Decreasing the energy burden faced by low-income populations is a priority for many state and local governments. Traditional residential financing programs and incentives often exclude low-income and moderate-income families who can’t provide the required upfront payment and/or are credit-challenged. In CELICA, partners were interested in the on-bill tariff model as a means to provide a service to low-income and moderate-income customers while avoiding consumer credit risk. This issue brief explores how the on-bill tariff model works both to finance energy upgrades, and take most of the default risk off of the consumer as the model is considered an expenditure by the utility. On-bill tariffs, while not designed solely for low-income households, have been used to provide energy efficiency improvements in Arkansas, Tennessee, North and South Carolina, Oklahoma, California and other states where the programs are accessible to households of all income levels.

After providing a concise overview of various forms of utility on-bill financing for home energy improvements, this issue brief explains how on-bill tariffs differ from other types of on-bill financing, and what its benefits can be for low-income households. Strategies for state and local governments that want to support on-bill tariff programs are then described with examples and resources to further explore.

**What Is On-bill Financing?**

Approximately 110 utilities across the country, including publicly-owned utilities (i.e., municipal and rural electric cooperatives) and investor-owned utilities, offer some form of on-bill financing. Utilities vary greatly on how they structure their programs, such as what financing terms are offered and what energy measures are allowable. “On-bill financing allows the customers who can afford having interest added to their loan repayment and can pass credit-worthiness tests, like FICO credit score and other methods to avoid the upfront cost of the clean energy upgrade, but to incrementally pay for it on the utility bill. On-bill repayment options require the customer to repay the loan through a charge on their monthly utility bill as well, but with this option, the upfront capital is provided by a third party, not the utility.” In both cases, the loan is made to an individual and upon sale of home, the borrower usually must pay off loan, although some program design allows transfer to the next occupant.

With all on-bill structures (on-bill loans, on-bill repayment, and on-bill tariffs), utility customers are able to make cost saving energy improvements like efficiency, storage and solar photovoltaic generation to their homes or businesses and repay the project costs over time on their monthly utility bill. On-bill financing and on-bill repayment, also known as on-bill recovery, are structured in the form of a loan from the utility that collects repayment via customer bills. With on-bill loans, the utility is the capital provider whereas with on-bill repayment loans, capital is provided by a third party lender. On-bill tariffs are also connected to utility bills but are unique in ways that are explored in the next section.

**How Do On-bill Tariffs Differ?**

Like other types of on-bill financing, an on-bill tariff allows utility customers to make energy efficiency improvements in their homes and repay those investments over time on their utility bill. On-bill tariffs differ in that they are not a loan, but a charge or “tariff” tied to the utility meter. The utility pays for the upfront cost of home energy improvements, such as air sealing, LED lighting retrofits, and home heating and

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2 [https://www.energy.gov/eere/slc/bill-financing-and-repayment-programs](https://www.energy.gov/eere/slc/bill-financing-and-repayment-programs)
cooling units, which are repaid overtime by way of an additional charge on the customer’s bill. If adequate consumer protections are built into the program design, the customer’s monthly bill is often lower after the improvements even with this additional charge as the energy savings are typically significant.

On-bill tariffs are associated with the utility meter, not an individual. Utilities therefore do not have to evaluate occupant credit scores, debt to income ratios, or screen for homeownership in order to initiate the energy efficiency work. Utilities are authorized by utility commissions or other regulatory bodies to include tariffs on utility bills to recover costs such as infrastructure improvements. Energy performance improvements in the home are viewed as system reliability improvements, allowing the utility to add a tariff to the customer’s bill to recover costs. This is similar to how utilities pay for necessary equipment, except the improvement serves just one utility meter. The tariff charge will remain attached to the meter at the improved home, regardless of who occupies the property, until the improvement is paid off.\(^3\) This transferability not only reduces risk to homeowners; it also allows renters to participate by making it so renters repay the utility costs for the improvements while also benefitting from the cost savings from the improvements on their bill. In an on-bill tariff program, the customer pays off the cost of the home improvements just as they do for other utility charges.

**Differences in Non-payment – Loan and Tariff Programs**

As a utility charge to the meter – not a loan obligation to the household – the financial consequences of nonpayment of an on-bill tariff are the same as not paying the utility bill. Nonpayment may lead to power disconnection where that is allowable. Some programs are designed such that in a nonpayment situation, as with any utility charge, outstanding payments would come due; however, unlike a loan, there would be no acceleration. In other words, the entire balance of the project cost would not come due as it may for a loan.

**Differences in Repayment for Loan and Tariff Programs**

Both on-bill loans and on-bill tariffs can be structured to be cost effective—where the energy savings exceed the monthly debt service. However, an on-bill tariff can allow for a longer flexible term for repayment – often 10-12 years. As a result of a longer payback period, on-bill tariff programs have greater flexibility to make utility bills cash flow positive, reducing the energy burden for participating low-income households.

**Figure 1: Key Differences Between On-bill Loans and On-bill Tariffs**

<table>
<thead>
<tr>
<th></th>
<th>On-bill Loan</th>
<th>On-bill Tariff</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How is debt repaid?</strong></td>
<td>Loans repaid by customer on monthly electric bill</td>
<td>Cost recovery fee paid by customer on monthly utility bill</td>
</tr>
<tr>
<td><strong>Can repayment responsibility transfer to new homeowner or occupant?</strong></td>
<td>Some programs allow transfers but not automatic</td>
<td>Includes mechanisms to transfer tariff obligation to new occupants</td>
</tr>
<tr>
<td><strong>Utility shutoff possible for non-payment?</strong></td>
<td>Yes, depending on program design</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Underwriting criteria</strong></td>
<td>Necessary for many loan programs</td>
<td>Not necessary for the transaction</td>
</tr>
<tr>
<td><strong>Renters allowed to participate</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Benefits of On-bill Tariff Programs
The benefits of on-bill tariff programs include the following:
(Note: where similar benefits can be found in on-bill loan programs that is noted as well)

- Low-income and moderate-income households’ ability to access energy efficiency and renewable energy increases when utilities pay upfront costs for projects at these households. These households have limited discretionary income and are often excluded from participating in on-bill loan programs that require creditworthiness and/or an upfront payment.

- The on-bill tariff payment is attached to the meter, not the occupant. This can benefit participants who are renting, if they move before the energy benefits have been fully paid off. When the new occupant takes over payments, the original participant does not have to keep paying for efficiency benefits they no longer receive or pay off the outstanding dollar amount of a loan. Robust consumer protections must be in place for on-bill tariff programs to notify and explain to new residents that there is an additional financial obligation associated with the property.

- On-bill tariff programs may choose through program design to reduce eligibility criteria to whether a project is cash-flow positive (i.e., estimated bill savings are greater than the on-bill payments). This protects the low-income participant from incurred a monthly charge larger than the savings and thereby adding to their monthly financial responsibilities.

- In model on-bill tariff programs, there are protections both of the consumer and the utility, to ensure both parties fully meet their obligations.

How Can State and Local Governments Help?
State and local governments have helped engage utilities, low-income housing entities, and low-income energy assistance and education and outreach organizations to understand how an on-bill tariff program would best meet the needs of low-income households. They have also provided information and technical assistance to utilities including lessons learned and implementation models from other jurisdictions. States can also offer underwriting to mitigate any perceived risks, as Arkansas did in the Ouachita HELP PAYS® example provided below.

States can also create and finance green banks, which in turn can finance all types of on-bill programs. In Hawaii, for example, the state legislature created the Hawaii Green Infrastructure Authority, which in 2018 launched the Green Energy Money Saver (GEM$) on-bill tariff program. The program was developed in partnership with the Public Utilities Commission and investor-owned utilities. The GEM$ provides funding to deployment partners, such as financial lenders and energy efficiency and renewable energy developers. Investor-owned utilities in the state collect the repayment as a tariff.4

Program Profile: Ouachita HELP PAYS® and the State of Arkansas Loan Loss Reserve
Ouachita Electric Cooperative is a rural electric cooperative in Southwest Arkansas that offers the HELP Pay As You Save® (PAYS®) on-bill tariff to its members to enable the installation of money saving efficiency measures with no up-front costs. Although this program is available to households of all income levels, it overcomes traditional barriers to low-income household participation by, for example, removing upfront costs. Renters pay off the cost of improvements from which they benefit over time on their bill, thereby addressing the split incentive they may otherwise have with landlords to pay for improvements. Consistent with the PAYS® model, the Ouachita program requires that monthly energy savings exceed the debt service by at least 20%, providing assurances that the cost of the upgrades will not be an additional stress to the household. To encourage programs like Ouachita HELP PAYS®, the Arkansas State Energy

Office set up a loan loss reserve to mitigate the risk of losses from on-bill programs in the state. Since establishing the loan loss reserve in 2011, there have been no losses and the reserve has not been used.

To learn more about Ouachita HELP PAYS®, read the full case study.

For More Information on Existing On-bill Programs

Below are examples of rural electric co-ops and investor-owned utilities that have worked with their oversight authorities — a board or public utility commission — to successfully put on-bill programs in place. Links are included to approved on-bill tariff schedules and regulatory filings.

- Upgrade to $ave, North Carolina
- HELP PAYS®, Arkansas
- How$martKY, Kentucky (Part 1, Part 2)
- Green Jobs, Green New York (utility role is to recover NYSERDA capital through on-bill recovery legislation, processes)

Resources

- On Bill (Inclusive) Financing for Energy Efficiency, Southeast Energy Efficiency Alliance & Clean Energy Works