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Electric Service Discount and Arrearage Management Program Design Template

John Howat

National Consumer Law Center®

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for Economic Justice*

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Since 1969, the nonprofit National Consumer Law Center® (NCLC®) has used its expertise in consumer law and energy policy to work for consumer justice and economic security for low-income and other disadvantaged people, in the United States. NCLC's expertise includes policy analysis and advocacy; consumer law and energy publications; litigation; expert witness services; and training and advice for advocates. NCLC works with nonprofit and legal services organizations, private attorneys, policymakers, and federal and state governments and courts across the nation to stop exploitive practices, help financially stressed families build and retain wealth, and advance economic fairness.

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ABOUT THE AUTHOR

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I. BACKGROUND AND PROGRAM DESIGN OBJECTIVES

As the health, safety, and economic impacts of the Covid-19 crisis become increasingly clear, the need to universally adopt programs and policies that enhance the affordability of necessary utility service is also highlighted. To win approval of programs and policies to enhance secure access to home energy services, advocates must “make the case” for program need and present a data-driven proposal outlining program design parameters. National Consumer Law Center has developed customizable templates to aid advocates and consumers in developing proposals for the implementation of comprehensive electric service bill payment assistance and arrearage management programs. While this resource applies directly to electric utility service, many of the design and implementation principles are also applicable to natural gas and water service.

Reliable electricity service is a necessity of life. Without electricity, residents cannot effectively participate in present-day society or be secure from threats to their health and safety. Looking forward, as technological, economic and regulatory changes usher in a transition to increased electrification in the transportation and building sectors, the importance of secure, uninterrupted access to electricity service is heightened. All customers, including those with low incomes, need access to reliable and secure sources of electricity. To help ensure home energy security for low-income residents, what is needed is an electricity affordability program that:

- Serves all residential electricity customers eligible to participate in the Low Income Home Energy Assistance Program (“LIHEAP”);
- Lowers program participants’ electricity burdens to an affordable level;
- Promotes regular, timely payment of electric bills by program participants;
- Comprehensively addresses payment problems associated with program participants’ current and past-due bills;
- Is funded through a mechanism that is reliable while providing sufficient resources to meet policy objectives over an extended timeframe; and
- Is administered efficiently and effectively.

Following is a discussion of each of these program design objectives.

Program eligibility guidelines, participation, and enrollment

Income eligibility for participation in an electricity affordability program should be capped at no less than state-specific LIHEAP income-eligibility guideline. All households receiving or eligible for benefits through the federal LIHEAP should be automatically enrolled in an electric affordability program. In the event that the electricity affordability program’s participation level does not exceed any enrollment ceiling that may be established, consenting households receiving benefits from other means-tested benefit programs (e.g., SNAP, Medicaid) should also be automatically enrolled in the electricity affordability program.

Program benefits

Affordability program participants should receive benefits in the form of discounted electric rates or fixed credits on their electric bills. The goal of a comprehensive affordability program should be to substantially lower the electricity burden¹ of participants. To meet this objective, one of the following should be funded and implemented:

- Percentage discount of at least 30%;
- Percentage of income payment plan (“PIPP”) lowering *all* participants’ electricity bill payments to 6% or less of household income; or
- Tiered discount setting payments at a targeted electricity burden level of 6% or less.

These program types, currently offered in many states around the country, are described in greater detail below. Templates to determine program costs and non-participant bill impacts are also provided.

Incorporation of arrearage management into an affordable current bill program

To sustain participants’ bill affordability and home energy security, program design must be comprehensive in its approach to dealing with both participants’ current bills and arrearage balances. A program that is intended to promote regular, timely payments by reducing electricity burdens to an affordable level is rendered less effective by a requirement that participants pay off an arrearage in addition to the affordable current bill. Requiring the simultaneous payment of pre-existing arrears *and* the discounted electric bill therefore runs counter to the policy objectives of promoting affordable, regular, timely payments by program participants.

There are two basic models of low-income utility arrearage management that have been implemented in the United States. One entails the write-down of customer arrears over time after a series of timely payments on current bills. The other model entails the retirement of arrearage balances in full on a one-time basis. The one-time “forgiveness” model is administratively straightforward but entails a large initial outlay of program cash resources. Write-downs over a period of 12 months may provide customers with an enhanced incentive to keep up with current bills (as long as they are affordable), while placing less strain on program cash flow. The most prevalent model provides low-income rate participants with opportunities to retire one-twelfth (1/12) of a pre-program overdue balance with each timely payment of a current bill.

Program funding

Funding for an electricity affordability program needs to be sufficient and reliable. Program funding should be sufficient to provide meaningful energy burden reduction and energy security for LIHEAP-eligible electricity customers. In addition, program administration costs of 5% to 7% of program benefits to the total program cost estimate are required.

¹ The term “electricity burden” refers to the proportion of household income that is devoted to paying for residential electricity service. The terms “energy burden” and “home energy burden” refer to the proportion of income devoted to all home energy services.

A sustainable electricity affordability program with set benefit levels and participation rates also requires funding that is predictable and reliable. A uniform volumetric charge – approved prior to program implementation – is the optimal funding source for an effective program.

Program administration

Electricity affordability program design should foster efficient, streamline administrative procedures. With limited program resources available, funds should be devoted to participant benefits rather than administrative costs to the greatest extent feasible. Minimizing administrative costs while delivering an effective electricity affordability program requires that certain agencies, organizations and individuals work together cooperatively and efficiently. Administrative structures and procedures that apply to the state’s LIHEAP may be “piggybacked” onto any new electricity affordability program to create administrative efficiencies.

Community Action Agencies, with sufficient support from program administrative funds, are ideally suited to conduct program intake and outreach functions. The agencies that certify LIHEAP eligibility could simultaneously certify low-income rate and arrearage management eligibility using the same procedures that currently apply to LIHEAP.

Utilities would be responsible for collecting program-related charges, and assigning qualified customers to a tariffed, low-income rate. Utilities would further be responsible for tracking arrearage write-downs for each participating customer, and for regular reporting of program activities and financial transactions. All program costs, including bill credits or discounts, approved startup and ongoing administrative expenses, and approved arrearage retirement amounts should be recoverable through volumetric charges, as described above.

Affordability rate applicants would provide the documentation required for certification on an annual basis. In addition, program applicants should be referred to all appropriate energy efficiency services that may be available.

Utility system costs of program implementation

Most prospective low-income assistance program costs may be readily identified and quantified. Projecting the cost of implementing the affordability program requires multiplying the projected number of program participants by the sum of the value of the monthly discount (or revenue loss) per customer and the average arrearage per customer that is retired. Program administration costs must then be added to the value of discounts and retired arrearages to obtain an estimate of total program costs.

Utility system, societal, and customer benefits

Quantifying the entire range of program benefits, including those associated with utility uncollectible accounts, presents a greater analytical challenge than quantifying costs. Nonetheless, quantification challenges should not lead to the conclusion that benefits simply do not exist. Rather, they suggest that decisions regarding the adoption and implementation of low-income payment assistance programs should not hinge entirely on the results of overly simplified cost-benefit analyses.

Effective bill payment assistance programming may reduce uncollectible account write-offs. Precise quantification of the bad debt mitigation impact of a low-income payment assistance program presents a considerable analytical challenge, particularly on a prospective basis. The extent to which this objective may be achieved is contingent on a number of existing conditions and key program design/implementation elements, including the following:

A company's existing bad debt profile and the extent to which uncollectible account write-offs are currently concentrated among low-income customers;

- Income and expense circumstances of the program participants;
- Program benefit levels and reduction of participants' utility burden (i.e., reduction of the proportion of a participant's income that is devoted to utility bills);
- Outreach and targeting of "payment troubled" customers and prospective program participants;
- The extent to which the program comprehensively incorporates reduction of current bills with means of effectively managing pre-program arrears; and
- Contact and follow-up with program participants.

Comprehensive bill affordability program costs are generally limited to non-participants within the utility system. However, program benefits accrue to participants (enhanced "home energy security," health and safety, housing security, and more), and society more broadly (reduced public health expenditures, reduced need for other transfer payments, and more). These benefits are more difficult to quantify than program costs but must nonetheless be factored into decisions regarding adoption of new programs.

Straight percentage discounts

A straight discount entails reducing the total utility bill by a specified percentage or dollar amount. Under this model, the discount may be achieved through a set customer charge reduction and/or a usage charge reduction. The states of California and Massachusetts have adopted straight discount rates that are available to utility customers who participate in LIHEAP. The straight discount model reduces the energy burden of participants at a relatively low administrative cost. However, this model does not differentiate the benefit level within the broad participant group. The benefit level is the same for a household living at 50% of the federal poverty level as it is for a household living at the upper limit of the income eligibility guideline.

Percentage of income payment plan (PIPP)

A PIPP entails participating customers paying a predetermined, "affordable" percentage of income for natural gas or electric service. PIPPs therefore target benefit levels to a household's particular income circumstances based on predetermined affordability goals. However, since separate billing and payment arrangements must be developed for each participating customer, PIPPs generally entail a somewhat higher level of administrative complexity than straight discount rates. The Colorado Public Utilities Commission recently approved a PIPP for Excel Energy customers. Illinois investor-owned utilities have also implemented a PIPP. In addition, the program model has been operative for many years in Ohio, Pennsylvania, New Jersey and Maine.

Tiered discount

A tiered discount represents a hybrid of design elements of straight discount and PIPP models. In a tiered discount, the level of the discount depends on the customer's income or poverty level. Like a PIPP, the tiered discount is designed to reduce a customer's bill to an affordable level, and households in the lower income or poverty tiers receive a steeper discount than those in higher tiers. Thus, benefits are targeted according to a household's income circumstances, but the individual payment arrangements and billing typified by a PIPP are not required. A tiered discount entails somewhat higher administrative cost than a straight discount, but considerably less than a PIPP. Tiered discount programs currently operate in New Hampshire and Indiana.

II. PROGRAM DESIGN TEMPLATE

Following is a series of tables and charts illustrating the benefits and costs associated with implementing a comprehensive affordability program, including reduced current bills and management of "preprogram" arrears. The tables and charts draw on data pertaining to Arizona Public Service Company and are presented as an example of template capabilities and outputs. The materials may readily be customized by altering a number of key, utility-specific variables, including number of program participants, average arrearage, billing and expenditure levels, target electricity discount percentage or burden level, and anticipated administrative cost. Inputs related to customer usage, expenditures and revenues are often available through public documents filed by utilities with the Federal Energy Regulatory Commission and the Energy Information Administration. Income and poverty information needed for new proposals is also publicly available.

National Consumer Law Center is prepared to work with state-level advocates, policymakers, regulators and others to modify these tables and charts according to local or state circumstances, in support of proposals for new or enhanced programming.

INCOME TABLES

The tables below draw on publicly available data and are used by advocates to illustrate program need and as program design inputs.

Table 1: FY 2020 POVERTY GUIDELINES FOR THE 48 CONTIGUOUS STATES AND THE DISTRICT OF COLUMBIA

Ratio of Income to Poverty

Household Size	50%	75%	100%	125%	150%
1	\$6,380	\$9,570	\$12,760	\$15,950	\$19,140
2	\$8,620	\$12,930	\$17,240	\$21,550	\$25,860
3	\$10,860	\$16,290	\$21,720	\$27,150	\$32,580
4	\$13,100	\$19,650	\$26,200	\$32,750	\$39,300
5	\$15,340	\$23,010	\$30,680	\$38,350	\$46,020
6	\$17,580	\$26,370	\$35,160	\$43,950	\$52,740
7	\$19,820	\$29,730	\$39,640	\$49,550	\$59,460
8	\$22,060	\$33,090	\$44,120	\$55,150	\$66,180

Source: [U.S. Department of Health and Human Services](#)

Table 2: FY 2020 AZ STATE MEDIAN INCOME

Household Size	60%	80%	100%
1	\$23,516.48	\$31,355.31	\$39,194.13
2	\$30,752.32	\$41,003.09	\$51,253.87
3	\$37,988.16	\$50,650.88	\$63,313.60
4	\$45,224.00	\$60,298.67	\$75,373.33
5	\$52,459.84	\$69,946.45	\$87,433.07
6	\$59,695.68	\$79,594.24	\$99,492.80
7	\$61,052.40	\$81,403.20	\$101,754.00
8	\$62,409.12	\$83,212.16	\$104,015.20
9	\$63,765.84	\$85,021.12	\$106,276.40
10	\$65,122.56	\$86,830.08	\$108,537.60
11	\$66,479.28	\$88,639.04	\$110,798.80
12	\$67,836.00	\$90,448.00	\$113,060.00

Source: [U.S. Department of Health and Human Services](#)

Table 3: AZ Minimum Wage

Hourly	\$12.00
Annual (40 hours/week x 52 weeks)	\$24,960

Source: [U.S. Department of Labor](#)

PROGAM DESIGN WORKSHEETS

The tables below reflect design parameters of 3 program types: a 30% straight discount, a tiered discount, and a percentage of income payment plan. Each of the program design worksheets incorporate and arrearage management component. As noted previously, template inputs may readily be adjusted to reflect a broad range of customer participation, program benefit, average arrearage, and program administrative cost scenarios.

Table 4: APS Straight Discount Worksheet

% Discount	30%	Average Pre-program Arrearage	\$200	#Participants	20,000
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Program Benefits

Number of Participants	<i>Undiscounted Annual Bill (FF1)</i>	<i>Discounted Annual Bill</i>	<i>Value of Discount per Customer</i>	<i>Average Arrearage per Customer</i>	<i>Total Benefits per participant</i>
20,000	\$1,680	\$1,175.81	\$504	\$200	\$704

Annual Expenditure	\$1,680	Program Administration (% of Arrearage Write-down + Discounts)	5%
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Program Costs

Total \$ Discount	<i>Total \$ Arrearage Write-down</i>	<i>Total \$ Program Administration</i>	<i>Total \$</i>
\$10,078,398	\$4,000,000	\$703,919.90	\$14,782,318

Table 5: APS Tiered Discount Worksheet

Target Burden **6.0%** Average Pre-program Arrearage **\$200** # Participants per tier **6667** Annual Expenditure **\$1,680** Program Administration (% of Arrearage Write-down + Discounts) **5%**

Ratio of Income to Poverty Brackets

Income Brackets, Households, Expenditures, and Discounts

Lower	Upper	Income at Category Midpt: 2-person HH	# HH	Avg. Annual Electricity Expenditure	Target Burden	Expenditure @ Target Burden	Annual Discount	Monthly Discount	% Discount	Avg. Arrearage per Customer	Total Benefits per participant
0.00	0.75	\$6,465	6,667	\$1,680	6.0%	\$388	\$1,292	\$108	76.9%	\$200	\$1,492
0.76	1.25	\$17,326	6,667	\$1,680	6.0%	\$1,040	\$640	\$53	38.1%	\$200	\$840
1.26	1.50	\$23,791	6,667	\$1,680	6.0%	\$1,427	\$252	\$21	15.0%	\$200	\$452
Weighted Avg. Discount			43.3%								

Program Costs

Total \$ Discount per Tier	Total \$ Arrearage Write-down per Tier	Total \$ Program Administration per Tier	Total \$ per Tier
\$8,612,220	\$1,333,333	\$497,278	\$10,442,831
\$4,267,740	\$1,333,333	\$280,054	\$5,881,127
\$1,681,740	\$1,333,333	\$150,754	\$3,165,827

Total Program Cost

\$14,561,700	\$4,000,000	\$928,085	\$19,489,785
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Table 6: APS PIPP Worksheet

Target Burden 6.0% Avg Pre-program Arrearage \$200 # Participants per tier 20,000 Annual Expenditure \$1,680 Program Administration* 5%

Income Brackets, Households, Expenditures, and Discounts

Selected Poverty Level (2-person Household)	Annual HH Income	# HH	Average Annual Electricity Expenditure	Target Burden	Expenditure @ Target Burden	Annual Discount	Monthly Discount	Percentage Discount
50%	\$8,620	6,667	\$1,680	6.0%	\$517	\$1,163	\$97	69.2%
100%	\$17,240	6,667	\$1,680	6.0%	\$1,034	\$645	\$54	38.4%
125%	\$21,550	6,667	\$1,680	6.0%	\$1,293	\$387	\$32	23.0%
Weighted Avg. Discount	43.6%							

Program Costs

Selected Poverty Level (2-person Household)	Total \$ Discount	Total Arrearage Write-down	Total Program Administration	Total
50%	\$7,750,220	\$1,333,333	\$454,177.67	\$9,537,731
100%	\$4,302,220	\$1,333,333	\$281,777.67	\$5,917,331
125%	\$2,578,220	\$1,333,333	\$195,577.67	\$4,107,131

Total Program Costs

	\$14,630,660	\$4,000,000	\$931,533	\$19,562,193
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*(% of Arrearage Write-down + Discounts)

BURDEN IMPACTS

The tables and graphs below illustrate the electricity burden reduction impacts of prospective bill affordability and arrearage management program implementation.

Table 7: Electricity Burden Impacts: 30% Discount

	Single, Minimum Wage* Worker (40 hours x 52 weeks)	2- person HH, 100% 2019 FPL	2- person HH, 150% 2019 FPL	2-Person Median Income HH	Upper- income HH (\$100,000)
Annual Pretax Income	\$24,960	\$17,240	\$25,860	\$51,254	\$100,000
Monthly Pretax Income	\$2,080	\$1,437	\$2,155	\$4,271	\$8,333
Undiscounted Current Annual Electricity Expenditure	\$1,680	\$1,680	\$1,680	\$1,680	\$1,680
Undiscounted Current Monthly Electricity Expenditure	\$140	\$140	\$140	\$140	\$140
Arrearage Payment (\$200/4)	\$50	\$50	\$50	\$0	\$0
Total Undiscounted Monthly Payment	\$190	\$190	\$190	\$140	\$140
Undiscounted Electricity Burden (During Arrearage Payoff)	9.1%	13.2%	8.8%	3.3%	1.7%
Discounted (30%) Electricity Expenditure	\$1,176	\$1,260	\$1,260	\$1,680	\$1,680
Discounted Electricity Burden	4.7%	7.3%	4.9%	3.3%	1.7%

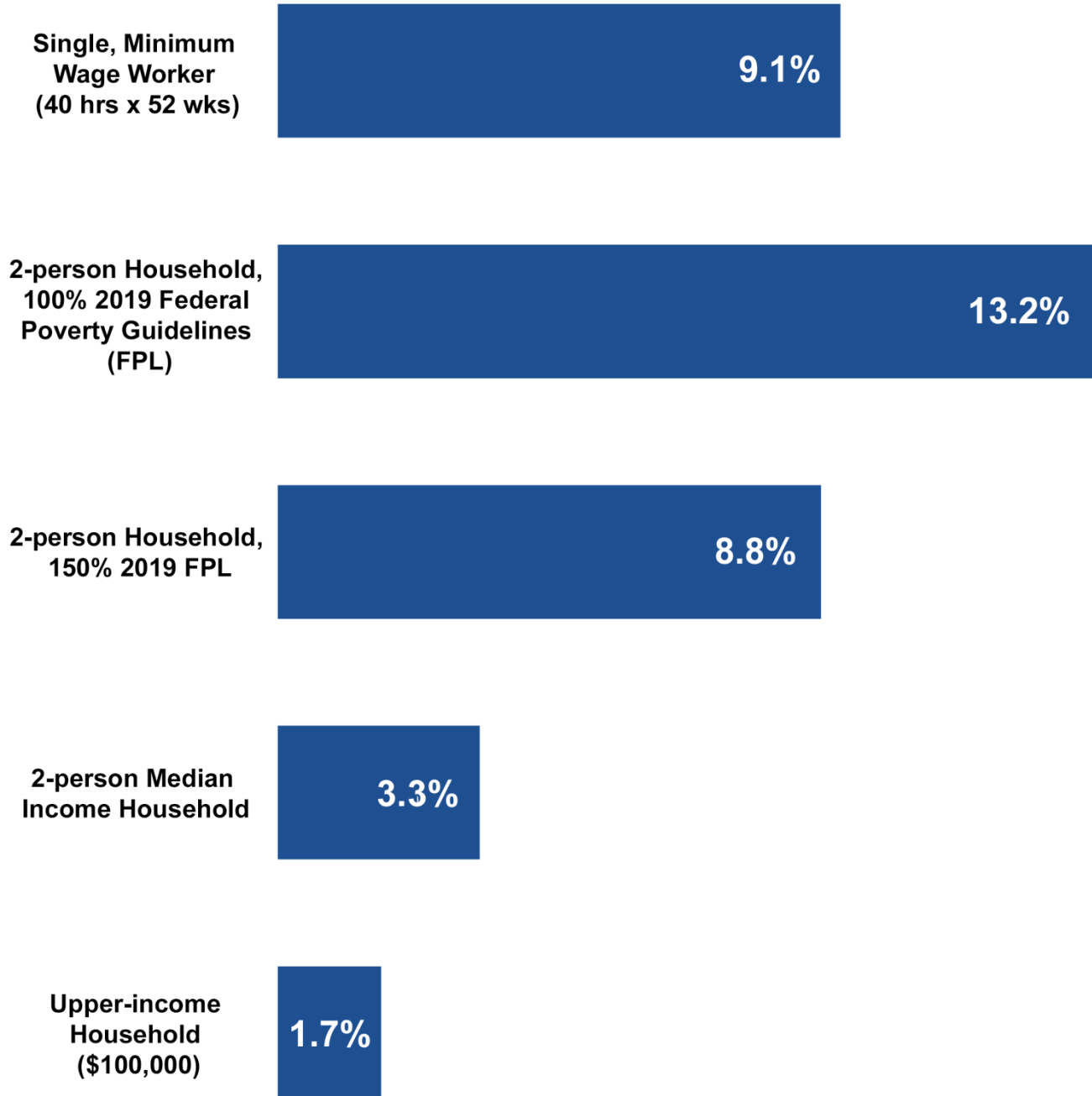
Table 8: Electricity Burden Impacts: Tiered Discount (6% Target Burden)

	Single, Minimum Wage* Worker (40 hours x 52 weeks)	2-person HH, 100% 2019 FPL	2-person HH, 150% 2019 FPL	2- Person Median Income HH	Upper- income HH (\$100,000)
Annual Pretax Income	\$24,960	\$17,240	\$25,860	\$51,254	\$100,000
Monthly Pretax Income	\$2,080	\$1,437	\$2,155	\$4,271	\$8,333
Undiscounted Current Annual Electricity Expenditure	\$1,680	\$1,680	\$1,680	\$1,680	\$1,680
Undiscounted Current Monthly Electricity Expenditure	\$140	\$140	\$140	\$140	\$140
Arrearage Payment (\$200/4)	\$50	\$50	\$50	\$0	\$0
Total Undiscounted Monthly Payment	\$190	\$190	\$190	\$140	\$140
Undiscounted Electricity Burden (During Arrearage Payoff)	9.1%	13.2%	8.8%	3.3%	1.7%
Discounted Electricity Expenditure	\$1,039.57	\$1,039.57	\$1,427.47	\$1,680	\$1,680
Discounted Electricity Burden	4.2%	6.0%	5.5%	3.3%	1.7%

Table 9: Electricity Burden Impacts: PIPP Discount (6% Target Burden)

	Single, Minimum Wage* Worker (40 hours x 52 weeks)	2-person HH, 100% 2019 FPL	2- person HH, 150% 2019 FPL	2- Person Median Income HH	Upper- income HH (\$100,000)
Annual Pretax Income	\$24,960	\$17,240	\$25,860	\$51,254	\$100,000
Monthly Pretax Income	\$2,080	\$1,437	\$2,155	\$4,271	\$8,333
Undiscounted Current Annual Electricity Expenditure	\$1,680	\$1,680	\$1,680	\$1,680	\$1,680
Undiscounted Current Monthly Electricity Expenditure	\$140	\$140	\$140	\$140	\$140
Arrearage Payment (\$200/4)	\$50	\$50	\$50	\$0	\$0
Total Undiscounted Monthly Payment	\$190	\$190	\$190	\$140	\$140
Undiscounted Electricity Burden (During Arrearage Payoff)	9.1%	13.2%	8.8%	3.3%	1.7%
Discounted Electricity Expenditure	\$1,498	\$1,034	\$1,552	\$1,680	\$1,680
Discounted Electricity Burden	6.0%	6.0%	6.0%	3.3%	1.7%

**Chart 1: Unequal Burdens:
Electricity Expenditures as a Proportion of Household Income: APS**



**Chart 2: 30% Straight Discount:
Undiscounted & Discounted Electricity Burdens by Selected Household Incomes**

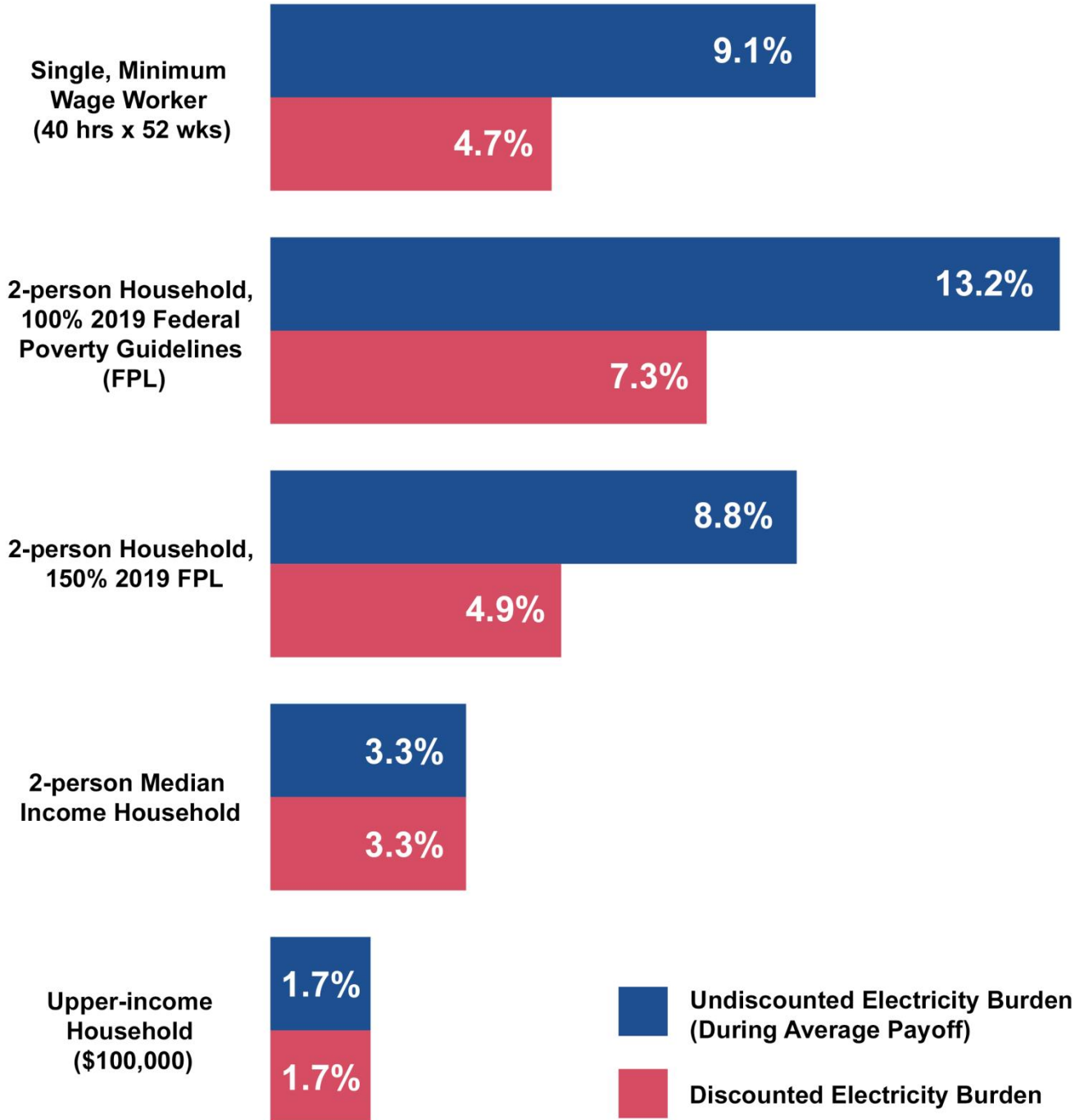
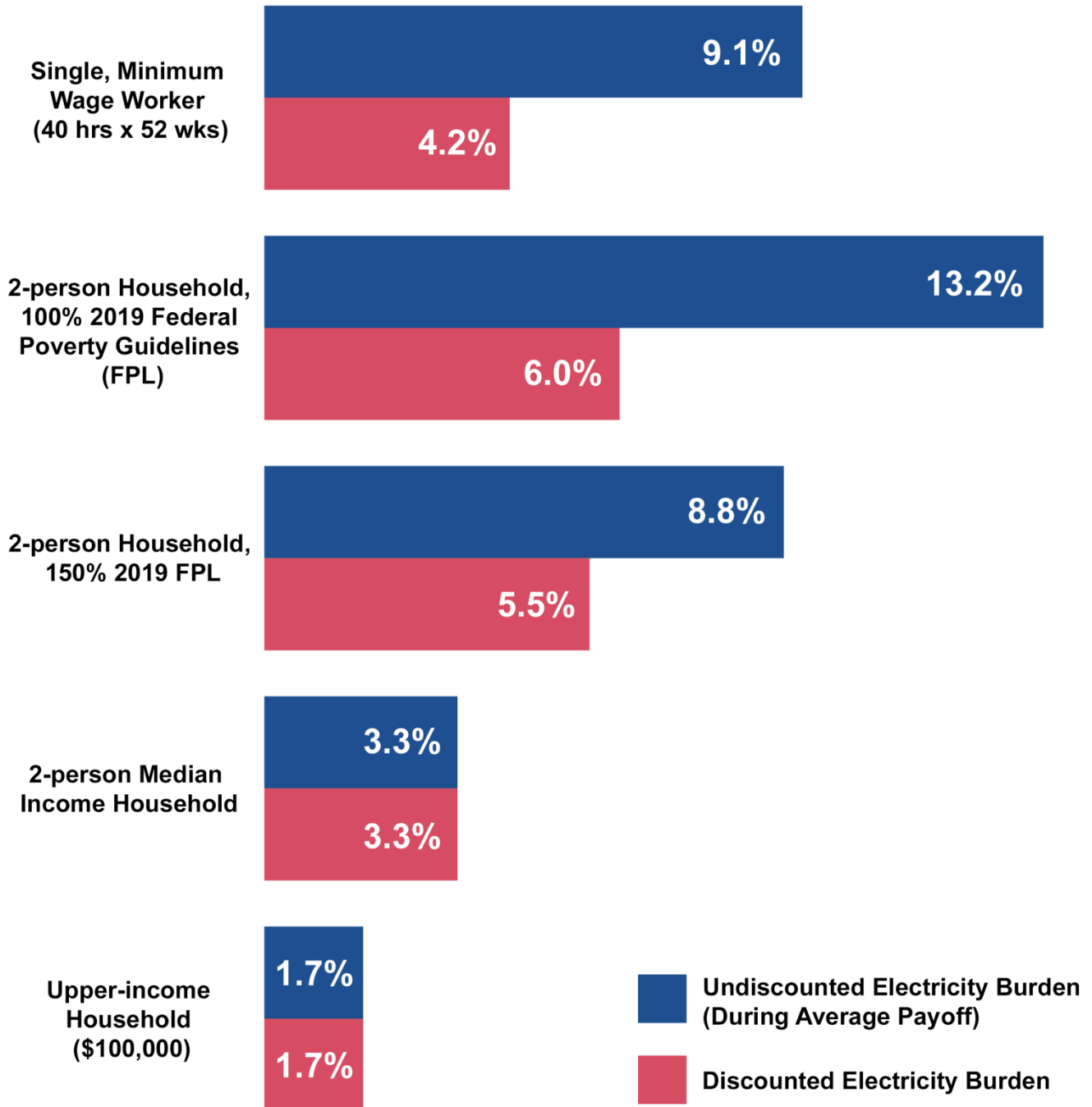
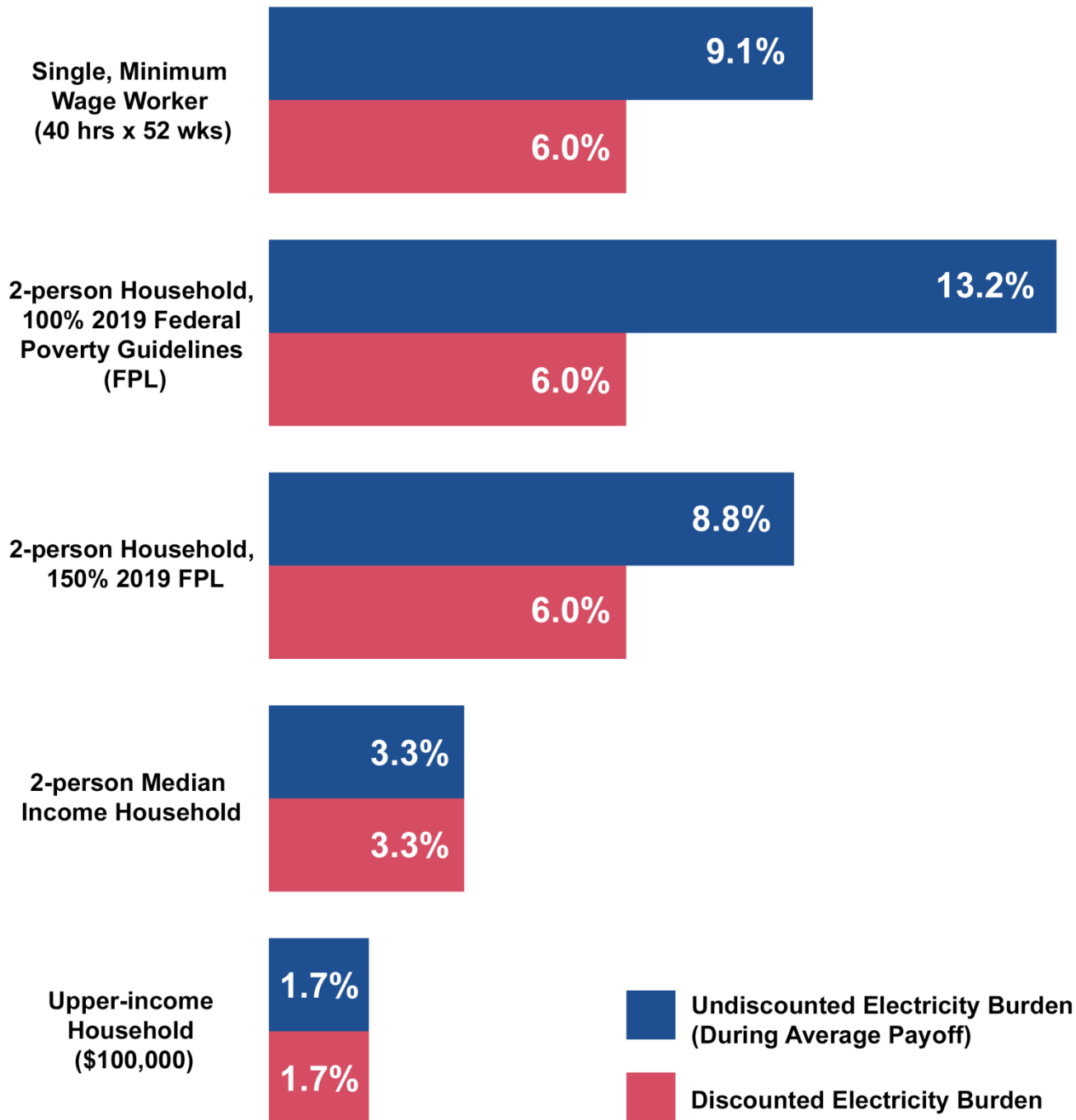


Chart 3: Tiered Discount – 6% Target Burden:

Undiscounted and Discounted Electricity Burdens by Selected Household Incomes



**Chart 4: PIPP Discount – 6% Target Burden:
Undiscounted and Discounted Electricity Burdens by Selected Household Income**



USAGE, CUSTOMERS, REVENUES AND BILL IMPACTS

The table below was generated using publicly-available data filed by electric utility companies. The table illustrates usage, number of customers, and revenues for each rate and customer class, and can be used to estimate bill impacts of a ratepayer-funded bill assistance/arrearage management program. Program-related bill impact estimates assume a universal volumetric charge applicable to all customer classes.

Table 10: Usage, Customers, Revenues, and Bill Impacts

sched_num_ttl	mwh_sold	revenue	Avg Num cstmr	Kwh Sale cstmr	Revenue Kwh sold	Annual Residential Expenditure	Monthly Residential Expenditure	Monthly bill impact
440 Residential								
E-12	700,407	\$95,364,732	102,391	6,841	\$0.1362	\$932	\$78	\$0.45
ET-1	266,703	\$33,892,316	24,896	10,713	\$0.1271	\$1,362	\$113	\$0.65
ET-2	682,426	\$87,648,630	68,463	9,968	\$0.1284	\$1,280	\$107	\$0.61
ECT-1R	86,943	\$10,108,119	4,912	17,700	\$0.1163	\$2,059	\$172	\$0.99
ECT-2	336,413	\$38,469,840	21,960	15,319	\$0.1144	\$1,752	\$146	\$0.84
R-XS	1,098,031	\$164,853,437	202,292	5,428	\$0.1501	\$815	\$68	\$0.39
R-BASIC	1,079,833	\$163,078,732	110,243	9,795	\$0.1510	\$1,479	\$123	\$0.71
R-BASICL	704,990	\$110,077,223	41,375	17,039	\$0.1561	\$2,660	\$222	\$1.28
R-TOU-E	4,272,171	\$638,005,054	279,510	15,285	\$0.1493	\$2,282	\$190	\$1.09
R-2	710,519	\$98,543,232	45,183	15,725	\$0.1387	\$2,181	\$182	\$1.05
R-3	2,716,749	\$340,793,200	120,162	22,609	\$0.1254	\$2,835	\$236	\$1.36
R-TECH	270	\$37,231	8	33,750	\$0.1379	\$4,654	\$388	\$2.23
E-12 EPR-2,6	76,939	\$14,380,698	29,185	2,636	\$0.1869	\$493	\$41	\$0.24
ET-1 EPR-2,6	54,862	\$7,143,711	8,931	6,143	\$0.1302	\$800	\$67	\$0.38
ET-2 EPR-2,6	243,127	\$31,851,004	33,762	7,201	\$0.1310	\$943	\$79	\$0.45
ECT-1R EPR-2,6	6,594	\$1,150,500	552	11,946	\$0.1745	\$2,085	\$174	\$1.00
ECT-2 EPR-2,6	29,117	\$5,365,070	2,972	9,797	\$0.1843	\$1,806	\$150	\$0.87

Table 10: Usage, Customers, Revenues, and Bill Impacts (cont.)

R-TOU-E RCP	35,360	\$5,855,729	3,243	10,903	\$0.1656	\$1,806	\$150	\$0.87
R-2 RCP	3,560	\$542,662	292	12,192	\$0.1524	\$1,858	\$155	\$0.89
R-3 RCP	7,189	\$1,058,128	483	14,884	\$0.1472	\$2,191	\$183	\$ 1.05
R-TECH RCP	19	\$2,822	1	19,000	\$0.1485	\$2,822	\$235	\$1.35
E-47	1,623	\$535,894	0	0	\$0.3302	\$0	\$0	\$ -
Green Power	0	\$86,482	0	0	\$ -	\$0	\$0	\$ -
Total Residential	13,113,845	\$1,848,844,446	1,100,816	11,913	\$0.1410	\$1,680	\$140	\$0.81
							\$0	\$ -
442 Commercial							\$0	\$ -
E-20	36,073	\$4,849,656	382	94,432	\$0.1344	\$12,692	\$1,058	\$6.09
E-30	4,829	\$1,326,787	4,312	1,120	\$0.2748	\$308	\$26	\$0.15
E-32-XS	1,540,390	\$247,524,340	99,149	15,536	\$0.1607	\$2,497	\$208	\$1.20
E-32 XS D	3,792	\$608,507	203	18,680	\$0.1605	\$2,998	\$250	\$1.44
E-32-S	2,431,063	\$328,483,026	18,075	134,499	\$0.1351	\$18,171	\$1,514	\$8.72
E-32-M	2,805,493	\$312,969,297	3,647	769,260	\$0.1116	\$85,849	\$7,154	\$41.19
E-32-L	2,141,694	\$205,780,576	594	3,605,545	\$0.0961	\$346,493	\$28,874	\$166.24
E-32TXS	2,151	\$353,439	145	14,834	\$0.1643	\$2,437	\$203	\$1.17
E-32TOUS	26,519	\$3,518,003	140	189,421	\$0.1327	\$25,136	\$2,095	\$12.06
E-32TOUM	72,547	\$7,366,248	64	1,133,547	\$0.1015	\$115,055	\$9,588	\$55.20
E-32TOUL	213,868	\$18,229,763	35	6,110,514	\$0.0852	\$520,616	\$43,385	\$249.78
GS-SCHM	59,297	\$7,965,897	91	651,615	\$0.1343	\$87,512	\$7,293	\$41.99
GS-SCHL	39,411	\$4,718,032	29	1,359,000	\$0.1197	\$162,672	\$13,556	\$78.05
E-34	492,818	\$40,940,367	17	28,989,294	\$0.0831	\$2,409,010	\$200,751	\$1,155.77
E-35	352,958	\$30,838,974	13	27,150,615	\$0.0874	\$2,372,964	\$197,747	\$1,138.47
E-221	338,490	\$35,564,382	1,331	254,313	\$0.1051	\$26,728	\$2,227	\$12.82
E-47	19,976	\$8,642,128	0	0	\$0.4326	\$0	\$0	\$ -

Table 10: Usage, Customers, Revenues, and Bill Impacts (cont.)

Green Power	0	\$222,857	0	0	\$ -	\$0	\$0	\$ -
EPR-2	7,903	\$808,194	25	316,120	\$0.1023	\$32,339	\$2,695	\$15.52
EPR-6	568,457	\$68,897,737	1,205	471,749	\$0.1212	\$57,176	\$4,765	\$27.43
E-56	3,378	\$745,755	1	3,378,000	\$0.2208	\$745,862	\$62,155	\$357.84
E-56R	152,576	\$14,074,455	19	8,030,316	\$0.0922	\$740,395	\$61,700	\$355.22
AG-X	1,033,685	\$70,307,462	116	8,911,078	\$0.0680	\$605,953	\$50,496	\$290.72
Total Commercial	12,347,368	\$1,414,735,882	129,593	95,278	\$0.1146	\$10,919	\$910	\$5.24
							\$0	\$ -
442 Industrial and Irrigation							\$0	\$ -
E-30	60	\$19,705	76	789	\$0.3284	\$259	\$22	\$0.12
E-32-XS	31,987	\$5,245,574	2,327	13,746	\$0.1640	\$2,254	\$188	\$1.08
E-32 XS D	50	\$7,045	1	50,000	\$0.1409	\$7,045	\$587	\$3.38
E-32-S	83,152	\$12,875,473	756	109,989	\$0.1548	\$17,026	\$1,419	\$8.17
E-32-M	214,171	\$25,895,483	297	721,114	\$0.1209	\$87,183	\$7,265	\$41.83
E-32-L	473,172	\$45,615,787	115	4,114,539	\$0.0964	\$396,642	\$33,053	\$190.30
E-32TXS	15	\$1,950	1	15,000	\$0.1300	\$1,950	\$163	\$0.94
E-32TOUS	1,423	\$150,729	6	237,167	\$0.1059	\$25,116	\$2,093	\$12.05
E-32TOUM	3,777	\$502,021	6	629,500	\$0.1329	\$83,661	\$6,972	\$40.14
E-32TOUL	50,226	\$4,503,984	8	6,278,250	\$0.0897	\$563,159	\$46,930	\$270.19
E-34	124,484	\$9,918,120	5	24,896,800	\$0.0797	\$1,984,275	\$165,356	\$951.99
E-35	567,699	\$43,513,937	15	37,846,600	\$0.0766	\$2,899,050	\$241,587	\$1,390.87
E-36 XL	47,204	\$3,751,238	1	47,204,000	\$0.0795	\$3,752,718	\$312,727	\$1,800.44
E-221	10,017	\$1,126,787	87	115,138	\$0.1125	\$12,953	\$1,079	\$6.21
E-47	567	\$169,667	0	0	\$0.2992	\$0	\$0	\$ -
EPR-6	27,651	\$3,327,090	24	1,152,125	\$0.1203	\$138,601	\$11,550	\$66.50
AG-X	601,898	\$31,759,995	3	200,632,667	\$0.0528	\$10,593,405	\$882,784	\$5,082.38

Table 10: Usage, Customers, Revenues, and Bill Impacts (cont.)

Total Industrials & Irrigation	2,237,553	\$188,384,585	3,728	600,202	\$0.0842	\$50,537	\$4,211	\$24.25
	0	\$ -	0	0	\$ -	\$0	\$0	\$ -
444 Public Street Lighting	138,266	\$21,805,883	1,169	118,277	\$0.1577	\$18,652	\$1,554	\$8.95
Total Public Street Lighting	138,266	\$21,805,883	1,169	118,277	\$0.1577	\$18,652	\$1,554	\$8.95
						\$0	\$0	\$ -
445 Other Public Authorities	1,932	\$126,762	145	13,324	\$0.0656	\$874	\$73	\$0.42
Total Other Public Authorities	1,932	\$126,762	145	13,324	\$0.0656	\$874	\$73	\$0.42
Unbilled MWh & Revenue								
Residential Unbilled	76,637	\$18,524,796	0	0	\$0.2417	\$0	\$0	
Commercial Unbilled	41,044	\$4,957,866	0	0	\$0.1208	\$0	\$0	
Ind & Irrig. Unbilled	-13,285	\$(1,124,145)	0	0	\$0.0846	\$0	\$0	
Public Str Lighting Unbilled	27	\$5,467	0	0	\$0.2025	\$0	\$0	
Other Public Auth Unbilled						\$0	\$0	
Total Unbilled MWh & Revenue	104,423	\$22,363,984	0	0	\$0.2142	\$0	\$0	
	0	\$ -	0	0	\$ -			

Table 10: Usage, Customers, Revenues, and Bill Impacts (cont.)

449.1 Provision for Rate Refunds	0	\$216,071	0	0	\$ -		
Total Provisions for Rate Refunds	0	\$216,071	0	0	\$ -		
<i>Total Sales (MWH) and Revenue From Sales (\$)</i>	27,838,964	\$3,473,897,558					
<i>\$20M Program Percent of Revenues From Sales</i>		0.58%					

Source: Arizona Public Service Company 2018 FERC Form 1, p. 304.

III. CONCLUSION

To win approval of programs and policies to enhance secure access to home energy services, advocates must “make the case” for program need and present a data-driven proposal outlining program design parameters. National Consumer Law Center has developed customizable templates to aid advocates and consumers in developing proposals for the implementation of comprehensive electric service bill payment assistance and arrearage management programs. The tables and charts in this report provide an example of template capabilities and outputs.

For technical assistance in developing a customized affordable bill program proposal, contact National Consumer Law Center Senior Energy Analyst John Howat at jhowat@nclc.org



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