Subsidy	• \$500 grant	
		Low-Income Residential Hardship	One Time Subsidy	• Up to \$600	Poverty Level
KS/ MO	Evergy	COVID 12-Month Arrangement	Payment Agreement	• 12-month payment plan with 1/12 down payment	
		4-Month Arrangement	Payment Agreement	• 4-month payment plan with \$25 credit after initial payment and up to \$75 credit after final payment	Customer Status and Arrearage
		Pay Your Balance Now	Percent Discount	• Receive 10% credit up to \$100 if pay past due balance	Customer Status and Arrearage
		Customer Service Credits	One Time Subsidy	• Customer service reps can give out 10 \$50 credits per month	
PA	PECO	COVID Payment Agreement	Payment Agreement	• 24-month payment plan	
		LIHEAP Recovery Crisis Program	One Time Subsidy	• Up to \$800	Poverty Level

Table IV-34 displays the number of Coronavirus program participants. The number of participants in Ameren IL's programs range from 500 to 4,000 however, three of the four programs were ongoing as of July 17th, 2020 and will continue to enroll customers. There were over 20,000 customers participating in all of Evergy's Coronavirus bill payment assistance programs.

Table IV-34
Number of Program Participants to Date
Ameren IL, Evergy, PECO

State	Utility	Program	Number of Participants
IL	Ameren IL	Fresh Start	4,000*
		AIMS	900*
		Non-Residential Hardship	900
		Low-Income Residential Hardship	500*
KS/MO	Evergy	COVID 12-Month Arrangement	Over 20,000
		Pay Your Balance Now	
		4-Month Arrangement	
		Customer Service Credits	

* Programs are ongoing as of 7/17/20

S. Summary

APPRISE conducted a program design review to characterize the parameters of bill payment assistance programs around the country. Key findings from the review are summarized below.

- *Administration and Enrollment:* Customer intake for the bill payment assistance programs is conducted by many different organizations, including local agencies, state government departments, community-based organizations, contractors, and utility companies. Eighteen programs have the utility company as the program administrator. Nine programs have a state agency as the program administrator.

Intake for these programs is often conducted by local community agencies. These agencies interact with the low-income households on other program benefits and have often already developed a trusted relationship with the client.

- *Budget:* Most of the programs are funded by ratepayers, but there are significant differences between the programs in terms of the budget, number of customers served, and benefit levels. These differences will impact the type of administration that is needed for the program.

The annual budget ranges from \$37,769 for a small utility program to \$220.8 million for a statewide electric program. The mean budget is \$38 million. The number of households served ranges from 180 to 359,655 households with a mean of 55,588. The average annual

benefit ranges from \$72 to \$1,206 with a mean of \$600 and can depend on the customer's fuel type.

- *Outreach:* The programs use a variety of outreach methods to spread awareness to potential clients. These methods include inserting information with a customer's utility bill, mailing information to targeted groups, partnering with local agencies, providing information at community events, on the company's website, through company representatives, or United Way. The most common outreach methods are postings on the company website (13 programs) and partnering with local agencies (12 programs).
- *Intake:* Customers can submit their application in-person, via email, mail, online, telephone, and other, such as fax. The most common intake method is in-person, with 18 programs that use this method, followed by mail, with 13 programs that use this method. Online application is becoming more common and participants are more frequently suggesting this option if it is not available.
- *Income Eligibility:* Nineteen programs determine eligibility based on percent of the Federal Poverty Level (FPL), two use percent of the State Median Income (SMI), and others base eligibility on household income, energy usage, or LIHEAP eligibility. The FPL values range from 125 to 200 percent, and the most common by far is 150 percent of the FPL.
- *Other Eligibility Requirements:* Some programs require customers to be payment-troubled, enroll in budget billing, enroll in LIHEAP, and/or receive weatherization services to participate. It is most common for a program to require a customer to enroll in a utility low-income energy efficiency program, with 11 out of the 18 programs that report this requirement.
- *Targeting:* About 25 percent of participants have income at or below 50 percent of the poverty level, 50 percent have income between 51 and 100 percent of the poverty level, and 25 percent have income between 101 and 150 percent of the poverty level.
- *Bill Subsidy Determination:* The programs provide a variety of bill subsidies which include a percent discount, rate discount, percentage of income program, fixed credit program, monthly subsidy, and annual subsidy. Percentage of income is the most common subsidy type, with 16 out of 27 programs using this subsidy type.
- *Bill Subsidy Benefit Levels:* The mean subsidy amount ranges from \$40 to \$1,206 with an average of \$600. Several programs provide different subsidy amounts based on the household's heating type.
- *Minimum Monthly Payment & Maximum Credit:* Programs may require a minimum monthly payment amount or a maximum credit to control program costs. These

restrictions can depend on fuel type, household size, income, or poverty level. The mean minimum monthly bill is \$23 and the mean annual maximum credit is \$1,345.

- *Bill Consistency*: Customers tend to prefer fixed monthly bills and report that predictable bills are easier to pay. Fifteen programs offer fixed bills through a percentage of income payment plan and three offer fixed bills through budget billing.
- *Arrearage Forgiveness Parameters*: Most programs offer arrearage forgiveness over 12 to 36 months. This arrearage forgiveness is received every month that the customer pays their bill in full, however most programs provide forgiveness for previous months when customers make up missed payments. A few programs require a co-pay of \$5/month toward the accumulated arrearages.
- *LIHEAP Coordination*: Eleven of the assistance programs offer referrals to LIHEAP. These referrals were commonly made by utility representatives or staff at local agencies. One common requirement for participating in the bill payment assistance programs is applying for LIHEAP. Twelve utilities reported that this was a requirement for participating in their bill payment assistance program.
- *Program Removal*: Non-payment, failure to recertify, and failure to seek other services such as LIHEAP or weatherization were common removal reasons. Other removal reasons included being income ineligible for the program, moving, failing to provide income or household documentation, establishing multiple accounts, failing to allow access to meter reads, and successfully ending the program.
- *Holistic Service Delivery and Case Management*: Referrals to weatherization services was the most popular referral across the assistance programs, made by 15 programs, followed by referrals to hardship services, made by ten programs, and referrals to special needs assistance, done by nine programs.
- *Other Challenges*: In response to the coronavirus, about half of the states have a shutoff moratorium in place and about half do not, as of August 3rd, 2020.

Ameren IL, Every, and PECO implemented disconnection and late fee moratoriums in response to the Coronavirus. Ameren IL and PECO also implemented a moratorium on deposits.

Ameren IL, Every, and PECO implemented several programs in response to the coronavirus. Six of the programs provide a one-time benefit, four of the programs are payment arrangements for customers to pay off their arrearages, and one program provides a percent discount. The programs began between January and June 2020, with a majority of the programs starting in May and June. The end dates range from June 2020 to May 2021, with most programs ending in August 2020.

Other practices implemented during the coronavirus include reduction in charges/rates for residential high energy users, refunds of existing security deposits, suspension of credit card fees, third-party payments on a customer's behalf, suspension of negative credit reporting, and the establishment of special fuel funds.

V. Outcomes

This section reviews program outcomes from bill payment assistance programs across the country. Referenced studies are anonymized because many of the evaluation studies have not been made public.

A. Participation

Table V-1 displays the number of annual participants for each program. The number of participants varied widely, ranging from 2,515 for one of the utility-administered programs to 359,655 for the statewide program. The average annual participation was 70,986 customers.

**Table V-1
Program Participation**

ID	Program Year	# Annual Participants
1	2010	100,849
2.A	2013	3,511
2.B	2013	2,515
3	2014	359,655
4	2009	29,957
5	2013	31,379
6	2015	68,351
7	2019	9,856
8	2018	120,122
9	2015	36,426
10	2017	62,200
11	2018	82,661
12	2011	15,333
Mean Annual Participants		70,986

Table V-2 displays the distribution of participants across the percent of the Federal Poverty Level (FPL). The largest percentage of participants was between 51 and 100 percent of the FPL. On average across all of the programs (not weighted by participants), 26 percent of participants were at or below 50 percent of the FPL, 49 percent were between 51 and 100 percent, 24 percent were between 101 and 150 percent, and one percent were above 150 percent.

Programs with a percentage of income subsidy type were more likely to serve a greater proportion of the lowest-income customers, those with income less than or equal to 50 percent of the FPL. This is because those are the customers who are most likely to have an energy burden above the targeted level. The three programs with the highest share of lowest-income customers used this subsidy type and four of the five programs with the highest share of lowest-income customers used this subsidy type. The one program in the top five that was not

a percentage of income program, #2.A, used a fixed credit subsidy type, which also targets benefits based on burden and would cause lower-burden households to be less likely to participate.

**Table V-2
Participant Poverty Level**

ID ¹⁶	Year	Participants*	% of Participants by FPL			
			≤50%	51%-100%	101%-150%	>150%
2.A	2013	3,511	28%	55%	17%	0%
2.B	2013	2,515	20%	66%	15%	0%
3	2014	359,655	38%	41%	19%	0%
4	2009	29,957	29%	45%	24%	1%
5	2013	26,343	23%	49%	23%	5%
6	2015	68,351	22%	46%	31%	2%
7	2019	9,856	18%	47%	35%	0%
8	2018	118,232	25%	45%	30%	0%
9	2015	36,426	26%	47%	27%	0%
10	2017	62,200	32%	55%	12%	<1%
11	2018	82,661	19%	45%	36%	0%
12	2011	15,152	26%	52%	22%	0%
Mean		67,905	26%	49%	24%	1%

*Customers with poverty level information.

B. Participant Characteristics

Table V-3 provides the following information on the percent of participants in vulnerable groups and with various income sources.

- **Elderly:** The percent of participants who were 65 years of age and older ranged from six to 36 percent with a mean of 18 percent. Programs that conducted outreach through United Way, company representatives, and bill inserts had a higher share of participants with an elderly household member.
- **Children:** The percent of participants who had a child under 18 years old in the household ranged from 16 to 62 percent with a mean of 44 percent. Programs that conducted outreach at community events had a higher share of participants with a child in the household. All programs except for #2.A and #6 used community events as an opportunity to inform customers about the programs and, in some cases, to conduct intake.
- **Employed:** The percent of employed participants ranged from 19 to 49 percent with a mean of 30 percent.
- **Unemployment:** The percent of participants who received unemployment income ranged from one to five percent with a mean of two percent.

¹⁶Only programs with available information are included in the table.

- Disability Income: The percent of customers who received disability income ranged from less than one percent to 36 percent with a mean of 22 percent.

**Table V-3
Participant Characteristics**

ID ¹⁷	Year	% of Participants with Vulnerable Group		% of Participants Income Type		
		Senior	Children	Employed	Unemployed	Disability
2.A	2013	31%	36%	19%	1%	36%
2.B	2013	-	-	20%	2%	19%
3	2014	16%	48%	33%	4%	10%
4	2009	11%	62%	49%	1%	<1%
5	2013	15%	51%	35%	5%	30%
6	2015	36%	16%	23%	3%	35%
7	2019	6%	38%	32%	1%	-
8	2018	-	-	28%	2%	23%
9	2015	27%	46%	20%	2%	11%
10	2017	7%	37%	21%	2%	27%
11	2018	15%	58%	49%	3%	29%
Mean		18%	44%	30%	2%	22%

C. Retention

Table V-4 provides information on program retention. The table shows the percent of participants who remained in the program for a full year, the percent of participants who re-certified, and the mean number of years participants remained in the program. Only four programs had data on the percent of participants who re-certified and the mean number of years of participation.

Stay-out periods required after program departure did not lead to better retention rates. Only two of the programs in the table had a stay-out period. In program #12, customers who requested to be removed had to wait 12 months to re-enter the program. Similarly, program #10 required a one-year stay-out period for customers who asked to be removed, who had two or more incidents of unauthorized use of utility service, or who submitted fraudulent enrollment information. Both of these programs had low retention rates relative to the others. This may be due to the fact that the programs that allowed participants to re-enroll had re-enrollment contributed to the full year of participation.

¹⁷Only programs with available information are included in the table.

The following statistics were calculated.

- **Percent Full Year Participation:** The percent of participants who remained in the program for a full year ranged from 46 to 86 percent with a mean of 65 percent.
- **Percent Re-Certified:** The percent of participants who re-certified ranged from 43 to 72 percent with an average of 57 percent.
- **Mean Years of Participation:** The mean number of years participants remained in the program ranged from 2.0 to 4.6 years with a mean of 3.2 years.

**Table V-4
Retention**

ID ¹⁸	Year	% Full Year Participation	% Re-Certified	Mean Years of Participation
2.A	2013	73%	-	2.4
2.B	2013	77%	-	2.0
3	2014	-	72%	-
5	2013	62%	-	-
6	2015	73%	43%	-
7	2019	69%		4.6
8	2018	86%	57%	3.7
9	2015	61%	-	-
10	2017	57%	-	-
11	2018	46%	-	-
12	2011	47%	54%	-
Mean		65%	57%	3.2

D. Affordability

Table V-5 displays information on discounted bills and energy burden. The table displays the following information.

- Mean annual bill in the year prior to program enrollment.
- Mean annual bill in the year following program enrollment.
- Difference between the pre- and post-program enrollment annual bills.
- Net change in annual bill after accounting for the change experienced by the comparison group.
- Mean annual program discount received in the year following enrollment.
- Mean energy burden and change for energy burden as shown for the annual bill.

The net change aims to control for external factors that could impact the bill or burden, such as a change in temperature or the energy rates. The discounted bill decreased from the pre-period to the post-period for all 13 programs with information. The energy burden decreased

¹⁸Only programs with available information are included in the table.

for all ten programs with information. As expected, the energy burden was higher for electric heating customers than for non-electric heating customers, as seen in programs #5 and #11.

The net change in the discounted bill is highly correlated with the net change in energy burden. On average, a \$547 net reduction in energy bills results in a six percentage point reduction in energy burden. A higher discounted bill generally results in a greater reduction in energy burden. This is true for both electric only customers and those using other fuels. One program that stands out is program #9. Participants in this program experienced only a -\$324 net change in their bill but achieved a nine percentage point net reduction in their energy burden. This large reduction in energy burden is due in part to effective targeting of customers with high energy burdens, as shown in table D-2 below.

- **Discounted Bill Net Change:** The net change for customers' discounted bills ranged from a decline of \$195 to a decline of \$1,146 with an average reduction of \$547.
- **Discount:** The discount received by the customers ranged from \$191 to \$1,054 with an average discount of \$467.
- **Energy Burden Net Change:** The net energy burden change ranged from a reduction of two percentage points to a reduction of nine percentage points, with an average reduction of six percentage points.

Table V-5
Affordability Impacts

ID ¹⁹	Year	Fuel	Discounted Bill				Discount	Energy Burden			
			Pre	Post	Change	Net Change		Pre	Post	Change	Net Change
2.A	2012	All	\$1,245	\$1,045	-\$200**	-\$343**	\$349	30%	28%	-2% **	-4% **
2.B	2012	All	\$2,021	\$1,202	-\$819**	-\$743**	\$649	21%	12%	-9% **	-8% **
3	2014	All	-	\$695	-	-	-	-	15%	-	-
4	2008	All	\$981	\$874	-\$107**	-\$207**	\$201	15%	13%	-2% **	-3% **
5	2013	Elec Heat	\$1,773	\$1,228	-\$544**	-\$553**	\$319	27%	22%	-5% **	-
		Non-Elec Heat	\$1,545	\$988	-\$557**	-\$500**	\$228	19%	14%	-5% **	-
6	2015	All	-	\$731	-	-	\$642	-	7%	-	-
7	2019	All	\$1,066	\$858	-\$208**	-\$195	\$191	16%	14%	-2% **	-2%
8	2017	Elec	\$1,490	\$881	-\$609	-\$613	\$478	24%	18%	-7%	-7%
		Elec&Gas	\$2,139	\$1,569	-\$570	-\$618	\$469	25%	20%	-5%	-5%
9	2015	All	\$1,234	\$643	-\$590**	-\$324**	\$194	38%	23%	-15% **	-9% **
10	2017	All	\$1,512	\$1,064	-\$448**	-\$602**	\$687	20%	10%	-10%	-
11	2018	Elec Heat	\$2,317	\$1,410	-\$907**	-\$1,146	\$1,054	17%	10%	-7% **	-9%
		Non-Elec Heat	\$1,703	\$1,004	-\$699**	-\$851	\$731	13%	7%	-5% **	-6%
12	2010	All	\$1,602	\$1,126	-\$476**	-\$410**	\$351	15%	10%	-5% **	-5% **

¹⁹Only programs with available information are included in the table.

ID ¹⁹	Year	Fuel	Discounted Bill				Discount	Energy Burden			
			Pre	Post	Change	Net Change		Pre	Post	Change	Net Change
Mean		-	\$1,587	\$1,021	-\$518	-\$547	\$467	22%	15%	-6%	-6%

**Denotes significance at the 99 percent. *Denotes significance at the 95 percent level.

Table V-6 displays information on pre- and post- energy burden by poverty level. The table shows that customers below 50 percent of the FPL were more likely to have a greater energy burden than those in the other poverty level groups. Therefore, programs that do a better job of targeting this group can have a greater impact on energy burden. While those with income at or below 50 percent of the FPL had an average reduction of 12 percentage points, those between 51 and 100 percent had an average reduction of five percentage points, and those between 101 and 150 percent had an average reduction of two percentage points.

Table V-6
Energy Burden Impact by Poverty Level

ID ²⁰	Year	Fuel	Energy Burden								
			≤ 50% FPL			51%-100% FPL			101%-150% FPL		
			Pre	Post	Change	Pre	Post	Change	Pre	Post	Change
2.A	2012	All	61%	57%	-4%	12%	8%	-4%	9%	6%	-3%
2.B	2012	All	36%	20%	-16%	17%	12%	-5%	13%	9%	-4%
4	2008	Elec Heat	42%	41%	-1%	12%	12%	0%	6%	7%	1%
		Non-Elec Heat	44%	38%	-6%	8%	7%	-1%	4%	4%	0%
5	2013	Elec Heat	52%	42%	-10%	14%	9%	-5%	12%	8%	-4%
		Non-Elec Heat	34%	21%	-13%	12%	7%	-5%	7%	5%	-2%
7	2019	All	18%	12%	-6%	7%	7%	0%	5%	5%	0%
8	2017	Elec	56%	41%	-15%	14%	9%	-5%	8%	7%	-1%
		Elec&Gas	65%	53%	-12%	15%	11%	-4%	10%	8%	-2%
9	2015	All	59%	35%	-24%	41%	25%	-16%	24%	15%	-9%
10	2017	All	20%	8%	-12%	13%	9%	-4%	11%	10%	-1%
11	2018	Elec Heat	38%	17%	-21%	16%	9%	-7%	10%	7%	-3%
		Non-Elec Heat	27%	10%	-17%	11%	6%	-5%	8%	5%	-3%
12	2010	All	29%	16%	-13%	13%	8%	-5%	10%	8%	-2%
Mean		-	42%	29%	-12%	15%	10%	-5%	10%	7%	-2%

²⁰Only programs with available information are included in the table.

E. Bill Payment

Table V-7 displays billing and payment data. The table provides information on the total charges and total payments and credits before and after program enrollment. It also shows the change and net change for these variables.

- Total Charges Net Change: The net change in total charges ranged from a decline of \$272 to an increase of \$29, with an average decline of \$98. Net total charges increased for two programs and decreased for the other eight.
- Total Payments and Credits Net Change: The net change in payments and credits ranged from a decline of \$115 to an increase of \$538 with an average increase of \$166. The net change in total payments and credits increased for eight programs and decreased for two programs.

Table V-7
Bills and Payments Impacts

ID ²¹	Year	Fuel	Total Charges				Total Payments and Credits			
			Pre	Post	Change	Net Change	Pre	Post	Change	Net Change
2.A	2012	All	\$1,245	\$1,394	\$149**	\$6	\$1,262	\$1,387	\$125**	\$12
2.B	2012	All	\$2,021	\$1,892	-\$130**	-\$60**	\$1,871	\$1,769	-\$102**	\$79**
3	2014	All	-	\$1,803	-	-	-	\$1,441	-	-
4	2008	All	\$981	\$1,075	\$95**	-\$5	\$869	\$926	\$56*	\$11
5	2013	Elec Heat	\$1,773	\$1,547	-\$226**	-\$235**	\$1,322	\$1,407	\$84	\$145**
		Non-Elec Heat	\$1,545	\$1,216	-\$329**	-\$272**	\$1,138	\$1,127	-\$12	\$152**
6	2015	All	-	\$1,373	-	-	-	\$1,317	-	-
7	2019	All	\$1,066	\$1,049	-\$17	-\$4	\$872	\$967	\$95**	\$179
8	2017	Elec	\$1,490	\$1,359	-\$131	-\$135	\$1,224	\$1,380	\$156	\$170
		Elec&Gas	\$2,139	\$2,038	-\$101	-\$149	\$1,780	\$2,030	\$250	\$214
9	2015	All	\$1,234	\$792	-\$442**	-\$175**	\$1,022	\$790	-\$232**	-\$5
10	2017	All	\$1,512	\$1,754	\$242**	\$29	\$1,100	\$1,609	\$509	\$538
11	2018	Elec Heat	\$2,317	\$2,464	\$147**	-\$92	\$1,827	\$2,481	\$654**	\$508
		Non-Elec Heat	\$1,703	\$1,735	\$32**	-\$120	\$1,375	\$1,698	\$323**	\$266
12	2010	All	\$1,602	\$1,477	-\$125**	-\$59**	\$1,374	\$1,100	-\$274**	-\$115**
Mean		-	\$1,587	\$1,531	-\$64	-\$98	\$1,310	\$1,429	\$126	\$166

**Denotes significance at the 99 percent level. *Denotes significance at the 95 percent level.

Table V-8 displays the cash coverage rate and the total coverage rate. The cash coverage rate is defined as the customer's payments divided by the total charges. The total coverage rate is defined as all credits, including assistance payments, divided by the total chargers.

²¹Only programs with available information are included in the table.

- Cash Coverage Rate: The cash coverage averaged 74 percent in the pre-enrollment period and 75 percent in the post-enrollment period.
- Cash Coverage Rate Net Change: The net change ranged from a decline of 26 percentage points to 37 percentage points with a mean increase of 11 percentage points. The cash coverage rate increased for eight programs and decreased for four programs.
- Total Coverage Rate: The total coverage rate averaged 85 percent in the pre-enrollment period and 103 percent in the post-enrollment period.
- Total Coverage Rate Net Change: The net change ranged from an increase of one percentage point to 45 percentage points with a mean increase of 26 percentage points. The total coverage rate increased for all 13 programs with information.

A decrease in the cash coverage rate combined with an increase in the total coverage rate suggests that participants were able to reduce the amount they pay while simultaneously covering a greater portion of their bills with the help of credits such as the program's bill credits and LIHEAP.

An increase in the cash coverage rate combined with an increase in the total coverage rate suggests that enrollment in the program made it easier for customers to budget for and pay a greater amount of their utility bills.

**Table V-8
Coverage Rates Impacts**

ID ²²	Year	Fuel	Cash Coverage Rate				Total Coverage Rate			
			Pre	Post	Change	Net Change	Pre	Post	Change	Net Change
2.A	2012	All	89%	23%	-26%**	-20%**	102%	100%	-2%*	1%
2.B	2012	All	83%	51%	-32%**	-26%**	95%	96%	1%	8%**
3	2014	All	-	44%	-	-	-	96%	-	-
4	2008	All	84%	103%	19%**	27%*	88%	111%	23%**	30%**
5	2013	Elec Heat	63%	56%	-7%*	-13%**	75%	92%	17%**	23%**
		Non-Elec Heat	66%	61%	-5%**	-8%**	77%	94%	17%**	31%**
6	2015	All	-	88%	-	-	-	94%	-	-
7	2019	All	67%	75%	9%**	17%	93%	114%	20%**	28%
8	2017	Elec	79%	113%	34%	37%	83%	124%	42%	45%
		Elec&Gas	79%	95%	17%	18%	83%	105%	22%	23%
9	2015	All	69%	95%	26%**	34%**	85%	123%	39%**	36%**
10	2017	All	-	-	-	-	72%	92%	20%*	36%*
11	2018	Elec Heat	71%	92%	20%**	25%	83%	104%	21%**	26%
		Non-Elec Heat	77%	94%	17%**	24%	84%	98%	15%**	21%

²²Only programs with available information are included in the table.

ID ²²	Year	Fuel	Cash Coverage Rate				Total Coverage Rate			
			Pre	Post	Change	Net Change	Pre	Post	Change	Net Change
12	2010	All	60%	66%	5% ^{**}	18% ^{**}	86%	101%	15% ^{**}	26% ^{**}
Mean		-	74%	75%	6%	11%	85%	103%	19%	26%

^{**}Denotes significance at the 99 percent level. ^{*}Denotes significance at the 95 percent level.

Table V-9 displays the distribution of total bill coverage rates in the pre- and post-enrollment periods. The table shows that all but one program had an increase in the percentage of customers with a total bill coverage rate of 100 percent or more. Program #2.A experienced a decline. This is consistent with Table V-8 above that shows that participants in Program #2.A had a reduction in total coverage rate after program enrollment.

- On average, 31 percent had a total coverage rate of 100 percent or more in the year prior to enrollment and 48 percent had a total coverage rate of 100 percent or more in the year following enrollment.
- On average, 49 percent had a total coverage rate of 90 percent or more in the year prior to enrollment and 72 percent had a total coverage rate of 90 percent or more in the year following enrollment.
- Prior to enrollment 36 percent had a total coverage rate of less than 80 percent, and following enrollment, only 15 percent had a total coverage rate of less than 80 percent.

Table V-9
Coverage Rate Distribution

ID ²³	Year	Fuel	Total Coverage Rate							
			< 80%		80% - 89%		90% - 99%		≥ 100%	
			Pre	Post	Pre	Post	Pre	Post	Pre	Post
2.A	2012	All	3%	1%	8%	12%	30%	38%	59%	49%
2.B	2012	All	14%	10%	26%	24%	29%	31%	31%	35%
4	2008	All	23%	6%	24%	8%	20%	18%	33%	68%
5	2013	Elec Heat	54%	19%	19%	18%	11%	33%	15%	30%
		Non-Elec Heat	53%	20%	17%	10%	13%	29%	18%	41%
6	2015	Elec Heat	-	26%	-	19%	-	25%	-	31%
		Non-Elec Heat	-	18%	-	21%	-	36%	-	25%
7	2019	All	24%	5%	11%	9%	17%	27%	47%	59%
8	2017	Elec	40%	22%	13%	11%	16%	13%	32%	54%
		Elec&Gas	36%	19%	14%	14%	18%	19%	32%	48%
9	2015	All	40%	14%	12%	6%	15%	9%	33%	71%
10	2017	All	59%	29%	11%	14%	11%	25%	19%	31%

²³Only programs with available information are included in the table.

ID ²³	Year	Fuel	Total Coverage Rate							
			< 80%		80% - 89%		90% - 99%		≥ 100%	
			Pre	Post	Pre	Post	Pre	Post	Pre	Post
11	2018	Elec Heat	38%	9%	18%	6%	21%	17%	23%	67%
		Non-Elec Heat	39%	12%	19%	9%	18%	21%	25%	59%
12	2010	All	40%	13%	15%	10%	14%	21%	31%	55%
Mean		-	36%	15%	16%	13%	18%	24%	31%	48%

F. Arrearages

Table V-10 displays information on shortfall, arrearage forgiveness, and ending balance. Participants in all 13 programs with information experienced a net decline in shortfall. The ending balance increased for one program and decreased for eight programs.

A decrease in the ending balance was characteristic of programs that provided high levels of discounts and included an arrearage forgiveness component. Program #11 had an average decline in ending balance of \$454 and \$642 for electric non-heating and heating, and discounts that averaged \$1,045 for their electric heating customers and \$731 for their non-electric heating customers. Additionally, they received arrearage forgiveness each month they made a complete and timely monthly payment.

- Shortfall Net Change: The net change ranged from a decline of \$6 to a decline of \$922, with a mean decline of \$357.
- Arrears Forgiven: The amount of arrearages forgiven ranged from \$26 to \$720, with a mean of \$230.
- Ending Balance Net Change: The net change ranged from a decline of \$841 to an increase of \$14 with a mean decline of \$276.

Table V-10
Shortfall, Arrearage Forgiveness, and Ending Balance Impacts

ID ²⁴	Year	Fuel	Shortfall				Arrears Forgiven	Ending Balance			
			Pre	Post	Change	Net Change		Pre	Post	Change	Net Change
2.A	2012	All	-\$17	\$7	\$24**	-\$6	-	\$204	\$177	-\$28**	-\$71**
2.B	2012	All	\$93	\$67	-\$26	-\$139**	-	\$277	\$96	-\$180**	-\$188**
4	2008	All	\$111	-\$52	-\$163	-\$218	\$26	\$162	\$113	-\$49**	-\$63**
5	2013	Elec Heat	\$450	\$140	-\$310**	-\$380**	\$134	\$830	\$897	\$67	\$14
		Non-Elec Heat	\$407	\$89	-\$318**	-\$424**	\$127	\$919	\$931	\$12	-\$37
6	2015	All	-	\$56	-	-	\$48	-	-	-	-

²⁴Only programs with available information are included in the table.

ID ²⁴	Year	Fuel	Shortfall				Arrears Forgiven	Ending Balance			
			Pre	Post	Change	Net Change		Pre	Post	Change	Net Change
7	2019	All	\$194	\$83	-\$111**	-\$182	\$130	\$364	\$243	-\$122**	-\$201
8	2017	Elec	\$298	-\$58	-\$356	-\$374	-	-	-	-	-
		Elec&Gas	\$397	-\$21	-\$419	-\$922	-	-	-	-	-
9	2015	All	\$211	-\$147	-\$358**	-\$318**	\$118	-	-	-	-
10	2017	All	\$492	\$151	-\$341**	-\$539**	-	-	-	-	-
11	2018	Elec Heat	\$491	-\$17	-\$507**	-\$600	\$720	\$1,082	\$602	-\$481**	-\$642
		Non-Elec Heat	\$327	\$36	-\$291**	-\$386	\$539	\$799	\$457	-\$343	-\$454
12	2010	All	\$228	\$377	-\$294	-\$149	-	\$760	-\$80	-\$840**	-\$841**
Mean		-	\$283	\$51	-\$267	-\$357	\$230	\$600	\$382	-\$218	-\$276

**Denotes significance at the 99 percent level. *Denotes significance at the 95 percent level.

Table V-11 displays information on arrearage forgiveness. The table shows participants' initial arrears, the percent who received arrearage forgiveness, the mean number of payments, and the mean amount forgiven for all participants with arrears and for the new enrollees with arrears.

Out of the three programs with the highest level of arrearage forgiveness, one provides forgiveness over 18 months and two provide forgiveness over 36 months. The three programs with the lowest level of arrearage forgiveness provide this forgiveness over 12 months and 24 months. The arrearage forgiveness timeframe for one of these programs was unknown.

The three programs with the highest level of arrearage forgiveness all required customers to make a \$5/month co-payment towards any built up arrearage. None of the three programs with the lowest level of arrearage forgiveness required this.

The table provides the following information.

- **Initial Arrears:** For all program participants with arrears, the initial arrears ranged from \$440 to \$932 with an average of \$615. For the new enrollees with arrears, the initial arrears ranged from \$221 to \$1,193 with an average of \$637.
- **Percent Received Forgiveness:** The percent of all program participants with arrears who received forgiveness ranged from 23 to 100 percent with an average of 67 percent. The percent of the new enrollees with arrears who received forgiveness ranged from 30 to 100 percent with an average of 86 percent.
- **Mean Number of Payments:** The mean number of arrearage forgiveness payments for all participants with arrears ranged from 2.1 to 10.1 with an average of 4.9 payments.
- **Mean Amount Forgiven:** The mean amount forgiven for all participants with arrears ranged from \$40 to \$365 with an average of \$134. The mean amount forgiven for the new enrollees with arrears ranged from \$14 to \$641 with an average of \$208.

**Table V-11
Arrearage Forgiveness**

ID ²⁵	Year	Fuel	All Participants with Arrears				New Enrollees with Arrears			
			Initial Arrears	% Received Forgiveness	Mean # Payments	Mean \$ Forgiven	Initial Arrears	% Received Forgiveness	Mean # Payments	Mean \$ Forgiven
5	2013	All	-	77%	4.7	\$76	-	89%	5.8	\$130
6	2015	Elec Heat	-	33%	2.9	\$95	-	-	-	-
		Non-Elec Heat	-	23%	2.1	\$40	-	-	-	-
7	2019	All	\$440	90%	5.9	\$157	\$541	99%	7.7	\$192
8	2018	All	\$475	89%	10.1	\$47	\$221	100%	10.0	\$14
9	2016	All	-	100%	3.3	\$216	-	100%	5.0	\$167
10	2017	All	\$923	-	3.2	\$118	\$1,193	-	6.7	\$204
11	2018	All	-	> 99%	7.2	\$365	-	100%	10.4	\$641
12	2011	All	\$622	25%	-	\$93	\$592	30%	-	\$106
Mean		-	\$615	67%	4.9	\$134	\$637	86%	7.6	\$208

G. Collections Actions and Costs

Table V-12 displays the collections impacts. The table provides information on the total number of collections actions and the total cost of actions before and after program enrollment. The number of collections actions increased for two programs and decreased for six programs. The cost of collections actions increased for one program and decreased for six programs. Programs #8 and #11 had significantly more collections actions in the both the pre- and post-periods, which explains the high total cost of actions.

- Total Number of Actions Net Change: The net change ranged from a decline of 7.8 actions to an increase of 0.2 actions, with a mean decline of 2.9 collections actions.
- Total Cost of Actions Net Change: The net change ranged from a decline of \$118 to an increase of \$1, with an average decline of \$38.

**Table V-12
Collections Impacts**

ID ²⁶	Year	Fuel	Total # of Actions				Total Cost of Actions				
			Pre	Post	Change	Net Change	Pre	Post	Change	Net Change	
4	2008	All	5.1	5.7	0.6	0.2	\$8	\$8	- < \$1	- < \$1	
5	2013	Elec Heat	-	8.7	-	-	-	-	-	-	-
		Non-Elec Heat	-	10.8	-	-	-	-	-	-	-

²⁵Only programs with available information are included in the table.

²⁶Only programs with available information are included in the table.

ID ²⁶	Year	Fuel	Total # of Actions				Total Cost of Actions			
			Pre	Post	Change	Net Change	Pre	Post	Change	Net Change
6	2015	Elec Heat	-	8.2	-	-	-	\$16	-	-
		Non-Elec Heat	-	7.4	-	-	-	\$14	-	-
7	2015	All	10.2	10.0	-0.1	-0.2	\$12	\$11	-\$1	- < \$1
8	2017	Elec	34.9	29.0	-5.9	-6.9	\$226	\$149	-\$77	-\$76
		Elec&Gas	36.4	33.6	-2.8	-5.8	\$230	\$176	-\$55	-\$68
9	2016	All	0.3	0.5	0.2	< 0.1	\$6	\$7	\$1**	-\$1
10	2017	All	3.3	1.6	-1.7	-2.9	-	-	-	-
11	2018	All	21.9	16.2	-5.7	-7.8	\$254	\$164	-\$89**	-\$118
12	2010	All	0.3	0.5	0.2**	-0.2**	\$2	\$4	\$2**	< \$1
Mean		-	14.1	11.0	-1.9	-2.9	\$85	\$61	-\$31	-\$38

**Denotes significance at the 99 percent level. *Denotes significance at the 95 percent level.

Table V-13 provides information on terminations before and after program enrollment. The number of terminations increased for one program, did not change for one program, and decreased for six programs. The percent with service terminations did not change for one program and decreased for four programs.

- Number of Terminations Net Change: The net change ranged from a decline of 0.3 terminations to an increase of less than 0.1 terminations, with a mean decline of 0.10 terminations.
- Percent Service Termination Net Change: The net change ranged from a decline of 17 percentage points to no change, with a mean decline of ten percentage points.

Table V-13
Termination Impacts

ID ²⁷	Year	Fuel	# of Terminations				% Service Termination			
			Pre	Post	Change	Net Change	Pre	Post	Change	Net Change
2.A	2012	All	-	-	-	-	27%	25%	-2%	-6%
2.B	2012	All	-	-	-	-	33%	12%	-22%**	-17%**
4	2008	All	0.1	0.1	< 0.1	< 0.1	-	-	-	-
5	2013	Elec Heat	-	0.4	-	-	-	25%	-	-
		Non-Elec Heat	-	0.5	-	-	-	29%	-	-
6	2015	Elec Heat	-	0.1	-	-	-	-	-	-
		Non-Elec Heat	-	< 0.1	-	-	-	-	-	-
7	2015	All	0.1	0.1	< 0.1	0	7%	9%	1%	0%
8	2017	Elec	0.3	0.1	-0.2	-0.2	-	8%	-	-

²⁷Only programs with available information are included in the table.

ID ²⁷	Year	Fuel	# of Terminations				% Service Termination			
			Pre	Post	Change	Net Change	Pre	Post	Change	Net Change
		Elec&Gas	0.4	0.3	-0.1	-0.2	-	11%	-	-
9	2016	All	0.1	0.1	< 0.1*	- < 0.1	-	-	-	-
10	2017	All	0.2	< 0.1	-0.2**	-0.3**	15%	4%	-11%**	-15%**
11	2018	All	0.2	0.1	-0.1**	-0.1	15%	7%	-8%**	-10%
12	2010	All	< 0.1	< 0.1	- < 0.1	- < 0.1	-	-	-	-
Mean		-	0.2	0.2	-0.1	-0.1	19%	14%	-8%	-10%

*Denotes significance at the 99 percent level. **Denotes significance at the 95 percent level.

H. Other Benefits

Table V-14 displays the percent of program participants who received LIHEAP benefits and the mean LIHEAP grant received before and after program enrollment. The percent of customers who received LIHEAP increased from 42 percent to 51 percent with an average net increase of four percent. Three programs had a decline in the percent of participants who received LIHEAP.

Programs that required customers to enroll in LIHEAP to remain in the program were more likely to experience an increase in LIHEAP receipt in the post-period. Programs #2.A, #2.B, #4, #7, #10, and #12 required customers to enroll in LIHEAP and all experienced an increase in the percent of customers who received LIHEAP assistance with the exception of programs #2.A and #2.B.

Table V-14
Other Benefits

ID ²⁸	Year	Fuel	% Received LIHEAP				LIHEAP Grant (Received LIHEAP)			
			Pre	Post	Change	Net Change	Pre	Post	Change	Net Change
1	2010	All	-	69%	-	-	-	-	-	-
2.A	2012	All	83%	53%	-30%**	-56%**	-	-	-	-
2.B	2012	All	68%	64%	-4%	-14%**	-	-	-	-
4	2008	All	11%	81%	69%**	66%**	\$245	\$267	\$22	-
5	2013	Elec Heat	36%	41%	5%	-	\$379	\$381	\$2	-
7	2015	All	55%	58%	3%	7%	\$209	\$223	\$15	\$18
8	2017	Elect	11%	17%	6%	2%	\$409	\$353	-\$56	-\$14
		Elec&Gas	23%	32%	9%	17%	\$378	\$337	-\$41	-\$41
9	2016	All	38%	42%	4%**	1%	\$219	\$242	\$23**	\$17
10	2017	All	41%	48%	7%**	17%**	\$215	\$245	\$30**	\$93**

²⁸Only programs with available information are included in the table.

ID ²⁸	Year	Fuel	% Received LIHEAP				LIHEAP Grant (Received LIHEAP)			
			Pre	Post	Change	Net Change	Pre	Post	Change	Net Change
11	2018	Elec Heat	32%	31%	-1%	-7%	\$250	\$229	-\$21*	-\$77
12	2010	All	68%	73%	5%	11%**	\$316	\$395	\$79	\$25
Mean		-	42%	51%	7%	4%	\$291	\$297	\$6	\$3

**Denotes significance at the 99 percent level. *Denotes significance at the 95 percent level.

I. *Other Affordability Issues*

Table V-15 shows the percent of survey respondents who delayed or skipped paying for common household expenses before and after program enrollment. All bill payment assistance programs were effective in helping customers with non-energy related issues. These non-energy related issues included helping households meet food and medical expenses.

- Food: Across all programs the percent of customers who skipped paying bills to pay for food decreased after program enrollment from 64 percent to 26 percent. Program #3 and Program #5 had the greatest reduction, with a 43 percentage point decline.
- Medicine: Across all programs, the percent of customers who skipped paying bills to pay for medicine decreased from 35 percent to 17 percent. Program #11 had the greatest reduction with a 24 percentage point decline.
- Medical or Dental: Across all programs, the percent of customers who skipped paying their medical or dental bills decreased from 36 percent to 19 percent. Program #3 had the greatest reduction with a 25 percentage point decline.
- Mortgage or Rent: Across all programs, the percent of customers who skipped paying mortgage or rent decreased from 43 percent to 19 percent. Program #12 had the greatest reduction with a 30 percentage point decline.
- Telephone or Cable: Across all programs, the percent of customers who skipped paying telephone or cable bills decreased from 59 percent to 28 percent. Program #5 had the greatest reduction with a 41 percentage point decline.
- Credit Card or Loan: Across all programs, the percent of customers who skipped paying credit card bills or loans decreased from 27 percent to 16 percent. Program #5 had the greatest reduction with a 15 percentage point decline.
- Car payment: Across all programs, the percent of customers who skipped making car payments decreased from 16 percent to eight percent. Program #5 had the greatest reduction with a 12 percentage point decline.

Table V-15
Problem Meeting Financial Obligations Before and During Program Participation

ID ²⁹	Year	Delayed or Skipped Paying Bills or Making Purchases to Make Ends Meet													
		Expense													
		Food		Medicine		Medical/Dental		Mortgage/Rent		Phone/Cable		Credit Card/Loan		Car Payment	
		Prior	In	Prior	In	Prior	In	Prior	In	Prior	In	Prior	In	Prior	In
3	2015	72%	29%	36%	17%	42%	17%	46%	21%	59%	25%	28%	15%	19%	10%
4	2010	54%	24%	38%	22%	35%	24%	43%	22%	62%	37%	27%	19%	20%	9%
5	2015	60%	17%	32%	14%	34%	13%	41%	13%	60%	19%	28%	13%	17%	5%
6	2016	69%	32%	38%	19%	43%	20%	42%	17%	52%	28%	26%	16%	17%	10%
9	2017	60%	24%	27%	17%	35%	24%	35%	19%	53%	24%	31%	17%	13%	8%
11	2019	64%	24%	29%	5%	27%	12%	39%	20%	-	-	-	-	-	-
12	2012	66%	29%	44%	22%	36%	24%	52%	22%	65%	37%	21%	16%	11%	5%
Mean		64%	26%	35%	17%	36%	19%	43%	19%	59%	28%	27%	16%	16%	8%

Table V-16 displays the change in the percent of survey respondents who delayed or skipped paying for common household expenses before and after the program. Programs using a percent of income or a percent discount bill subsidy with budget billing, such as Programs #3 and #5, were more likely to help customers meet other financial obligations. Both subsidy types make bills more affordable and more predictable, which may make it easier for customers to budget expenses for other obligations.

Table V-16
Change in Problem Meeting Financial Obligations Before and During Program Participation

ID ³⁰	Year	Delayed or Skipped Paying Bills or Making Purchases to Make Ends Meet						
		Change in Expense						
		Food	Medicine	Medical/Dental	Mortgage/Rent	Phone/Cable	Credit Card/Loan	Car Payment
3	2015	43%	19%	25%	25%	34%	13%	9%
4	2010	30%	16%	11%	21%	25%	8%	11%
5	2015	43%	18%	21%	28%	41%	15%	12%
6	2016	37%	19%	23%	25%	24%	10%	7%
9	2017	36%	10%	11%	16%	29%	14%	5%
11	2019	40%	24%	15%	19%	-	-	-
12	2012	37%	22%	12%	30%	28%	5%	6%
Mean		38%	18%	17%	23%	30%	11%	8%

²⁹Only programs with available information are included in the table.

³⁰Only programs with available information are included in the table.

Table V-17 displays the frequency at which program participants used their kitchen stove or oven for heat prior to and after enrollment in the program. The table shows that all programs participants reported a reduction in the frequency at which they used their kitchen stove or oven for heating.

- The percent of participants who always or frequently used their stove or oven for heating decreased from eight percent to three percent after program enrollment.
- Sometimes/Seldom: The percent of participants who sometimes or seldom used their stove or oven for heating decreased from 23 percent to ten percent after program enrollment.
- Never: The percent of participants who never used their stove or oven for heating increased from 68 percent to 88 percent after program enrollment.

Table V-17
Used Kitchen Stove or Oven for Heat Before and During Program Participation

ID ³¹	Year	Frequency Used Kitchen Stove or Oven for Heat					
		Always/Frequently		Sometimes/Seldom		Never	
		Before	During	Before	During	Before	During
3	2015	7%	3%	30%	15%	63%	81%
4	2010	9%	6%	19%	14%	72%	81%
5	2015	7%	2%	26%	8%	67%	89%
6	2016	6%	2%	24%	7%	70%	91%
9	2017	8%	3%	17%	8%	74%	89%
11	2019	9%	2%	23%	6%	68%	92%
12	2012	11%	0%	24%	9%	65%	90%
Mean		8%	3%	23%	10%	68%	88%

Table V-18 displays the percent of participants who were unable to use their main source of heat prior to and following enrollment in the program because the heating system was broken and the participant was unable to pay for a repair or replacement. The table shows that the percent of customers with this problem declined after program enrollment. While 22 percent of participants reported that they were unable to heat their home before the program, only 11 percent reported that this was the case while participating in the program. Participants in programs #3 and #6 experienced a 15 percentage point decline in the percent of customers who were unable to heat their homes, the largest decline across all programs.

³¹Only programs with available information are included in the table.

Table V-18
Could Not Heat Home Before and During Program Participation

ID ³²	Year	Wanted to use main source of heat, but could not because heating system was broken, and participant was unable to pay for repair or replacement		
		Before	During	Change
3	2015	26%	11%	15%
4	2010	23%	13%	10%
5	2015	17%	7%	10%
6	2016	29%	14%	15%
8	2018	29%	16%	13%
9	2017	20%	13%	7%
11	2019	15%	6%	9%
12	2012	18%	9%	9%
Mean		22%	11%	11%

J. Satisfaction

Table V-19 shows the importance of the program in helping participants make ends meet and their overall satisfaction with the assistance program. Eighty-five percent of participants across all programs said that the program was very important in helping them make ends meet. Similarly, 86 percent of participants across all programs were very satisfied with their program and only two percent were somewhat or very dissatisfied.

Program satisfaction was loosely related to a change in energy burden. Of the five programs with the highest percentage of satisfied participants, four reduced energy burden by at least five percent. In contrast, of the five programs with the lowest satisfaction, only two reduced energy burden by at least five percent. There was no clear relationship between program satisfaction and level of benefit or type of program.

Table V-19
Program Importance and Participant Satisfaction

ID ³³	Year	Importance of Program in Making Ends Meet (% current/past participant respondents)			Satisfaction with Program (% current/past participant respondents)		
		Very Important	Somewhat Important	Of Little Importance/ Not Important	Very Satisfied	Somewhat Satisfied	Somewhat/ Very Dissatisfied
2.A	2014	86%	14%	0%	81%	14%	5%
2.B	2014	88%	8%	0%	100%	0%	0%
3	2015	91%	8%	1%	87%	12%	1%
4	2010	84%	11%	6%	84%	12%	2%

³²Only programs with available information are included in the table.

³³Only programs with available information are included in the table.

ID ³³	Year	Importance of Program in Making Ends Meet (% current/past participant respondents)			Satisfaction with Program (% current/past participant respondents)		
		Very Important	Somewhat Important	Of Little Importance/ Not Important	Very Satisfied	Somewhat Satisfied	Somewhat/ Very Dissatisfied
5	2015	93%	7%	0%	91%	9%	0%
6	2016	80%	18%	2%	77%	16%	6%
7	2020	81%	16%	0%	94%	6%	0%
8	2018	75%	17%	7%	69%	24%	6%
9	2017	92%	5%	3%	93%	6%	1%
10	2018	85%	7%	4%	89%	7%	4%
11	2019	87%	8%	4%	90%	10%	1%
12	2012	80%	17%	2%	77%	19%	3%
Mean		85%	11%	2%	86%	11%	2%

K. Summary

This section reviewed the outcomes that are assessed to determine the success of bill payment assistance programs, based on available program evaluation reports. Key findings are summarized below.

- *Participation:* The number of participants varied widely, ranging from 2,515 to 359,655 with an average of 70,986.
- *Participant Characteristics:* Across all programs, 18 percent of households had someone aged 65 years or older, 44 percent had a child aged 18 years or younger, 30 percent were employed, two percent received unemployment income, and 22 percent received disability income. Programs that conducted outreach at community events had a higher share of participants with a child in the household. Programs that conducted outreach through United Way, company representatives, and bill inserts had a higher share of participants with an elderly household member.
- *Retention:* The percent of participants who remained in the program for a full year ranged from 46 to 86 percent with a mean of 65 percent. The percent of participants who re-certified to continue their enrollment in the program ranged from 43 to 72 percent with an average of 57 percent. The mean number of years participants remained in the program ranged from 2.0 to 4.6 years with a mean of 3.2 years.
- *Affordability:* The bill declined from the pre-period to the post-period for all 13 programs with information. The energy burden declined for all ten programs with information. The discount received by the customers ranged from \$191 to \$1,054 with an average of \$467. The net change for customers' energy burden ranged from a decline of nine percentage points to a decline of two percentage points, with an average of -6 percent.

Customers below 50 percent of the FPL were more likely to have a greater energy burden than those in the other poverty level groups. Therefore, programs that do a better job of

targeting this group can have a greater impact on energy burden. While those with income at or below 50 percent of the FPL had an average reduction of 12 percentage points, those between 51 and 100 percent had an average reduction of five percentage points, and those between 101 and 150 percent had an average reduction of two percentage points.

- *Bill Payment:* The total charges increased for one program and decreased for 12 programs. The total payments and credits increased for nine programs and decreased for four programs. The net change for customers' total charges ranged from a decline of \$272 to an increase of \$29, with an average decline of \$98. The net change for customers' payments and credits ranged from a decline of \$115 to an increase of \$538, with an average increase of \$166.
- *Arrearages:* Participants' shortfall decreased for all 13 programs with information. Participants' ending balance increased for one program and decreased for eight programs. A decrease in the ending balance was characteristic of programs that provided high levels of discounts and included an arrearage forgiveness component. The amount of arrearage forgiveness ranged from \$26 to \$720, with a mean of \$230.
- *Collections Actions:* The number of collections actions increased for two programs and decreased for six programs. The cost of collections actions increased for one program and decreased for six programs. The average net change in collections cost was a decline of \$38.
- *Other Benefits:* The percent of customers who received LIHEAP increased from 42 percent to 51 percent, with a net change of four percent. Programs that required customers to enroll in LIHEAP were more likely to have a positive and significant net change in the percent of customers who received LIHEAP in the post period.
- *Other Affordability Issues:* All bill payment assistance programs were effective at helping customers with non-energy related issues, according to survey responses. These non-energy related issues included helping households with food and medical expenses. Programs that used a percent of income or a percent discount bill subsidy with budget billing were more likely to help customers meet other financial obligations.
- *Satisfaction:* Eighty-five percent of participants across all programs said that the program was very important in helping them make ends meet and eighty-six percent of participants across all programs were very satisfied with the programs. Program satisfaction was loosely related to the change in energy burden.

VI. Best Practices

This section provides a discussion of best practices for low-income energy bill payment assistance programs across the country.

A. *Program Design Advantages and Disadvantages*

This section provides a discussion of the advantages and disadvantages of various design parameters employed by low-income bill payment assistance programs across the country.

Program Administration

Bill payment assistance programs are typically run by a utility company or by a state agency. There are advantages to each approach.

- **Utility Administration:** Utilities have the advantage of ready access to data on energy usage, participation in other low-income energy programs, and bill payment histories. As such, utilities can target those customer segments that are most in need for assistance and can use customer information to develop benefit levels that are specific to individual customer characteristics.

Utilities also have the advantage of a long-term relationship with their customers. Utilities often have trusted relationships with their customers, households expect to receive energy information from their utility, and households may be comfortable receiving direct discounts or benefits from their utility.

- **State Agency Administration:** Programs run by a state office can provide equal opportunities to all low-income households throughout the state. State offices may have data on other low-income energy program participation that can be used to target households for participation. However, they will not have the level of data that the utility has, and the state office may not be as well known to potential program participants.

Outreach

Outreach is required to reach potential eligible participants and inform them of the program. The best outreach method will depend on the characteristics of the targeted customers.

- **Diverse Outreach Methods:** Usually, many different low-income customer segments are targeted for participation and the use of various types of outreach allows for the greatest penetration of the segments of the population that may prefer one type of contact over another. The programs that are most successful in recruiting customers for participation employ many different types of outreach.
- **Trusted Partners:** Working with partners that have already earned the trust of low-income households can be an important component of marketing success. Such partners include organizations that have provided other benefits to these households such as local Community Action Agencies or neighborhood organizations. Local agencies can also provide a more holistic approach to clients by offering information and referrals to other assistance programs, as well as direct program services.

- **Other Outreach Opportunities:** Organizations that provide transitional assistance for customers exiting homeless shelters may be a good partnership opportunity. While Ameren currently has a Keeping Current partner in this category, the organization has not enrolled customers in Keeping Current. Formerly homeless customers have barriers to enrollment including a need to pay off past utility balances prior to opening a new account. Working with these customers may require modifications to the program.

Intake

Bill payment programs offer various application methods. Many programs contract with community organizations to conduct enrollment. As with outreach, intake methods should differ based on the participants' characteristics, and programs that offer several application options will be the most successful in enrolling customers.

- **In-Person Intake:** In-person intake provides the opportunity for staff to assess each customer's needs, develop a set of benefits that meet those needs, fully explain the benefits of the program(s), and answer any questions the client has. In-person enrollment can also help to ensure that all required information is obtained from the customer. However, homebound individuals and those working long hours may have difficulty coming to an office for the application process.
- **Online Application:** This method allows potential participants to enroll at their convenience. However, older individuals may be challenged by the technology and some low-income clients may not have access to computers or smart phones.
- **Telephone Enrollment:** Telephone representatives can complete applications directly in the system for customers or can help customers complete applications to mail in for approval. This method can help those who are not able to come into the office and those who do not have the technology required for online application.

Income Eligibility

Most programs reviewed use 150 percent of the Federal Poverty Level (FPL) as an eligibility guideline. Some programs use a percent of the state median income or base eligibility on LIHEAP.

- **Lower Income Eligibility Level:** Lower income standards will ensure that the households with the greatest need for assistance benefit from the program. However, those with the lowest incomes may still face challenges with their bills and may struggle to meet program requirements for consistent bill payment.
- **Higher Income Eligibility:** A higher income guideline will allow more households to participate. However, this may reduce the amount of benefits that are available to more in-need, lower-income customers.
- **LIHEAP Eligibility:** Basing program eligibility on LIHEAP participation can make it easier to enroll participants, as their income eligibility has already been verified. However, it can restrict participation to customers who are already receiving assistance.

Other Eligibility Requirements

Eligibility requirements for customers to participate in other energy assistance programs can incentivize such participation and increase the probability of customers' success in the bill payment assistance program. However, some requirements can pose problematic barriers to program participation.

- **Payment-Troubled:** Some programs require customers to be “payment-troubled” to enroll in the bill payment assistance program. Payment-troubled may be defined as an arrearage on the utility account, enrollment or previous default on a payment plan, or high housing and utility costs relative to income. When such requirements are in place, customers may be removed from the bill payment assistance program when they no longer face these circumstances. Such a policy could provide adverse incentives, signaling to customers that they should skip future utility payments to renew program eligibility. These requirements may also miss customers who need assistance but restrict energy use and keep the home at an unsafe temperature to ensure that they can pay the utility bill.
- **Budget Billing:** Many programs require participation in budget billing at the time of enrollment in the bill payment assistance program. A fixed energy bill can help participants budget their expenses and participants have shown a strong preference for a predictable monthly utility bill.
- **LIHEAP:** Requiring participants to apply for LIHEAP can make it easier for customers to meet their monthly utility payment obligations and increase their probability of success.
- **Weatherization Assistance:** Requiring weatherization can further decrease participants' energy bills. However, exceptions are needed for renters who cannot obtain landlord approval for weatherization services.

Enrollment Level

Some programs set goals to reach a particular level of enrollment or have limits on the total number of participants or total program spending.

- **Target Enrollment Level:** A targeted enrollment level can provide incentives for programs to conduct enough outreach to meet that enrollment goal and provide services to customers who may be more difficult to reach.
- **Limited Enrollment:** Programs with a fixed budget may limit enrollment to ensure that participants receive a certain level of benefit. Benefits should be substantial enough to have an impact on affordability. Programs that provide only minimal assistance may not reduce energy burdens enough to help customers stay current on their utility bills.
- **Unlimited Enrollment and Benefits:** It has become increasingly common for bill payment assistance programs to serve all applicants at a pre-specified benefit level. These programs operate under the premise that programs should be available to all who need assistance and that all customers should have an affordable energy bill. However, for utilities that serve a high percentage of low-income households, and who have many customers just

above the eligibility level, the ratepayer subsidy cost could place a large burden on the customers who are just above the program's income-eligibility level.

Bill Subsidy Determination

Most of the bill payment assistance programs reviewed use a percent of income target to calculate the subsidy amount. However, there are several other methods that are used.

- **Percentage of Income:** The percentage of income subsidy is determined by setting the percent of income for the participant to pay, determining the annual bill as the percent of income multiplied by the customer's annual income, and dividing that income by 12 to obtain the monthly required payment. As a result, participants have fixed bills throughout the year. Customers have expressed a great preference for a predictable monthly bill. Additionally, percentage of income programs serve a greater proportion of the lowest-income customers who are most likely to have an energy burden above the targeted level. These programs can also have the greatest impact on energy burden.
- **Fixed Credit:** A fixed credit may be calculated to result in a targeted energy burden or as a flat amount depending on poverty level and/or energy bills. Because the credit is fixed rather than the payment being fixed, participants' bills will vary across the year unless they enroll in budget billing. While the fixed credit that is tied to energy burden will come closer to achieving the targeted burden, the monthly or annual subsidy that is based on poverty level or energy costs will not.
- **Percent Discount:** The percent discount provides a reduction in the energy bill that may be based on the customer's income or poverty level. This method results in an energy burden that varies based on the customer's income and energy costs. Some participants will receive a benefit that results in a very low burden, and some will still have a high energy burden following receipt of the program discount.

Minimum Monthly Payment & Maximum Credits

Programs can control costs through minimum payments that customers are required to pay each month or maximum credits that customers cannot exceed.

- **Minimum Monthly Payments:** Minimum monthly payments require customers to pay at least a certain amount each month even if their calculated payment is lower because of a very low income and/or high energy bill. Requiring customers to pay a certain amount each month reduces the cost to ratepayers and keeps a place in the customer's monthly budget for the energy bill. However, the minimum monthly payment will prevent the program from reaching the targeted energy burden for these customers.
- **Maximum Credits:** Maximum credits place a limit on the total annual program benefit that the customer may receive. These limits also reduce ratepayer costs, provide an incentive for participants to control their energy usage, and encourage participants to agree to low-income energy efficiency program participation. The maximum credit will also prevent the program from reaching the targeted energy burden for these customers.

Bill Consistency

Most of the bill payment assistance programs reviewed have fixed monthly customer bills that are achieved through percentage of income programs or through budget billing. Customers have expressed a preference for predictable monthly energy bills that do not fluctuate over the course of the year.

Arrearage Forgiveness

Many programs provide arrearage forgiveness to help customers remove debt that was accumulated prior to enrolling in the bill payment assistance program. Programs have various requirements in place for customers to receive this forgiveness.

- **Bill Paid in Full:** Requiring customers to pay their bill in full to receive an arrearage credit provides an incentive for customers to make their payments in full and on time. However, participants often do not understand that they will receive this benefit or how substantial of a benefit they will receive if they pay their bills, and therefore the incentive does not have the effect that it could.
- **Missed Payments Made Up:** Many programs provide arrearage forgiveness for all missed bills once those bills are paid. This enables customers to receive the benefit of arrearage forgiveness even if they do not stay on the utility's bill payment schedule and provides an additional opportunity for participants to become current on their bill.
- **Arrearage Co-payment:** Many programs add a small co-payment to the customer's monthly bill that helps to pay off the accumulated arrears. Because this payment is usually only five dollars per month, it should not have a large impact on affordability. However, it could increase the customer's energy burden over the targeted level.

Program Removal

All programs have specific guidelines and requirements that participants must follow to remain in the program.

- **Missed Payments:** While some programs allow customers to remain in the program until their service is terminated for nonpayment, others remove customers from the program following missed payments. Removal from the program will increase the customer's monthly payment obligation and may even return the pre-program arrearages to the customer's balance. This will not provide the customer with the opportunity to catch up with overdue bills and return to an affordable energy bill.
- **Recertification:** Many programs require customers to provide updated documentation of income eligibility every year or every other year. This requirement ensures that participants remain eligible for the program. However, placing too large of a burden on participants can cause them to be removed and can reduce program retention.

Holistic Service Delivery and Case Management

Many programs are administered by local agencies or community-based organizations that provide referrals to weatherization, hardship, or special needs services. The additional assistance, services, and referrals can help participants face their current challenges and

support the goal of energy affordability. However, participants can face challenges receiving weatherization services because their home needs remediation for health and safety conditions or because the landlord will not provide agreement for service delivery.

Other Challenges

Responding to the Coronavirus has presented a unique and unprecedented challenge for utility companies around the country.

- **Additional Programs:** Many utilities have developed new assistance programs and arrearage payment plans to help customers financially burdened by the pandemic. They have also increased income eligibility guidelines for participation. Customers who call the utility and report problems paying their bills can learn about these opportunities for assistance. They can also learn about these opportunities through information posted on the utility website and social media, as well as through utility emails.
- **Shutoff Moratoriums:** Many states have implemented shutoff moratoriums. While these programs can be instrumental in ensuring that customers retain services, they can reduce incentives for customers to apply for available assistance, such as LIHEAP assistance that has been increased during the pandemic.

B. Best Practices

This section provides an assessment of best practices for low-income energy bill payment assistance programs. The programs differ on many parameters, so it can be difficult to compare the programs' effectiveness. However, where possible, we provide our assessment of best practices based on experiences described, knowledge of low-income energy issues, and research on low-income bill payment assistance programs.

Outreach

Programs are most effective at reaching the eligible population when they employ a variety of outreach techniques that reach customers with various characteristics and when they partner with trusted community organizations.

The formerly homeless is a population that should be considered for outreach. However, additional flexibility will be needed to meet the needs of these former customers to enable them to open new accounts.

Intake

As with outreach, intake methods should differ based on participants' characteristics and programs that offer several options will be the most successful.

Income Eligibility

Income eligibility should be determined to ensure that customers in need are served at a level of benefits that impact their energy affordability. Basing program eligibility on LIHEAP participation can make it easier to enroll participants, as their income eligibility has already been verified. However, programs should have additional entry points to ensure that access is not limited.

Other Eligibility Requirements

The program should consider requirements that incentivize customers to participate in other assistance programs and increase the probability of success but avoid requirements that can pose barriers to participation. Programs should not require participants to demonstrate that their bill is unaffordable through arrearages or missed payments, as households may constrain energy usage or other necessities to pay their utility bill and not show these indications of energy unaffordability.

Enrollment Level

Programs should balance enrollment and benefit levels to ensure that they significantly impact participants and do not adversely impact the ratepayer due to a large bill adder.

Bill Subsidy Determination

Percent of income programs provide more equitable benefits based on energy burden, result in fixed monthly payments, serve lower-income households, and have greater impacts on energy burden.

Energy Burden Target

Furnishing a benefit level to achieve a set energy burden target provides the greatest assurance that customers will receive benefits in proportion to their need for assistance.

Bill Consistency

Customers have expressed a preference for predictable monthly energy bills that do not fluctuate over the course of the year, and such equalized billing provides greater opportunity for bill management.

Arrearage Forgiveness

Arrearage forgiveness allows participants to remove debt built up prior to program participation and meet current bill payment obligations. Customers who were unable to afford their bills prior to program participation are unlikely to afford the discounted bill if they also have responsibility for paying off large, accumulated arrearages.

Educating customers about the arrearage forgiveness benefit can help incentivize customers to pay their bills. Providing arrearage forgiveness when customers make up their missed payments enables customers to receive the benefit even if they cannot stay current and provides an additional opportunity for customers to become current on their utility bills.

LIHEAP Coordination

Coordination with LIHEAP can increase benefit receipt and provide additional potential for customers to succeed on the bill payment assistance program.

Energy Efficiency Services

Energy efficiency services should be targeted to high-usage payment program participants. Additional funding can be provided to remediate conditions that prevent measure installation and additional efforts can be made to provide outreach to landlords to obtain agreement for service delivery.

Program Removal

Allowing the customer to remain on the bill payment assistance program until service termination for nonpayment will provide another opportunity for customers to make up their bills at the lower payment rate and remain in the program.

Recertification

Recertification ensures that customers remain eligible for the program, but the process should not be too burdensome.

Other Challenges

Shutoff moratoriums can provide customers with time to make their payments but can lead to reduced need for assistance that has been made available during a crisis such as COVID-19 or extreme weather. Requiring customers to apply for available assistance can help to ensure that available assistance is leveraged.

VII. Recommendations

This section provides recommendations for Ameren Missouri's Keeping Current Program based on all of the research conducted in this study and the findings from previous Ameren Keeping Current Evaluations. Recommendations for various program design parameters are provided below.

1. *Administration:* Ameren should continue to administer Keeping Current with assistance from the agencies on outreach, intake, and data management. Ameren should assess whether a 13 percent total administrative cost for the program (including utility and agency costs) would provide adequate resources to effectively manage the program.
2. *Outreach:* Ameren should conduct additional outreach for Keeping Current through agencies and their own call center representatives. Agencies may need additional education to consider the program not only as a special option for extreme circumstances and not only for customers with high arrearages. This may require ongoing outreach and education at the agencies due to turnover and seasonal employees.

Agencies should develop outreach plans that specify several outreach methods to reach various segments of their populations in need. Ameren should re-assess the agency payments (\$25 for each Keeping Current enrollment and \$10 for each Keeping Cooling enrollment) and consider whether higher fees should be paid to compensate agencies adequately for outreach, intake, and referrals.

Ameren call center representatives should be trained to screen payment-troubled customers for eligibility, refer eligible customers to their local agency, and send lists of eligible customers to their local agency so that the agency can also follow up with the customers.

3. *Intake:* Agencies should continue to encourage customers to visit offices for in-person Keeping Current intake. This process allows for in-depth education about the program, referrals to LIHEAP and weatherization, and education about other potential sources of assistance. However, agencies should provide flexibility to customers who are unable to visit the office because they are homebound, are working during the agency's office hours, or do not have transportation or childcare available.
4. *Income Eligibility:* Ameren should maintain the current income eligibility level of 150 percent of the FPL. They should base eligibility on one month of income to ensure that customers who recently became unemployed due to COVID-19 are eligible.
5. *Other Eligibility Requirements:* Ameren should continue the following additional eligibility requirements.
 - Weatherization: Apply for the program.
 - LIHEAP: Apply for the program (continued) and apply benefits to Ameren bill if an Ameren gas or Ameren electric heating customer (new).

- Consistent Bill: Enroll in budget billing (in the absence of a new Percentage of Income Program that provides a fixed monthly bill).
6. *Additional Populations:* Ameren should consider enhanced benefits for formerly homeless customers to help them pay off past balances and open a new Ameren account.
 7. *Recertification:* Ameren should continue to require participants to re-certify their eligibility every two years. This will be especially important if they move to a Percentage of Income Payment program.
 8. *Enrollment Level:* Ameren and their agencies should provide additional outreach as discussed above to reach more customers with this program.
 9. *Bill Subsidy Determination:* Ameren should consider moving to a Percentage of Income Payment Program (PIPP) to provide participants with a fixed energy burden at an affordable level. The end of this section provides a comparison of the costs of the current program to the costs of a PIPP.
 10. *Target Energy Burden:* Ameren should consider targeting a three percent energy burden for alternative electric heat participants and a six percent energy burden for electric heat participants. If the cost of these energy burden targets is beyond a target program budget, Ameren should consider a somewhat higher energy burden to reduce costs.
 11. *Minimum Payments and Maximum Credits:* Ameren should consider a minimum monthly payment and a maximum annual credit to limit program costs. Customers who reach the maximum annual credit should be targeted for weatherization.
 12. *Arrearage Forgiveness:* Ameren should continue the arrearage forgiveness program where participants pay 1/12 of their arrearages when they enroll and have 1/11 of the remaining amount forgiven each month. We recommend that forgiveness be provided for bills that are made up following the initial bill due date. Participants should receive education so that they understand that this is an important benefit of the program.
 13. *LIHEAP:* Ameren and the agencies should provide additional education and outreach to ensure that participants apply for LIHEAP assistance. They should send reminders to participants to re-apply to LIHEAP and emphasize that they can receive benefits from both LIHEAP and Keeping Current at the same time.
 14. *Energy Efficiency:* Ameren should prioritize high usage Keeping Current participants for weatherization. They should educate landlords about the program and encourage landlords to provide authorization for program measures.
 15. *Program Removal:* Participants are currently removed from Keeping Current if they are not current within two billing cycles. We recommend that customers remain on Keeping Current

as long as they remain customers and are not terminated due to nonpayment. We also recommend that customers receive monthly bill credits for all made up past due monthly bills.

Ameren Keeping Current and PIPP Cost Comparison

Given the recommendation to move to a Percentage of Income Program (PIPP) to better target those most in need, provide more equitable energy burdens across program participants, and reach the goal of affordable energy, it is important to understand the potential costs of a PIPP. This section provides projections of average participant credits by poverty level and total subsidy costs for various levels of program participation.

Table VII-1 compares the average discount received by participants in Ameren's Keeping Current Program to projected discounts under various PIPP designs.

- The Keeping Current discounts shown are the average discounts that were received by participants in the 2019 evaluation analyses.
- The first PIPP scenario targets a six percent burden for electric heat participants and a three percent burden for alternative heat participants.
- The second PIPP scenario targets a ten percent burden for electric heat participants and a six percent burden for alternative heat participants.
- Each PIPP scenario calculates the average discount with and without a minimum monthly payment and with and without a maximum annual credit. The modelled minimum monthly payment was \$25 for electric heat and \$10 for alternative heat and the maximum PIPP credit modelled was \$2,000 for electric heat and \$1,500 for alternative heat households.

The table shows that the modelled PIPP credits are significantly greater than the Ameren Keeping Current Program credits.

- Keeping Current credits averaged \$575 for electric heat participants at or below 50 percent of the Federal Poverty Level (FPL) and \$199 for Alternative Heat participants at or below 50 percent of the FPL.
- The six percent burden target for Electric Heat participants at or below 50 percent of the FPL provided a mean credit of \$1,843 with no minimum payment or maximum credit and a mean credit of \$1,484 with the minimum payment and maximum credit.
- The ten percent burden target for Electric Heat participants at or below 50 percent of the FPL provided a mean credit of \$1,622 with no minimum payment or maximum credit and a mean credit of \$1,332 with the minimum payment and maximum credit.

Differences between the current program structure and the PIPP are smaller for the higher poverty level groups, and the credits for Electric Heat participants between 101 and 150 percent of the FPL are greater under Ameren's current program than under the higher burden PIPP structure.

**Table VII-1
Credit Cost per Participant for Keeping Current and PIPP**

	Mean Discount					
	≤ 50% FPL		51% - 100% FPL		101% - 150% FPL	
	Electric Heat	Alternative Heat	Electric Heat	Alternative Heat	Electric Heat	Alternative Heat
Observations	134	31	215	50	86	25
Keeping Current (2019 Evaluation)	\$575	\$199	\$445	\$217	\$443	\$219
PIPP (6% Electric Heat Burden, 3% Alternative Heat Burden)						
No Min Payment or Max Credit	\$1,843	\$1,658	\$1,248	\$1,207	\$761	\$907
With Min Payment & Max Credit	\$1,484	\$1,313	\$1,114	\$1,071	\$730	\$890
PIPP (10% Electric Heat Burden, 6% Alternative Heat Burden)						
No Min Payment or Max Credit	\$1,622	\$1,472	\$789	\$826	\$315	\$396
With Min Payment & Max Credit	\$1,332	\$1,248	\$723	\$776	\$304	\$396

Table VII-2 compares the cost of the Keeping Current Program with the projected costs of implementing the PIPP, given the number of Keeping Current participants as of July 2020. The number of participants in each poverty level group was modelled by applying the poverty level group distribution found in the 2019 evaluation to the total number of program participants in July 2020.

The table shows that the projected costs for the PIPP discounts are significantly greater than the costs of the discounts under the current Ameren Keeping Current structure.

- Total credit costs under the current structure are projected to be \$681,953 compared to costs of \$2.1 million for the six and three percent PIPP burden targets with no minimum payment or maximum credit and \$1.8 million with a minimum payment and maximum credit.
- The Keeping Current Program cost \$254,725 for electric heat participants at or below 50 percent of the FPL and \$19,701 for alternative heat participants at or below 50 percent of the FPL.
- The six percent burden target for Electric Heat participants at or below 50 percent of the FPL results in projected program costs of \$816,449 with no minimum payment or maximum credit and projected program costs of \$657,412 with the minimum payment and maximum credit.
- The ten percent burden target for Electric Heat participants at or below 50 percent of the FPL results in projected program costs of \$718,546 with no minimum payment or maximum credit and projected program costs of \$590,076 with the minimum payment and maximum credit.

Differences between the credit costs for the current program structure and the PIPP are smaller for the higher poverty level groups, and the costs for Electric Heat participants between 101 and 150 percent of the FPL are greater under Ameren's current program than under the higher burden PIPP structure.

Table VII-2
Projected Program Costs for Keeping Current and PIPP
With July 2020 Participation Level

	Projected Costs for Program by Poverty Level Group							
	≤ 50% FPL		51% - 100% FPL		101% - 150% FPL		Total Cost	
	Electric Heat	Alt. Heat	Electric Heat	Alt. Heat	Electric Heat	Alt. Heat	Electric Heat	Alt. Heat
# of Participants	443	99	582	137	241	55	1,266	291
Keeping Current	\$254,725	\$19,701	\$258,990	\$29,729	\$106,763	\$12,045	\$620,478	\$61,475
PIPP (6% Electric Heat Burden, 3% Alternative Heat Burden)								
No Min Pay / Max Cred	\$816,449	\$164,142	\$726,336	\$165,359	\$183,401	\$49,885	\$1,726,186	\$379,386
Min Pay & Max Cred	\$657,412	\$129,987	\$648,348	\$146,727	\$175,930	\$48,950	\$1,481,690	\$325,664
PIPP (10% Electric Heat Burden, 6% Alternative Heat Burden)								
No Min Pay / Max Cred	\$718,546	\$145,728	\$459,198	\$113,162	\$75,915	\$21,780	\$1,253,659	\$280,670
Min Pay & Max Cred	\$590,076	\$123,552	\$420,786	\$106,312	\$73,264	\$21,780	\$1,084,126	\$251,644

Table VIII-3 compares the cost of the Keeping Current Program with the projected costs of the PIPP if ten percent of income-eligible households (estimated in the Needs Assessment) participate. The top row displays the estimated number of customers that would participate.

- Total credit costs under the current structure are projected to be \$2.4 million compared to costs of \$22.2 million for the six and three percent PIPP burden targets with no minimum payment or maximum credit and \$19.7 million with a minimum payment and maximum credit.
- The program would cost \$1,096,468 for electric heat participants at or below 50 percent of the FPL and \$460,168 for alternative heat participants at or below 50 percent of the FPL under the Keeping Current structure in place now.
- The six percent burden target for Electric Heat participants at or below 50 percent of the FPL results in projected program costs of \$3,514,417 with no minimum payment or maximum credit and projected program costs of \$2,829,840 with the minimum payment and maximum credit.
- The ten percent burden target for Electric Heat participants at or below 50 percent of the FPL results in projected program costs of \$3,092,992 with no minimum payment or maximum credit and projected program costs of \$2,539,991 with the minimum payment and maximum credit.

**Table VII-3
Projected Program Costs for Keeping Current and PIPP
With Ten Percent Participation**

	Projected Costs for Program by Poverty Level Group							
	≤ 50% FPL		51% - 100% FPL		101% - 150% FPL		Total Cost	
	Electric Heat	Alt. Heat	Electric Heat	Alt. Heat	Electric Heat	Alt. Heat	Electric Heat	Alt. Heat
# of Participants	1,907	2,312	2,657	3,777	3,274	4,965	7,838	11,054
Keeping Current	\$1,096,468	\$460,168	\$1,182,365	\$819,566	\$1,450,205	\$1,087,423	\$3,729,038	\$2,367,157
PIPP (6% Electric Heat Burden, 3% Alternative Heat Burden)								
No Min / Max Cred	\$3,514,417	\$3,833,959	\$3,315,936	\$4,558,598	\$2,491,210	\$4,503,618	\$9,321,563	\$12,896,175
Min Pay & Max Cred	\$2,829,840	\$3,036,181	\$2,959,898	\$4,044,953	\$2,389,728	\$4,419,206	\$8,179,466	\$11,500,340
PIPP (10% Electric Heat Burden, 6% Alternative Heat Burden)								
No Min / Max Cred	\$3,092,992	\$3,403,853	\$2,096,373	\$3,119,637	\$1,031,184	\$1,966,298	\$6,220,549	\$8,489,788
Min Pay & Max Cred	\$2,539,991	\$2,885,875	\$1,921,011	\$2,930,797	\$995,174	\$1,966,298	\$5,456,176	\$7,782,970

Table VII-4 compares the cost of the Keeping Current Program with the projected costs of the PIPP if 25 percent of eligible households participate.

- Total credit costs under the current structure are projected to be \$15.2 million compared to costs of \$55.5 million for the six and three percent PIPP burden targets with no minimum payment or maximum credit and \$49.2 million with a minimum payment and maximum credit.
- The program would cost \$2,741,169 for electric heat participants at or below 50 percent of the FPL and \$1,150,419 for alternative heat participants at or below 50 percent of the FPL under the Keeping Current structure in place now.
- The six percent burden target for Electric Heat participants at or below 50 percent of the FPL results in projected program costs of \$8,786,042 with no minimum payment or maximum credit and projected program costs of \$7,074,599 with the minimum payment and maximum credit.
- The ten percent burden target for Electric Heat participants at or below 50 percent of the FPL results in projected program costs of \$7,732,480 with no minimum payment or maximum credit and projected program costs of \$6,349,977 with the minimum payment and maximum credit.

**Table VII-4
Projected Program Costs for Keeping Current and PIPP
With Twenty-Five Percent Participation**

	Projected Costs for Program by Poverty Level Group							
	≤ 50% FPL		51% - 100% FPL		101% - 150% FPL		Total Cost	
	Electric Heat	Alt. Heat	Electric Heat	Alt. Heat	Electric Heat	Alt. Heat	Electric Heat	Alt. Heat
# of Participants	4,767	5,781	6,643	9,442	8,184	12,414	19,594	27,637
Keeping Current	\$2,741,169	\$1,150,419	\$2,955,913	\$2,048,914	\$3,625,512	\$2,718,557	\$9,322,594	\$5,917,890
PIPP (6% Electric Heat Burden, 3% Alternative Heat Burden)								
No Min / Max	\$8,786,042	\$9,584,898	\$8,289,840	\$11,396,494	\$6,228,024	\$11,259,045	\$23,303,906	\$32,240,437
Min Pay & Max	\$7,074,599	\$7,590,453	\$7,399,745	\$10,112,382	\$5,974,320	\$11,048,015	\$20,448,664	\$28,750,850
PIPP (10% Electric Heat Burden, 6% Alternative Heat Burden)								
No Min / Max	\$7,732,480	\$8,509,632	\$5,240,933	\$7,799,092	\$2,577,960	\$4,915,746	\$15,551,373	\$21,224,470
Min Pay & Max	\$6,349,977	\$7,214,688	\$4,802,528	\$7,326,992	\$2,487,936	\$4,915,746	\$13,640,441	\$19,457,426