ELECTRIC MUNICIPAL UTILITIES AND THE TRANSITION TO A CLEAN ENERGY FUTURE
A Guide for Municipal Utility Leaders
Climate Cabinet Education combines data science with policy expertise, local partnerships and cross-state experience to support climate leadership in local governments across the US — working towards a clean energy economy that creates jobs, improves community health, and unlocks local opportunity and leadership.

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Ken Colburn retired as RAP’s director of US programs in 2020. He continues to contribute to the clean energy transition part-time through his LLC, Symbiotic Strategies.

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Access to electricity is a prerequisite for many aspects of our lives, including refrigeration, heating and cooling, and health equipment, as well as internet-based necessities that connect people to employment, education, support services, and even health care. In modern-day life, electricity is not optional; it is a necessity, regardless of income. The ratio of the energy bill amount to income is called the energy burden. Energy burdens are typically far higher for low-income people because they have less opportunity to reduce their energy consumption in relation to income and face barriers to utilizing advances in energy efficiency. In other words, when low-income customers pay their energy bills, they have much less money left for other necessities than the average customer. Additionally, people of color, renters, and adults 65 and older have disproportionately high energy burdens compared with customers who do not fall into those categories.

The following section discusses policies municipal utilities can adopt to help customers facing high energy burdens pay their bills. Of course, payment plans and financial mechanisms discussed in this section are not a complete solution to dealing with the problem of energy burden. Targeted energy efficiency, weatherization, and distributed energy programs are critical for lowering energy usage and costs in the first place. Taking a multi-solution targeted approach that combines energy efficiency, weatherization, and distributed energy programs is essential for lowering energy usage and costs in the first place.
efficiency, bill assistance and payment plans can be useful, as many utilities are doing. See Section III-A for a discussion of energy efficiency and Section III-D for a discussion of community solar.

1. Bill Assistance Programs

For people with low income, managing the various costs associated with living, including energy, is a persistent struggle. Although a utility’s available funds can be limited, there are various ways that municipal utilities can help reduce the bill that customers receive each month, which can afford the customer a chance to keep up with the obligations the municipality sets.

a. Low Income Home Energy Assistance Program

The Low Income Home Energy Assistance Program (LIHEAP) is a federal program that allocates funds for bill assistance on a yearly basis. In 2021, $3.36 billion was allocated among the states, territories and Native American tribes. Each state determines the amount of the customer benefit, which can be used for winter heating, summer cooling, crisis and weatherization as determined by the state. Municipal utilities can and should ensure that their customers are included in the state allocation of funds for LIHEAP. This is an existing program that mainly requires outreach on the part of the utility.

b. Income-Based Discounts

California utilities with 100,000 customers or more are eligible for the California Alternative Rates for Energy program. Customers who are enrolled receive a 30% to 35% discount on their electric bill and a 20% discount on their natural gas bill based on income eligibility criteria, established at up to 200% of the federal poverty guideline. Municipal utilities implement these kinds of discounts themselves, too. Seattle City Light has a program providing a 60% discount retroactive to the date of the application for income-qualifying customers, which shows up as a 2% impact on rates as a whole. Flathead Electric Cooperative in Montana has a basic charge waiver program, under which eligible members receive a credit equal to half the basic charge on their bill each month. In most cases this credit is $11.36 per month. Some programs offer additional support to customers who qualify for LIHEAP. For example, Fort Collins Utilities in Colorado has an income-qualified assistance program that provides a 23% discount on certain elements of service. The program also offers educational resources on energy efficiency and conservation. Households that receive LIHEAP are eligible. North Attleborough Electric Department in Massachusetts offers a discount rate to customers eligible for LIHEAP. Other utilities have multiple discount tiers for different incomes, which have been designed to address energy burden as it occurs in their communities.


155 California Public Utilities Commission. (n.d.). California Alternate Rates for Energy (CARE). https://www.cpuc.ca.gov/care/. Also of critical concern are those households whose income is just above the 200% threshold and who also are struggling to make ends meet and pay utility bills. To address this concern, California created the Family Electric Rate Assistance program for households with three or more people in which the total household income is at or below 250% of the federal poverty guideline. These households receive a 12% rate discount. This program highlights the need to create discounts that help more than just the lowest income customers.


c. Usage-Based Discounts

There are also programs that have differentiated rates based on the amount of energy used. For example, the rate for up to 500 kWh per billing period could be discounted. This reduction gives extra incentive for customers to reduce usage. This approach pairs well with energy efficiency and weatherization programs, especially those designed to benefit low-income residents.

d. Percentage of Income Payment Plan

The percentage of income payment plan (PIPP) used by investor-owned utilities in Ohio, Pennsylvania and Illinois as well as a few other jurisdictions allows income-eligible customers\textsuperscript{159} to pay a percentage of their income instead of the full bill every month to keep service connected. Ohio set the percentage of income at 6% each for gas and electric service, for a total of 12%. In Illinois, 3% is used as the percentage of income, which better matches the energy burden for customers who are not categorized as low income. The unrecovered portion of the low-income customer’s bill is recovered from all customers (residential, commercial and industrial) through a rider on monthly bills that is reconciled periodically. The utilities track the unpaid bill amounts as arrears for the customer that they are required to pay back once they are no longer eligible for the program due to increased income. Depending on how long the customer was on PIPP and the size of the monthly bill, these arrearage amounts can prove to be insurmountable obstacles to a sustainable debt-free life. Therefore, a critical component of the PIPP program is the arrearage forgiveness program whereby for every month the customer pays the current bill plus a portion of the arrearage, the utility writes off one month of arrearage. In Ohio, this allows the customer to be debt free after two years.

\textbf{Table 4. Traditional percentage of income payment plan mechanism}

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer monthly income</td>
<td>$1,500</td>
</tr>
<tr>
<td>Customer payment (6% of income)</td>
<td>$90</td>
</tr>
<tr>
<td>Customer bill [$10 customer charge + (1,000 kWh x $0.12/kWh)]</td>
<td>$130</td>
</tr>
<tr>
<td>Customer arrearage amount collected through surcharge (bill amount of $130 minus customer payment of $90)</td>
<td>$40</td>
</tr>
</tbody>
</table>

Source: Migden-Ostrander, J. (2021, April 13). Use Less, Save More: Adding a Conservation Incentive to Percentage of Income Payment Programs

The significant upside of this program is that it addresses head-on the energy burden and tries to make bills more affordable. The downside is that there is no incentive to conserve, as the utility bill is based on income and not usage. Table 4 demonstrates how the traditional PIPP program works using Ohio’s 6% of income.\textsuperscript{160}

Under the above scenario, the customer pays \$90 of a \$130 bill, with the remainder going into the PIPP rider account. Under the conservation incentive, if the customer does not conserve, the customer continues to pay the same amount as under the traditional PIPP mechanism. There is no penalty for not conserving. However, if the customer can reduce energy consumption, the savings from that reduction are split between the customer and the utility. This means customers pay a lower energy bill for the month in which they conserved, and the utility PIPP rider account increases by a lower amount. It creates a win-win scenario as illustrated in Table 5,\textsuperscript{161} using the same numbers as in Table 4.

\textsuperscript{159}Eligibility in Ohio is set at 150% of the federal poverty guideline. The community action agencies that provide multiple services to low-income customers determine a customer's eligibility and certify it to the utility. The utility pays the agencies a small fee for their services.

\textsuperscript{160}Migden-Ostrander, J. (2021, April 13). Use less, save more: Adding a conservation incentive to percentage of income payment programs. Regulatory Assistance Project. https://www.raponline.org/blog/use-less-save-more-adding-a-conservation-incentive-to-percentage-of-income-payment-programs/

\textsuperscript{161}Migden-Ostrander, 2021.
Table 5. Percentage of income payment plan mechanism with conservation incentive

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer monthly income</td>
<td>$1,500</td>
</tr>
<tr>
<td>Customer payment (6% of income)</td>
<td>$90</td>
</tr>
<tr>
<td>Customer historical bill [$10 customer charge + (1,000 kWh x $.12/kWh)]</td>
<td>$130</td>
</tr>
<tr>
<td>Customer current bill with incentive mechanism [$10 customer charge + (900 kWh x $.12)]</td>
<td>$118</td>
</tr>
<tr>
<td>Value of savings due to conservation (1,000 kWh minus 900 kWh = 100 kWh x $.12)</td>
<td>$12</td>
</tr>
<tr>
<td>Customer share of savings on bill ($12 x $.50)</td>
<td>$6</td>
</tr>
<tr>
<td>Customer total bill ($90 minus $6)</td>
<td>$84</td>
</tr>
<tr>
<td>Customer arrearage amount collected through surcharge (bill amount of $118 minus customer payment of $84)</td>
<td>$34</td>
</tr>
<tr>
<td>Reduction in PIPP collection account ($40 minus $34)</td>
<td>$6</td>
</tr>
</tbody>
</table>

Source: Migden-Ostrander, J. (2021, April 13). Use Less, Save More: Adding a Conservation Incentive to Percentage of Income Payment Programs

In the example in Table 4, the customer reduced their monthly consumption by 100 kWh, which reduced the monthly bill by $12. That $12 is shared 50-50 with the customer so that the monthly bill amount goes from $90 to $84. The amount that goes into the PIPP rider account decreases from $40 to $34.

e. State and Local Community Programs

Many states as well as municipal utilities and community organizations have programs for bill assistance. For example, HeatShare, a program of the Salvation Army, raises private money that elderly, disabled and low-income customers can apply toward heating and air-conditioning bills. When sufficient funds are available, HeatShare grants can cover emergency repairs to energy-related equipment as well as broken windows and doors. Decatur Utilities in Alabama has Operation: Warm, which provides assistance to people who don’t qualify for LIHEAP. The community action agency that administers Operation: Warm decides who receives funds based on income and necessary expenses, such as medications. The program runs from December 1 through May 31, during which applicants are eligible for assistance only once. Donation-based programs can be helpful but should not be relied upon as the primary way to address energy burden. Thus, in addition to facilitating charitable donations, the utility should also employ some of the other mechanisms discussed in this section that lower the affordability threshold for low-income customers through discounted rates and significant energy efficiency, which lowers consumption and thus bills.

f. Extended Payment Plans

An extended payment plan is the key element to avert a disconnection, but it only works if the plan is flexible and realistic in terms of what a customer can afford to pay each month. Plans can be designed so the customer pays the current bill plus a percentage of the arrearage over a period of months (e.g., the current bill plus 10% of the arrearage) or pays a percentage of the total bill plus the arrearage over a period of months (e.g., 25% of the combined total of the current bill and arrearage, until the arrearage is paid off). Putting a customer on a budget bill also helps manage the seasonal highs and lows by having the customer pay one-twelfth of the estimated annual usage each month. However, it is important to provide the customer with information on actual usage and energy efficiency savings to help the customer keep the overall bill low and to avoid the surprise of a high reconciliation payment amount at the end of the year if actual usage exceeds estimated budget usage.

g. Moratoriums, Arrearage Management Plans and Debt Forgiveness

Disconnection moratoriums have been used in the past to avert tragedy due to disconnections during events with significant health impacts, such as cold weather. Due to the COVID-19 pandemic, an unprecedented number of customers found themselves with significant unpaid utility balances. Moratoriums on disconnections protected these customers who lost their incomes, but arrears still grew. This reinforced the need for better and more flexible arrearage management plans than utilities may have traditionally offered. Some customers received automatic grants, but those who saw the most debt relief were customers who entered into agreements, similar to extended payment plans, in which they make certain payment amounts per month

related to their arrears, and the utility waives a portion of their balances each time. Maine’s Versant Power forgives one-twelfth of the outstanding balance, with a cap of $300, per bill, so long as the eligible customer meets the payment conditions. For customers whose arrearages had grown to insurmountable levels, a significant amount of forgiveness was the only practical way to move forward for both the utility and the customer.

2. Late Fees and Reconnection Fees

Late fees are meant to operate as a disincentive for being delinquent on bills. But when a customer is delinquent on a bill because they do not have the money to pay when it is due, either because they have not received their paycheck yet or because they live on a fixed income, this is not a viable disincentive. Late fees and reconnection fees levied against low-income customers only make payment plans harder to manage and further reduce their means to cover their cost of living. Municipal utilities should either eliminate these charges and incorporate them into the general rate that all customers pay or waive these charges for low-income customers.

3. Disconnection Policy

Electricity is an essential service, and establishing policies to keep customers connected is vital. By prioritizing cost-saving access to energy efficiency upgrades and distributed energy for low-income customers, employing a combination of the programs listed above and fostering trust with customers through clear communication and robust community engagement, a utility can avoid having customers face disconnection in many cases.

If a customer does end up facing disconnection, clear communication is vital, and certain protections should be guaranteed. Utilities should provide 30 days’ notice for disconnection with ample communications to ensure the customer is aware of their options and knows the utility is there to help them stay connected. Minimal partial payments should be set at a small percentage of the outstanding debt (e.g., 10%) while the customer sets up an extended payment plan.

Some customers should be protected from disconnection regardless of payment status:

- Those that have a physician’s note or medical certificate that states that access to electricity is vital for the health of a household member. These policies exist in all 50 states for all investor-owned utilities, and many municipal utilities have adopted similar protections. Allowing for self-certification in emergencies or short-notice situations is recommended.
- Customers who are already working to get assistance or take advantage of one of the utility’s programs.
- All customers during periods of unsafe weather conditions, including when the forecast high temperature is 32 degrees Fahrenheit or below, during a dangerous heat index and when the air quality index is at unhealthy levels.
- All customers during public health emergencies, following the precedent of utility shutoff moratoriums during the COVID-19 pandemic, as appropriate considering local circumstances.

Ultimately, utility service is a necessity like food and shelter. Disconnection removes access to that necessity, and all steps should be taken to work and communicate with the customer to avoid that outcome. Unfortunately, customers are often afraid to be proactive in addressing an inability to pay, so it is incumbent for the utility to reach out to those customers with clear communications as to options that can help the customer stay connected. This is not only in the best interests of the customer, but it is good for society as a whole and helps the utility by mitigating against lost revenues from lost service.


164 For state-specific criteria, see National Consumer Law Center. (2021). Protecting seriously ill consumers from utility disconnections; Appendix A: Serious illness criteria in each of the 50 states and D.C. https://www.nclc.org/images/pdf/energy_utility_telecom/consumer_protection_and_regulatory_issues/Serious_Illness_Ap_A.pdf. In some states where the utility commission has capacity to regulate municipal utilities these may apply, but individual municipal utilities should make sure their policy is not allowing customers to fall through the cracks.

Tracking progress on energy burden with performance incentive metrics

Performance incentive metrics are a useful tool to measure progress on issues that have been identified as public policy priorities. Reporting on metrics is a transparent way to inform the public of a municipal utility’s actions and progress in meeting those metrics. In Hawaii, for example, performance incentive metrics were established, which required the utility to report on:

- Energy burden in terms of the typical and average annual bill as a percentage of average income for low-income households.
- Percent of customers entering into a payment arrangement.
- Percentage of disconnections due to nonpayment.

Puerto Rico has also established performance metrics to address low-income issues. The metrics include the number of:

- Disconnections by customer class.
- Customers enrolled in a payment plan by class.
- Customers defaulting from a payment plan by class.
- Customers completing a payment plan by class.

The latter two are especially important to ensure that the payment plans the utility establishes are flexible, realistic and achievable.166

Useful Resources on Energy Burden


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