



## WEATHERIZATION/ELECTRIFICATION

### Small NV-UT Co-op Innovates to Weatherize and Electrify Members' Homes

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#### Summary

With the pandemic threatening to delay its efficiency project beyond the funding deadline, Wells Rural Electric Company got creative to meet the deadline and bundle efficient air-source heat pumps into weatherization retrofits. Three hundred households received deep energy retrofits that lowered their bills, improved home comfort and achieved Wells' and energy savings goals. The co-op's strategy and its nimble response to changing conditions may be useful to other electric utilities seeking to integrate HVAC electrification with weatherization.

#### Weatherizing in Rural America

Since 1981, the Bonneville Power Administration (BPA) has incentivized more than 2,500 average megawatts (equivalent to the energy produced by continuous operation of one megawatt of generation capacity) of energy conservation by its utility customers. Through BPA Energy Conservation Agreements (ECAs), BPA's utility customers choose which qualifying efficiency measures to pursue. But this flexibility does not extend to funding a switch from gas/propane to electricity for heating or other uses, which is prohibited under BPA's energy efficiency programs.

For Wells Rural Electric Co-op—a 6,000-member electric cooperative in Northeastern Nevada and Toole County, Utah—changing energy choices among its member-consumers led to an unexpected opportunity for WREC to use its BPA funding to finance efficient air-source heat pumps for member-consumers. For some time, rising propane costs in WREC's service territory had been motivating many consumer-members to switch from propane to electric resistance heating—the least costly form of electric heating to install and the most costly to operate. So, WREC could use its BPA ECA funding to replace electric resistance heating with high-efficiency air-source heat pumps as part of a broader weatherization program—something that wouldn't have been allowed had the consumer-members not already “fuel-switched” from fossil fuels to electricity.

Still, WREC faced other challenges that threatened its ability to execute its ECA with BPA. It had no local community action program (CAP) or other partner capable of screening applicants for income eligibility, nor were there adequate trade ally contractors in its area to conduct the efficiency retrofits—a capacity shortage made worse by the pandemic. Additionally, the pandemic caused other delays that put WREC in danger of losing its time-limited BPA funding.

#### The key features of WREC's strategy included:

- To attract the services of a qualified contractor outside its region, WREC aggregated the work into a single contract that stipulated completion before the BPA deadline.
- WREC worked with a community action program (CAP) from nearby Oregon to administer and certify income eligibility.
- WREC budgeted its own funds to meet additional expenses for activities outside its ECA with BPA in order to maximize value from the BPA-funded program.
- WREC deployed its contractor's staff to perform door-to-door outreach to member-consumers.

## Leveraging Previously Collected Data

WREC leveraged data on residential properties' appliances, energy usage and weatherization needs that had been developed during earlier lighting retrofit programs by its partner, the National Information Solution Cooperative (NISC). This data proved critical for WREC to execute its BPA-supported program because it provided detailed information on many consumer-members' homes, and this information streamlined the process of creating a scope of work and draft contract for air-sealing, insulation, HVAC upgrades, window replacements and other measures. With the specificity enabled by the NISC database and the aggregation of all work into one contract, the scope and draft contract attracted a regional contractor that completed all the work by WREC's deadline.

## Electrification

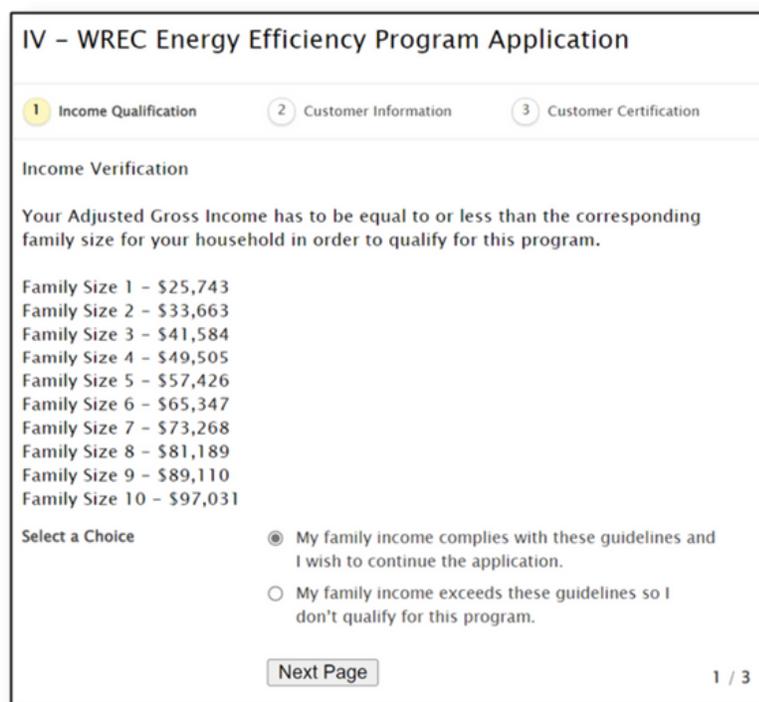
Residential member-consumers who had done their own "fuel switching" to electric resistance heating to avoid the high costs of propane presented WREC with strong opportunities to use BPA funds to upgrade residential heating to efficient heat pumps—which also provide cooling. Because of the inefficiency of electric resistance heating, these upgrades provided the reductions in annual kilowatt-hours that BPA's program funding required, as well as improving home comfort. Under the program, one ductless mini-split heat pump was authorized allowed per qualifying home.

## Customer engagement and income qualification

To ensure that member-consumers applying for energy upgrades met BPA's income eligibility requirements, WREC worked with an Oregon-based community action program (CAP) to develop a simple, user-friendly online form to collect required information from applicants.

Another key strategy for member-consumer engagement: having the contractor's staff go door to door to offer energy upgrades. Co-op staff report that some consumer-members who were initially skeptical were swayed by hearing about the benefits from neighbors who'd been among the first to receive the upgrades. "Word of mouth is a powerful advertising tool, and our members started to talk," noted Spencer Egbert, Director of Facilities and Energy Services at WREC.

Egbert also credited CLEAResult, the company that facilitates BPA's energy efficiency rebates, with providing WREC with valuable help to administer energy incentives efficiently. Importantly, the credibility of the co-op as originator of these efforts also helped overcome hesitancy among member-consumers and enabled WREC to engage 300 member-consumers—roughly 5 percent of its membership—in substantial residential energy efficiency upgrades.



**IV – WREC Energy Efficiency Program Application**

1 Income Qualification    2 Customer Information    3 Customer Certification

**Income Verification**

Your Adjusted Gross Income has to be equal to or less than the corresponding family size for your household in order to qualify for this program.

Family Size 1	- \$25,743
Family Size 2	- \$33,663
Family Size 3	- \$41,584
Family Size 4	- \$49,505
Family Size 5	- \$57,426
Family Size 6	- \$65,347
Family Size 7	- \$73,268
Family Size 8	- \$81,189
Family Size 9	- \$89,110
Family Size 10	- \$97,031

Select a Choice

My family income complies with these guidelines and I wish to continue the application.

My family income exceeds these guidelines so I don't qualify for this program.

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**Figure 1: WREC's Web Form to Collect Information from Consumers/Members**

### Bottom Line

Weatherization and Electrification Together can provide tremendous benefits to consumers, the electric grid, and the environment. While challenges exist to these types of projects, they can be overcome with innovation.

Learn more at: <https://be-league.org/we-together/>