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 Credit[9]
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

[9]Only 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.

[10] Only 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

[11]Only 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]	-	-	-	• Cannot receive LIHEAP benefits if also receive PIPP benefits
KY	LG&E-KU Home Energy Assistance Program (HEA)[1]	X	-	X	• 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	• First applied against LIPURP shortfall • Next applied to pre-program arrearages

[12]Only 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?[12]
PA	Duquesne Light Customer Assistance Program (CAP)[1]	X	-	X	-
PA	FirstEnergy Pennsylvania Customer Assistance Program (PCAP)[1]	X	-	X	• 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*	• 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	-	• 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	• 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	• 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.

[13]Only 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

[14]Only 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	• Conservation Consultants Inc. • Local agencies
PA	PGW Customer Responsibility Program (CRP)[1]	X	X	X	-
PA	PPL OnTrack (CAP)[1]	X	X	X	• PPL Customer Contact Center • Social agency caseworkers • Self-referrals
PA	UGI Customer Assistance Program (CAP)[1]	X	X	X	• 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 $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

- o Childcare
- o Transportation
- o Addiction Treatment
- o Rent Assistance
- o Job Training
- o 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]	• 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	• Grant up to $200	-
IL	Percentage of Income Payment Plan (PIPP)[2]	• 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]	• 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	-	-

[15]Only 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]	• CFLs • Blower door tests • Air sealing • General repairs	• Grant up to $500	• 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: o Funding o Housing o Food programs o Employment o Counseling o Rehabilitation o Transportation o Assistance with program applications
PA	Duquesne Light Customer Assistance Program (CAP)[1]	• 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	• Grant up to $500 • Protection against shutoffs • Restoration of electric service if terminated • Referrals to other programs and services	• 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]	• 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)	• Grant of up to $500	• 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]	• 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	• Grant of up to $400 for natural gas • Grant of up to $200 for non-natural gas	• 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	• Grant of up to $500 per fuel	• Referral services including job training, budget counseling, and education workshops
PA	People's Gas Customer Assistance Program (CAP)[1]	• 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	• Grant of up to $500	Referrals to: • 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]	• Air sealing • Insulation heating system replacement • Equipment repair and replacement • Hot water reduction measures	• Matching bill credit, generally up to $750	Referrals to: • Internal and external organizations and assistance programs
PA	PPL OnTrack (CAP)[1]	• 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	• Grant of up to $750 • Customer can also receive up to $375 in matching credits	• 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]	• 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)	• Grant of up to $400 for UGI Gas • Grant of up to $800 for PNG	• 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)
					7 month + 2 weeks (LI)
			3/16/20	Late Fee: Ongoing	Ongoing
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	• 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	• 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, Evergy, 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.

[16]Only 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.

[17]Only 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

[18]Only 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%**

[19]Only 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%

[20]Only 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.

[21]Only 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%

[22]Only 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%

[23]Only 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	-	-	-	-

[24]Only 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 Forgive-ness	Mean # Payments	Mean $ Forgiven	Initial Arrears	% Received Forgive-ness	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	-	-	-	-	-	-

[25]Only programs with available information are included in the table.
[26]Only 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%	-	-

[27]Only 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**

[28]Only 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%**

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

[31]Only 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%

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