South Carolina Co-ops Implement “Help My House” On-Bill Financing Pilot

July 2012

Central Electric Power Cooperative (Central), based in Columbia, South Carolina, is the wholesale power provider for the state’s 20 distribution cooperatives (co-ops). Central has been implementing energy efficiency programs as a strategy to bring down the rising costs of meeting the region’s growing demand for energy. In 2010, Central’s Board of Directors adopted a set of energy efficiency objectives including a 10 percent reduction in residential energy use within 10 years and a reduction in average wholesale power costs to serve residential users, while maintaining or improving member satisfaction. Working closely with the co-op’s marketing and public policy partner, the Electric Cooperatives of South Carolina (ECSC), Central is striving to accomplish its energy efficiency goals in a region where family income levels are 15 percent below the national average.

On-bill financing is one of the strategies being implemented to help South Carolina homeowners, who are often unable to participate in energy efficiency programs because they lack the funds or access to affordable financing for purchasing energy efficiency measures. On-bill financing enables a homeowner to borrow money for energy efficiency improvements to their house and repay it as part of their electric bill.

EESI received funding from the Doris Duke Charitable Foundation to assist with Pilot design and outreach and to report to key stakeholders, including Congress and state and national opinion leaders. Central applied for a loan from the U.S. Department of Agriculture’s Rural Utility Service program, and was approved for a $740,000 loan that enabled the Pilot to offer 2.5 percent financing to participating homeowners, the first time this type of loan was applied to energy efficiency improvements.

The Pilot was designed and launched in the spring of 2011, with the purpose of developing a template that could be used for a full-scale program. Consistent with South Carolina legislation authorizing utilities to offer on-bill financing, the legislation eliminated the need for credit checks by allowing loan repayment to be tied to the meter rather than to the borrower and by allowing for disconnection of power if loan payments were not made. The legislation also required an energy audit, utilities to provide a list of qualified contractors upon request, and final inspection of the retrofits by an auditor certified by the Building Performance Institute or a similar organization.

KEY FEATURES OF THE SOUTH CAROLINA CO-OPS’ “HELP MY HOUSE” PILOT

1. Eight co-ops participated in the Pilot with a goal of achieving 100 whole-house retrofits with on-bill financing tied to the meter. Each co-op had somewhat different approaches and timelines.
2. Over 20 contractors were trained and approved for the Pilot, with contractors agreeing not to be paid for completed work until a post-retrofit comprehensive audit verified that the work conformed to the Pilot’s retrofit standards (i.e. blower door, duct blaster testing).

3. Marketing was designed to reach co-op members who had higher than average electric energy use.

4. Each home received a walk-through audit (with REM Design software analysis and HVAC equipment testing) and a comprehensive audit before a loan could be approved.

5. Two affiliated organizations were involved: 1st Cooperative Federal Credit Union prepared and processed loan documents and KW Savings paid contractors and managed loan repayments.

6. The audits identified an ample supply of cost-effective energy efficiency improvements (featuring a projected positive cash flow with a 10-year term, 2.5 percent interest loan).

7. By February 2012, 125 homes had received retrofits (53 single family detached and 72 mobile homes) or 125 percent of the Pilot’s goal.

8. Most of the homes were poorly insulated, with attic insulation, air sealing and duct sealing all needed on more than 90 percent of the homes. Additionally, 84 percent of participants had HVAC retrofits.

9. The average loan was $7,684, with estimated annual savings of nearly 11,600 kWh per home, for an average projected simple payback of 5.98 years.

10. The Pilot demonstrated “deep impact” savings with on-bill financing (an average of 35 percent per home), substantially higher than what many other utility whole-house retrofit programs may be achieving.

11. There will be a full year of data collection to ascertain actual energy savings.

### PROJECTED ENERGY SAVINGS

The average interim projected energy cost savings for the participants was greater than the average loan payment, such that the homeowners would have a net average benefit of $406 annually (energy cost savings per year minus the annual loan payments).

<table>
<thead>
<tr>
<th>Projected Energy Savings from the Average Home Participating in the Pilot</th>
<th>MONTHLY</th>
<th>ANNUAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected Electric Savings (kWh)</td>
<td>966</td>
<td>11,593</td>
</tr>
<tr>
<td>Projected $ Savings</td>
<td>$107</td>
<td>$1,285</td>
</tr>
<tr>
<td>Loan Repayment</td>
<td>$73</td>
<td>$879</td>
</tr>
<tr>
<td>Net (Savings – Loan)</td>
<td>$34</td>
<td>$406</td>
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</tbody>
</table>


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