

# TechSurveillance

## PROGRAM IMPLEMENTERS:

### Directory of Energy Efficiency Implementation Contractors

*Part three of a three-part series*

BY **AMY WHEELLESS, PATRICK KEEGAN & CHRISTINE GRANT**, COLLABORATIVE EFFICIENCY  
AUGUST 2016

#### ARTICLE SNAPSHOT:

##### *What has changed in the industry?*

Most electric cooperatives currently offer some kind of energy efficiency program to their member-consumers. However, cooperatives are facing increasing pressure from policymakers, regulators, and consumers to increase the number and scope of energy efficiency programs to meet emissions reductions and provide additional member services.

##### *What is the impact on cooperatives?*

As described in Volume 1 in this series, *Energy Efficiency Program Implementers as an Extension of Co-op Staff*, many electric cooperatives have limited staff resources to dedicate to designing and implementing additional and expanded energy efficiency programs. Rather than hiring additional staff, co-ops could choose to outsource some or all program administration services to implementation contractors who have experience and expertise designing and implementing energy efficiency programs for electric consumers.

##### *What should cooperatives know or do about it?*

Hiring the right implementation contractor is important for the success of an energy efficiency program. This Volume expands on the past articles in the *Program Implementers* series, and describes the key capabilities that implementation contractors can offer electric cooperatives. It also provides a brief directory of selected implementation contractors with experience implementing utility energy efficiency programs.



## INTRODUCTION

The *Program Implementers* series provides information to electric cooperatives interested in working with third-party implementation contractors (ICs) for administering all or part of an energy efficiency program.

- Volume 1, *Energy Efficiency Program Implementers as an Extension of Co-op Staff*, explains the reasons for hiring an IC to assist with an energy efficiency program. For example, ICs with experience in energy efficiency programs can provide electric co-ops with regulatory, programmatic, and technical expertise. In addition, using an IC instead of hiring more staff members can give a program more flexibility and be more cost-efficient.
- Volume 2, *Identifying, Hiring, and Managing an Energy Efficiency Implementation Contractor*, provides electric co-ops with a framework for how to contract with and manage an IC, including how to develop and issue a Request for Proposals (RFP).

This article, Volume 3, describes the current state of the IC market, expands on key capabilities that ICs can offer to electric co-op energy efficiency programs, and presents a directory of selected ICs that have experience working on utility energy efficiency programs and interest in working with electric cooperatives. This information can be used to help identify ICs to target with an RFP, a Request for Information (RFI), or an informal cost solicitation.

## IMPLEMENTATION CONTRACTOR MARKET

In recent years, spending on energy efficiency has almost doubled: from 2008 to 2014, U.S. electric energy efficiency program expenditures grew from \$3.4 billion to \$6.7 billion (CEE, 2013/2015). It is expected that this spending will only continue to grow: twenty-four states have Energy Efficiency Resource Standards (EERS), which mandate regulated utilities achieve certain levels of energy efficiency, many with increasing levels over time, and there is potential that

pending federal regulation on carbon dioxide emissions could prompt more state actions related to energy efficiency (ACEEE, 2015/EPA, 2016). For their part, most co-ops have some experience with energy efficiency, and almost three-quarters of co-ops say they plan to significantly expand their energy efficiency offerings in the near future (NRECA, 2013).

A Harris Williams & Co. study found that, in 2009, the majority (55 percent) of the ratepayer utility energy efficiency spending was used for incentives (e.g., rebates, interest buy downs), but that the next largest amount (30 percent) was spent on out-sourced program services. In 2009, third-party program services accounted for about \$1.3 billion, of which 75 percent, or \$990 million, was used for program implementation and management. Smaller amounts were spent on program design services (\$132 million) and on evaluation, measurement, and verification (EM&V) services (\$198 million) (HW&Co., 2010).

More recent data of the size of the energy efficiency IC market are not available, but estimates and anecdotal information indicate that the size of the market has at least increased with the growth in energy efficiency spending. For example, the Association of Energy Service Professionals (AESP), the industry association representing professionals in the energy efficiency industry — including ICs — has seen a quadrupling in its membership in the last decade. Most of the growth has been from vendors supporting Investor-Owned Utility (IOU) energy programs (Hargrove, 2016). E Source, a research organization for utility issues, estimates that, based on the growth in U.S. energy efficiency spending, outsourcing to third-parties makes up 30 to 40 percent of utility budgets, or about \$2 billion to \$2.7 billion in 2014 on outsourced energy efficiency spending (E Source, 2016). Interviews with leaders in this industry also indicate that the market for ICs has grown — they noted increased participation at industry conferences and increased competition on RFPs.

It is common for IOUs to work with third-party companies for some part of their energy efficiency and demand response programs. Franklin Energy, a large implementation contractor, estimates that more than 90 percent of IOUs are using a third-party specialist firm for some energy efficiency or demand response work, including program design, implementation, and evaluation (FE, 2016). IOUs usually serve tenfold or more consumers than the typical co-op and have much larger staffs, but yet they still choose to work with ICs. Reasons why a utility would use a third-party IC for an energy efficiency program are summarized in **Volume 1** of this series and include staffing flexibility, specific programmatic or technical expertise, reduced liability, and cost efficiencies. In addition, as the market for ICs is very competitive, and as many ICs work for regulated utilities with evaluation requirements, the emphasis on quality assurance and control is very high.

**KEY CAPABILITIES IN ENERGY EFFICIENCY IMPLEMENTATION CONTRACTOR INDUSTRY**

ICs can provide a range of services for energy efficiency programs. As represented in Figure 1, ICs can also provide tailored levels of service, depending on the co-op’s needs. For example, while some co-ops may want an IC to provide and implement a full turnkey energy efficiency program, others may want to manage all member–consumer interactions and have the IC

handle administrative responsibilities, like application processing and project tracking. Some co-ops may have an established program and are only looking for some supplementary support from an IC, such as assistance with marketing or launching a new incentives program.

ICs offer a number of capabilities of interest to co-ops wanting to develop or expand an energy efficiency program, including:

**Program Design Support**

For an energy efficiency program to be implemented effectively, it must be designed well. Many ICs offer program design consulting to help utilities define the key elements of the program, such as energy savings goals, program budget, eligibility for participation, size of incentive payments, and evaluation requirements.

**Program Management and Data Tracking**

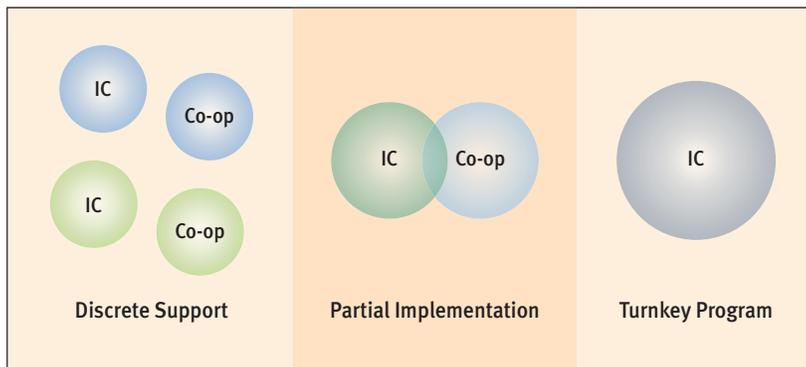
ICs can take on many of the administrative functions associated with an energy efficiency program, such as processing applications, issuing rebates, and tracking project details, including member-consumer information, measures implemented, and savings achieved. Many ICs also have proprietary software tools that are specifically designed for tracking utility energy efficiency programs.

**Program Marketing**

Websites, program brochures, and press releases are some of the ways that member-consumers will learn about a program. ICs are experienced in developing and distributing effective materials to interested consumers.

**Consumer Engagement**

ICs can answer and direct customer questions through email and by phone, talk with consumers at community events, or perform energy advising services directly in homes. Often, if co-ops prefer, these IC staff members can wear co-op branded shirts, have co-op branded vehicles, and hand out co-op business cards — they basically act as an extension of co-op staff. For



**FIGURE 1: Implementation Contractors Can Provide Different Levels of Support**

example, as shown in Figure 2, Wells Rural Electric Cooperative, which serves parts of Nevada and Utah, contracted with Efficiency Services Group (ESG) to perform direct install services in their territory; ESG staff members wear Wells REC shirts and put co-op logos on their trucks. However, for co-ops that prefer to manage these direct member-consumer interactions, ICs can support consumer engagement in other ways by tracking member-consumer details or developing marketing materials, for example.

**Trade Ally Organization**

A good trade ally network can be a key part of marketing and implementing a program, but it takes work to recruit local contractors and provide training and information about your programs. Many ICs are experienced in recruiting and screening trade allies, developing agreements, assembling manuals, and conducting trainings.

**Energy Savings and Regulatory Reporting**

Some co-ops are subject to state mandates on energy efficiency and must submit periodic



**FIGURE 2: Wells Rural Electric Cooperative contracted with Efficiency Services Group, whose staff wear co-op logo shirts.**

reports on costs and energy savings. ICs can assist with determining the energy savings associated with individual efficiency measures and can develop regulatory reports.

**EXAMPLES OF OFF-THE-SHELF PROGRAMS**

ICs with years of experience in the utility energy efficiency industry have developed programs that can be customized and implemented in different settings. The following are a few of the offerings that may be relevant to co-ops:

- ICF offers the *Quick Home Energy Check-up* program, which is a walk-through energy audit by a professional, with direct install of energy efficient products, like faucet aerators, efficient lighting, and water heater insulation. ICF can perform the energy audits and direct installs, and can manage scheduling with consumers. However, if co-op staff members would rather perform the audits and direct installs, ICF will discuss this alternative implementation method.
- Franklin Energy offers the *Rural Small Business* program, which was developed to support small businesses in large

rural utility territories where it may be difficult to have regular in-person interactions. Small businesses in participating utility territories receive one of three education kits customized to their type of business — retail, office, or restaurant. While all kits include LED lighting, for retail locations, the lighting is conducive to track or spotlighting. The office kit also includes a smart power strip, and the restaurant kit includes an energy efficient pre-rinse spray valve. Franklin Energy is able to implement this program from one of their offices, rather than on-site with the utility.

- GoodCents can prepare “*Conservation Kits*” with energy efficient products. These kits are tailored for each specific energy efficiency program, but often include efficient products such as LED light bulbs and water efficiency products.

### ENGAGING AN IMPLEMENTATION CONTRACTOR

Research for this paper found 35 U.S. companies providing third-party energy efficiency program implementation services for utilities; there are likely other companies working in this field. At the end of this article is a directory with details on a selection of these companies who could work with electric co-ops on energy efficiency.

Utilities often issue RFPs to find an IC to work with or may ask for more informal cost quotes for implementing programs. Many of the major ICs work nationwide on a variety of energy efficiency programs and usually have business development teams that search out these RFP opportunities and make sure they are on vendor lists. These teams invest time and money into building relationships with utilities.

ICs, however, do not respond to every RFP or request for quotes: a project must be the right fit for their key capabilities and it also must make financial sense, which depends on a number of factors. For example, if a project would require bringing in a staff person to work with the co-op's staff for an extended period, but the IC does not already have a local office or nearby work at another utility, it may not be financially feasible to respond to the request, if the size of the contract would not pay for a full-time staff person with associated overhead costs. If, however, a group of cooperatives collaborated on a project, this larger project could attract more responses from ICs and bring down fixed costs associated with responding to a contract. (**Volumes 1 and 2 of this series** encourage electric cooperatives considering hiring an IC to look for ways to collaborate with other distribution co-ops or with their generation and transmission (G&T) cooperative to help achieve these economies of scale.) If an IC is implementing a program at a nearby IOU or municipal utility, the IC could also be open to working on a smaller contract with a nearby

utility, thereby sharing some of the administrative functions between the co-op and other utility. A project that does not require extended use of on-site staff members, or that can be managed remotely, could also have lower overall project cost. From interviews with the major ICs, a contract that requires substantial on-site staff time would need a budget to cover the salary and overhead costs of the staff persons working with the co-op. However, discrete and remote projects or extensions of projects already in place at nearby utilities could be managed with a lower budget.

As discussed in **Volume 2**, there are a few ways to structure compensation to ICs: time-and-materials, performance-based ("pay-for-performance"), or a hybrid that combines components of both. Pay-for-performance contracts are becoming more common between utilities and ICs. For ICs that implement most or all of an energy efficiency program, a pay-for-performance contract can ensure that the program is meeting its energy savings targets or customer satisfaction goals, thus reducing risk for the utility.

### DIRECTORY OF IMPLEMENTATION CONTRACTORS

The **Appendix** at the end of this report provides self-reported information from a selection of ICs that work nationwide on all aspects of utility energy efficiency programs and have interest in working with small utilities and electric cooperatives. This directory includes:

- Advanced Energy
- CLEAResult
- Efficiency Services Group (ESG)
- Franklin Energy
- GoodCents
- ICF International
- Lockheed Martin (LM) Energy
- Vermont Energy Investment Corporation (VEIC)
- Wisconsin Energy Conservation Corporation (WECC)

**Collaborating with other cooperatives or other nearby utilities helps to create larger-sized projects that attract ICs and bring down fixed costs.**

There are also many other ICs not on this list that could work with electric cooperatives. Some companies have a more regional geographic focus or programmatic focus, but these companies could also be good candidates for a vendor list. A few of these companies include:

- Evergreen Consulting Group: focuses on the Pacific Northwest: [www.evergreen-efficiency.com](http://www.evergreen-efficiency.com)

- Michaels Energy: provides commercial and industrial implementation services: <http://michaelsenergy.com>
- Proctor Engineering Group: focuses on HVAC-related program services: [www.proctoreng.com](http://www.proctoreng.com)

## ARTICLE REFERENCES

[ACEEE, 2015] <http://aceee.org/policy-brief/state-energy-efficiency-resource-standard-activity>

[CEE, 2013] <http://library.cee1.org/content/cee-2013-annual-industry-report-data-graphics>

[CEE, 2015] <http://library.cee1.org/content/cee-2015-annual-industry-report-data-charts>

[EPA, 2016] [www.epa.gov/cleanpowerplan/clean-power-plan-existing-power-plants](http://www.epa.gov/cleanpowerplan/clean-power-plan-existing-power-plants)

[E Source, 2016] E Source. "Size of the Energy Efficiency Program Implementation Contractor Industry." E Source Answer. January 19, 2016. *Content Available Offline*.

[FE, 2016] Personal communication with Dan Tarrence, Executive Vice President of Franklin Energy (FE), on March 15, 2016.

[Hargrove, 2016] Personal communication with John Hargrove, President and CEO of AESP, January 19, 2016.

[HW&Co., 2010] Harris Williams & Co. *Energy Efficiency Program Management*. December 2010.

[NRECA, 2013] National Rural Electric Cooperative Association (NRECA). "[Electric Cooperatives and Energy Efficiency: A Snapshot](#)." July 2013.

**APPENDIX: SELF-REPORTED INFORMATION FROM SELECT IMPLEMENTATION CONTRACTORS**

| <b>Advanced Energy</b>                                    |  |
|---|--|
| <b>Overview</b>   | <p>Advanced Energy’s primary business is energy efficiency. We were organized to provide energy efficiency services to the electric utilities in NC, including our co-ops. Since 1996, we have been delivering energy efficiency services to utilities, manufacturers, and governments across the U.S.</p> <p>Advanced Energy has been providing EE services to cooperatives since 1980. Our primary services are program design, implementation, training, and consulting to multiple markets including residential, commercial, industrial, renewables, and electric transportation.</p> |
| <b>Utility EE Programs Implemented</b>                    | Residential existing homes and new homes programs; industrial process efficiency and commercial lighting; Home Performance with ENERGY STAR (HPwES); Residential HVAC tune-up and replacement; Pool pump replacement; Motor repair efficiency; Program design  |
| <b>Major Utility EE Contracts</b>                         | Seminole Electric Cooperative, South Mississippi Electric Power Association (SMEPA), Georgia Power, Arizona Public Service, Duke Energy, Dominion Power, North Carolina Electric Membership Corporation (NCEMC), TECO Energy, AEP Ohio, Santee Cooper, Green Power EMC   |
| <b>Co-op EE Contracts</b>                                 | NCEMC, Seminole Electric Cooperative, SMEPA, Roanoke Electric, Jackson Electric, Santee Cooper, Green Power EMC  |
| <b>EE Capabilities and Products of Interest to Co-ops</b> | <ul style="list-style-type: none"> <li>• Residential programs including HVAC tune-up, duct sealing, lighting, and small commercial</li> <li>• Agricultural lighting, motors and pump efficiency programs</li> <li>• Beneficial electrification programs for industrial and residential customers</li> <li>• Pre-pay for efficiency</li> <li>• Data Analytics and Energy Modeling</li> <li>• Solar/PV Assessments and design assistance</li> <li>• Electric transportation</li> <li>• Motor and pump efficiency and durability expertise</li> <li>• Program design</li> </ul>               |
| <b>Other Relevant Company Capabilities</b>                | Solar, Electric transportation, Industrial Process Efficiency/beneficial electrification and Motors and Drives testing and consulting  |
| <b>Years in Operation</b>                                 | 36   |
| <b>EE Employees</b>                                       | 42   |
| <b>Offices</b>  | Raleigh, NC; remote staff in Portland, OR and Washington State   |
| <b>Website</b>  | <a href="http://www.advancedenergy.org">http://www.advancedenergy.org</a>  |
| <b>Contact</b>  | <ul style="list-style-type: none"> <li>• Brian Coble, Senior Vice President, 919-857-9051, <a href="mailto:bcoble@advancedenergy.org">bcoble@advancedenergy.org</a></li> <li>• Kitt Butler, Sr. Program Manager, Motors and Drive, 919-857-9017, <a href="mailto:kbutler@advancedenergy.org">kbutler@advancedenergy.org</a></li> </ul>   |

| <b>CLEAResult</b>   |   |
|---|---|
| <b>Overview</b>   | <p>CLEAResult has more than 30 years of experience designing, marketing, and implementing energy programs for communities, utilities, businesses, and residential energy customers. With a current portfolio of more than 400 clients and more than 800 programs, we have helped save more than 9,100 gigawatt hours of energy and more than 107 million therms. We have grown to be the industry leader as the largest private company in North America exclusively focused on energy efficiency, demand response, and other demand-side management solutions. Our energy experts design, market, and implement energy programs for all sectors. In addition, we also offer clients experience in demand response, renewables, and emerging programs such as electric vehicles. We work with some of the largest and most complex investor owned utilities in North America, many of whom provide electric and gas service to millions of customers, across state boundaries, and are regulated by multiple state agencies.</p> <p>Within CLEAResult, we support local program teams with a national, best practice perspective to inform and support program design, evolution, and enhancements. These teams include energy efficiency program professionals with decades of experience designing and managing energy efficiency programs, processing incentive payments, and providing quality control and measurement &amp; verification to support the programs implemented on behalf of clients.</p> |
| <b>Utility EE Programs Implemented</b>                    | <p>Our residential and low income expertise features a variety of home energy program delivery approaches include A/C Tune-Up; Appliance Recycling; Audit &amp; Weatherization; Consumer Products; Direct Install; Ductless Heat Pump; Low-Income; Multi-Family (including Low-Income); New Homes Construction; Online Audits; Solar PV and Hot Water; Whole Home Energy Performance (including HPwES).</p> <p>Our commercial and industrial experience includes Prescriptive, Engineered and Custom Programs; Measurement &amp; Verification planning and implementation; energy studies, audits and assessments; Commercial A/C Tune-up; Retro-commissioning; Commercial Heating; and Energy Manager Programs.</p>  |
| <b>Major Utility EE Contracts</b>                         | Tennessee Valley Authority, Detroit Edison, PECO, ComEd, First Energy, SMUD, PG&E, Xcel Energy, American Electric Power, Entergy Arkansas   |
| <b>Co-op EE Contracts</b>                                 | South Mississippi Electric Power Association (SMEPA), BPA (which includes many northwest co-ops), TVA (which includes many southeast co-ops), Efficiency United (includes some co-ops in Michigan)  |
| <b>EE Capabilities and Products of Interest to Co-ops</b> | <p><b>Energy efficiency and demand response consulting:</b> Program design, filings, engineering, benchmarking &amp; master planning, trade ally network management.</p> <p><b>Marketing &amp; outreach:</b> Strategy &amp; planning, branding &amp; creative, Digital strategy.</p> <p><b>Technology delivery platform:</b> Field audit data collection, DSM tracker (Catalyst), Robust API data integration.</p> <p><b>Customer services:</b> contact center, program sales and support, incentive processing.</p>  |
| <b>Other Relevant Company Capabilities</b>                | Back-up call center for downed power lines, bill payment, demand response   |
| <b>Years in Operation</b>                                 | 30 years  |
| <b>EE Employees</b>                                       | 2,700+  |
| <b>Offices</b>  | 88 U.S. office locations  |
| <b>Website</b>  | <a href="http://www.clearesult.com">www.clearesult.com</a>  |
| <b>Contact</b>  | Cindy Schweitzer, Senior Director of Business Development, (608) 574-4685, <a href="mailto:cindy.schweitzer@clearesult.com">cindy.schweitzer@clearesult.com</a>   |

| <b>Efficiency Services Group (ESG)</b>                    |  |
|---|--|
| <b>Overview</b>   | <p>ESG's team of experienced professionals provide support and programs for residential, commercial, industrial, and agricultural customers. Small and mid-sized utilities have been ESG's focus since 2005. We specialize in serving the needs of cooperatives and public utilities in the Pacific Northwest, California, and Nevada from offices in Hillsboro, Oregon. In 2013 we were acquired by Ruralite Services, a cooperative with a 60-year history of providing communications services to public power.</p> <p>Energy efficiency is the foundation of the programs and services ESG provides to help utilities strengthen their relationships with their customers/members and help them manage their energy use.</p> <p>Our program and efficiency experts can conduct on-site verifications, administer rebate programs, manage direct install services and have experience with a variety of other offerings. ESG can operate your energy efficiency program from start to finish, or, we can tailor services to meet your utility's specific needs. Let us make your energy efficiency programs successful.</p> |
| <b>Utility EE Programs Implemented</b>                    | ESG is currently implementing rebate programs across all market sectors: residential, commercial, industrial and agricultural. Current and past programs have included: Commercial lighting programs; Custom projects; Solar PV; Direct Install programs for residential and commercial; Snapshot auditing programs.   |
| <b>Major Utility EE Contracts</b>                         | Central Lincoln PUD, OR; City of Lodi, CA; Wells Rural Electric Company, NV; Idaho Energy Authority, ID; Canby Utility, OR; City of Shasta Lake, CA; Lassen MUD, CA; Port of Oakland, CA; Vera Water & Power, WA; City of Gridley, CA (plus ten other public power utilities).   |
| <b>Co-op EE Contracts</b>                                 | Wells Rural Electric Company, NV; Blachly-Lane Electric Co-op, OR; Columbia Basin Electric Co-op, OR; West Oregon Electric Co-op, OR; Douglas Electric Co-op, OR; and Hood River Electric Co-op, OR.   |
| <b>EE Capabilities and Products of Interest to Co-ops</b> | <p>ESG is unique in our understanding of the needs and challenges that face small to mid-sized publicly owned utilities. ESG has demonstrated the ability to deliver quality programs and services in rural communities. ESG also understands that stronger relationships between the utility and their members is an important strategic outcome of all interactions with utility members. ESG can assist utilities in the design, implementation, and administration of programs in all customer segments. Some programs of specific interest to co-ops are:</p> <ul style="list-style-type: none"> <li>• Direct Install and Snapshot Audit Program – provides immediate benefits and a positive exchange with customers, and provides energy savings and valuable customer data to the utility.</li> <li>• Energy Expert training for utility staff – increases the overall energy expertise of utility staff and emphasizes the importance of building strong customer relationships.</li> </ul>   |
| <b>Other Relevant Company Capabilities</b>                | ESG provides consulting services to utilities to help them evaluate their current program offerings, and provides utility staff development; helping them become "energy experts" and understand their role in building strong customer relationships and loyalty.   |
| <b>Years in Operation</b>                                 | 10   |
| <b>EE Employees</b>                                       | 10   |
| <b>Offices</b>  | Hillsboro, OR and Rocklin, CA  |
| <b>Website</b>  | <a href="http://www.energyservicesgroup.com">http://www.energyservicesgroup.com</a>  |
| <b>Contact</b>  | Mark Gosvener, COO, 888.883.9879, <a href="mailto:MarkG@esgroupllc.com">MarkG@esgroupllc.com</a>   |

| <b>Franklin Energy</b>                                    |   |
|---|---|
| <b>Overview</b>   | With over two decades in the industry, Franklin Energy designs and implements energy efficiency programs for utility, state and municipality clients nationwide and into Canada. Franklin Energy is one of the five largest energy efficiency program management companies in the U.S. The firm pinpoints goal-focused solutions for its clients and their customers across residential, multifamily, small business and commercial/industrial markets. As home of Efficiency@Work, Franklin Energy integrates all customer interaction including online application processing and in-field data collection through its technology suite. Franklin Energy recently acquired Resource Action Programs, a designer and implementer of education based programs and kits. |
| <b>Utility EE Programs Implemented</b>                    | <b>Market segments:</b> Residential, Multifamily, Small Business, Commercial/Industrial.<br><b>Program types:</b> Prescriptive, custom, direct install, demand response, audits, kits, educational  |
| <b>Major Utility EE Contracts</b>                         | Franklin Energy implements nearly 70 programs on behalf of over 40 clients, including: Alliant Energy, Commonwealth Edison, Consumers Energy, DTE Energy, Duke Energy, MidAmerican Energy, Northshore Gas and Peoples Gas, PECO, We Energies, Xcel Energy, Lansing Board Water & Light, Michigan Public Power Association, Missouri River Energy Services, Wabash Valley Power Authority  |
| <b>Co-op EE Contracts</b>                                 | Franklin Energy serves 22 electric cooperatives, either direct, through a generation & transmission cooperative, or through a statewide program: <ul style="list-style-type: none"> <li>• Focus on Energy (Wisconsin)</li> <li>• Minnkota Power Cooperative</li> <li>• Wabash Valley Power Authority</li> </ul>   |
| <b>EE Capabilities and Products of Interest to Co-ops</b> | Marketing, engineering, technical auditing, agricultural program design/delivery, balancing energy efficiency and customer satisfaction as a strategic tool, marketing and outreach expertise, prescriptive and custom rebate evaluation and deemed savings.  |
| <b>Other Relevant Company Departments or Capabilities</b> | Franklin Energy only works for utilities on implementation of energy efficiency and demand response programs.   |
| <b>Years in Operation</b>                                 | 22  |
| <b>EE Employees</b>                                       | Over 500  |
| <b>Offices</b>  | 35 branch locations across 15 U.S. states and one Canadian province   |
| <b>Website</b>  | <a href="http://www.franklinenergy.com">www.franklinenergy.com</a>  |
| <b>Contact</b>  | Aron Jarr (West/Midwest), <a href="mailto:ajarr@franklinenergy.com">ajarr@franklinenergy.com</a><br>Kevin Lauckner (Central), <a href="mailto:klauckner@franklinenergy.com">klauckner@franklinenergy.com</a><br>Mark Bowen (East), <a href="mailto:mbowen@franklinenergy.com">mbowen@franklinenergy.com</a>   |

| <b>GoodCents</b>  |   |
|---|---|
| <b>Overview</b>   | <p>GoodCents® is a leading provider of integrated demand-side management (DSM) services for utilities of all sizes throughout North America. Our turnkey service includes program design, marketing, engineering, field services and technology-enabled implementation powered by GoodCents Connect®.</p> <p>We have a long history of implementing programs that meet or exceed our client's needs, expectations, and goals. We know how to respond to each client's unique needs. GoodCents® has extensive program administrator capabilities, with our combination of in-house and partnership resources, yet we are nimble enough to design and implement a customized program for each utility client, with our signature concierge-level customer service. Our company is not new, but our constant evolution and commitment to innovation makes it feel like we are. To date, we have implemented more than 55 energy efficiency and demand response programs in more than 20 states and provinces. GoodCents® is part of a family of companies owned by AM Conservation Group, which also owns Service Concepts. Both AM Conservation Group and Service Concepts have a long history of working with electric cooperatives.</p> |
| <b>Utility EE Programs Implemented</b>                            | Home Energy Assessments, Direct Install, Rebate Programs, Income Qualified Weatherization, Residential Lighting, Small Business Direct Install, Education Programs, Midstream/Upstream Buy Down, EE Kits, Behavioral & Multi-Family.  |
| <b>Major Utility EE Contracts</b>                                 | Alliant, IPL, NIPSCO, JEA, Vectren, Dominion Virginia Power   |
| <b>Co-op EE Contracts</b>   | None  |
| <b>EE Capabilities and Products of Interest to Co-ops</b>         | <p>We have the ability to offer co-ops assistance in both planning and operating their energy efficiency and demand response programs. Our capabilities can be implemented turnkey to implement a single or suite of programs or can be leveraged individually to assist you with managing and implementing your own program. Specific programs of interest:</p> <p><b>Behavioral Programs:</b> The GoodCents® solution will deliver behavioral DSM savings while boosting customer satisfaction and engagement. By placing an emphasis on digital channels for messaging in real time to correlate with that day's weather, we will create a linkage between weather and energy consumption. The detailed energy usage information combined with customized energy actions will lead to energy savings. We can combine a popular mobile app, online portal that highlighted energy usage in the context of the weather and bi-monthly paper-based Home Energy ScoreCards for those customers we are not able to engage through digital channels. This combination creates an environment where customers not only understand their energy usage, and how the day's weather impacts their bill, but also encourages them to act.</p>    |
| <b>EE Capabilities and Products of Interest to Co-ops (cont.)</b> | <p><b>Energy Efficiency Kits:</b> We can offer your customers standard conservation kits of energy efficient products with the option of customizing the package or box with a logo or program theme. Conservation kits are tailor-made for each specific efficiency program. They come in many forms, but effective kits include energy efficient products, such as LED light bulbs, and water efficient products, such as high-efficiency showerheads. These kits promote energy efficiency, foster goodwill and trigger a chain reaction of energy-conscious habits in your customers, while providing a consistent source of energy savings for utilities.</p>  |
| <b>Other Relevant Company Departments or Capabilities</b>         | GoodCents has a broad range of capabilities that can support our implementation or assist utilities when running their own programs. These include: Field Services, Measurement and Verification (M&V), Call Center, Engineering, EE Kits, Marketing, EE Products, Program Design, Rebates and Incentives, Reporting & Analytics and Trade Ally Network Development.  |
| <b>Years in Operation</b>   | 39 years  |
| <b>EE Employees</b>   | 250   |
| <b>Offices</b>  | 16  |
| <b>Website</b>  | <a href="http://www.goodcents.com">www.goodcents.com</a>  |
| <b>Contact</b>  | Jason LaStella, Director of Business Development, (415) 505-2596, <a href="mailto:Jason.lastella@goodcents.com">Jason.lastella@goodcents.com</a><br>Kristi Mailloux, Chief Marketing Officer, (843) 971-1414, <a href="mailto:kmailloux@amconservationgroup.com">kmailloux@amconservationgroup.com</a>  |

| <b>ICF International</b>                                  |  |
|---|--|
| <b>Overview</b>   | <p>ICF is a national leader in transforming energy efficiency markets because of the passion and expertise that its professional staff and technical experts bring to each engagement. For nearly three decades, ICF has provided a portfolio of strategy, analysis, advisory, and implementation services to clients in the energy sector. Currently, ICF implements more than 150 individual energy efficiency programs for 50 clients across North America. The ICF Team’s implementation experience spans single utilities with large service areas, such as Ameren Missouri, to statewide utility collaboratives, such as Energy Trust of Oregon and public benefit agencies such as NYSERDA in New York. Further, ICF has been entrusted by utilities such as BGE, PHI, Consumers Energy, DTE Energy, Georgia Power, Entergy Arkansas, Entergy Mississippi, and SMECO to manage large portions of their energy efficiency portfolios. Additionally for more than 20 years, ICF has been a significant contractor in supporting and helping grow the EPA’s ENERGY STAR® program.</p> <p>ICF optimizes implementation through design, targeting, engagement and delivery and provides end to end services, including IT, marketing, call center and incentive processing. See more details at <a href="http://www.icfi.com/markets/energy/campaigns/energy-programs">www.icfi.com/markets/energy/campaigns/energy-programs</a></p> |
| <b>Utility EE Programs Implemented</b>                    | ICF implements a broad range of programs that support all market segments including residential, low income, small business, governmental, institutional, large commercial and industrial. Programs include direct install, appliance and lighting rebate programs, residential retrofit and Home Performance with ENERGY STAR®, new construction, behavioral, custom commercial and industrial, combined heat and power.  |
| <b>Major Utility EE Contracts</b>                         | BGE (Baltimore Gas & Electric), PHI (Pepco and Delmarva), Consumers Energy, DTE (Detroit Edison) Energy, Georgia Power, Entergy Arkansas, Entergy Mississippi, SMUD (Sacramento Utility District)  |
| <b>Co-op EE Contracts</b>                                 | Southern Maryland Electric Cooperative (SMECO), Tennessee Valley Authority (serves many co-ops in the Southeast).  |
| <b>EE Capabilities and Products of Interest to Co-ops</b> | <p>ICF has developed numerous models and tools that could be beneficial for co-ops. One planning model is the DSM Optimizer that conducts sensitivity and uncertainty analyses to optimize programs and portfolios that result in the highest savings for the least cost. An example of a customer engagement tool is customer journey mapping. The Power Rebate™ App is our industry-first app that streamlines the rebate application process and can significantly increase in-field quality assurance and quality control as well as customer and trade ally satisfaction. ICF offers the Quick Home Energy Check-Up (QHEC) program for a number of utilities and believe this would work well for co-ops. The QHEC is a direct install and quick audit program conducted in residentially-metered single family and multifamily communities. During an audit a participating contractor, at no cost to the customer, will install efficient measures. At the conclusion of the audit, a report summarizing the direct install measures installed, the energy savings generated, and any recommendations for other energy efficiency improvements that can be made is delivered to the customer and/or property manager.</p> <p>In addition to program implementation, ICF can perform potential studies, market segmentation analyses, customer relationship building programs, and program design services.</p>                  |
| <b>Other Relevant Company Departments or Capabilities</b> | <p>ICF offers many services throughout the company that are of interest to utilities including:</p> <ul style="list-style-type: none"> <li>• Strategic positioning and planning</li> <li>• IRP support, Generation &amp; Transmission planning, Distributed Energy Resources (DER) analysis</li> <li>• Energy efficiency, Demand Response, DER, and load growth policy &amp; implementation</li> <li>• Regulatory filings and testimony (Federal and state)</li> <li>• NERC and environmental compliance</li> <li>• Cybersecurity</li> <li>• Transactions asset valuation and due diligence</li> <li>• Project permitting and siting (EIS/NEPA)</li> <li>• Market and policy analysis and forecasting</li> <li>• Locational benefit analyses</li> <li>• Analysis of potential program impact of EPA’s Clean Power Plan</li> </ul>  |
| <b>Years in Operation</b>                                 | 46 years   |
| <b>EE Employees</b>                                       | Over 650 employees working on EE   |
| <b>Offices</b>  | 70 offices worldwide   |
| <b>Website</b>  | <a href="http://www.icfi.com">www.icfi.com</a>   |
| <b>Contact</b>  | Michael Mernick, Senior Vice President, (401) 738-1579, <a href="mailto:Michael.Mernick@icfi.com">Michael.Mernick@icfi.com</a>   |

| <b>Lockheed Martin Energy</b>                             |  |
|---|--|
| <b>Overview</b>   | <p>Lockheed Martin (LM) Energy implements award-winning commercial, industrial, and residential energy efficiency programs and energy savings performance contracts.</p> <p>Energy customers depend on LM Energy's engineering, IT, and project management expertise to design and deliver comprehensive cost-effective efficiency programs for commercial, industrial, and residential property owners. As one of the largest implementers of utility energy efficiency programs in the U.S., LM Energy provides marketing, customer recruitment, contractor management, and technical services.</p>  |
| <b>Utility EE Programs Implemented</b>                    | <p>LM Energy implements a full range of commercial, industrial and residential EE programs for utilities and public purpose agencies across the U.S. Recent programs include for commercial &amp; industrial programs: Prescriptive, Custom, Retro-Commissioning, New Construction, Small Business Direct Install, Midstream/Upstream; and for residential programs: EE Products, Single Family Homes, Multifamily, Low Income</p>   |
| <b>Major Utility EE Contracts</b>                         | <p>LM Energy currently works with 8 of the 10 largest utilities in the U.S., including Pacific Gas &amp; Electric, Southern California Edison, Pepco and Delmarva Power, Con Edison, Duke Energy, Ameren Missouri, PSEG Long Island, and others.</p>   |
| <b>Co-op EE Contracts</b>                                 | <p>LM Energy has IT/OT current contracts with Southern Maryland Electric Cooperative, Northern Virginia Electric Cooperative, and Rappahannock Electric Cooperative. We work with a number of electric co-ops through our EE work with Energy Trust of Oregon, Bonneville Power Administration, and Tennessee Valley Authority (among others).</p>   |
| <b>EE Capabilities and Products of Interest to Co-ops</b> | <p>Residential programs that focus on providing financial incentives and technical expertise for a variety of energy saving technologies including lighting, water heating, weatherization, heating, appliances, and low cost/no cost measures. Program may target single family, multifamily and/or low income properties.</p> <p>Commercial and industrial focused programs that provide financial incentives and technical expertise to promote (1) energy efficient design into new construction and (2) optimization of existing space and processes through the retrofit and replacement of energy saving equipment.</p> <p>LM Energy can also support program design.</p> |
| <b>Other Relevant Company Departments or Capabilities</b> | <p>Information Technology, Operations Technology, Cybersecurity, Microgrid, Renewables and Cogeneration, Demand Response, Grid and Customer Analytics, T&amp;D Automation, Energy Services Company (ESCO), Demand Response, Energy Storage</p>   |
| <b>Years in Operation</b>                                 | 100+   |
| <b>EE Employees</b>                                       | 500+   |
| <b>Offices</b>  | <p>Lockheed Martin Corporation has offices in all 50 U.S. states; LM Energy has 20 offices across the U.S.</p>   |
| <b>Website</b>  | <a href="http://www.lockheedmartin.com">www.lockheedmartin.com</a>   |
| <b>Contact</b>  | <p>Joel McManus, Senior Business Development Manager, (202) 308-3150,<br/> <a href="mailto:joel.r.mcmanus@lmco.com">joel.r.mcmanus@lmco.com</a></p>  |

| <b>Vermont Energy Investment Corporation (VEIC)</b>       |  |
|---|--|
| <b>Overview</b>   | <p>For 30 years, the Vermont Energy Investment Corporation (VEIC) has provided energy services guided by our commitment to environmental and social justice, innovation, and results. We provide utilities and government with program implementation and consulting services in energy efficiency, renewable energy, transportation efficiency, and finance. Our staff of 350 specialize in policy and regulatory leadership, energy planning, program design and review, EM&amp;V, and finance grounded in our real-world experience delivering exemplary programs <a href="#">Efficiency Vermont</a>, the <a href="#">DC Sustainable Energy Utility (DCSEU)</a> and <a href="#">Efficiency Smart</a>. For these three comprehensive energy efficiency programs, we provide program design, program implementation, marketing, community engagement, technical assistance, incentive processing, financing options, measurement and verification, customer data analytics, and more. Our energy efficiency programs are comprehensive and support market rate and low income residential buildings, small/medium business, commercial buildings, and industrial facilities. Our programs focus on <i>whole-building</i>, <i>deep energy savings</i> as well as quick start direct install products. Our programs adhere to <i>strict cost-effectiveness screening criteria</i> and <i>independent third-party verification</i> of claimed savings.</p> |
| <b>Utility EE Programs Implemented</b>                    | <p>We work with all market segments, especially low/moderate income, and all types of programs from products, direct install, whole building, prescriptive, and custom. Recent examples:</p> <ul style="list-style-type: none"> <li>• Led the program design for residential energy efficiency programs and the renewable energy programs working with the program implementer for the New Jersey Clean Energy Program for the last 7 years.</li> <li>• Partnered with the program implementer to develop efficiency and renewable energy program portfolio, provide on-going assistance with market analysis, design new programs and refine existing ones, develop budgets, and provide implementation support for the Long Island Power Authority.</li> </ul>   |
| <b>Major Utility EE Contracts</b>                         | <p><b>Efficiency Vermont</b> – statewide Vermont EE implementation contract working with over 20 utilities, since 2000</p> <p><b>Efficiency Smart</b> – providing energy efficiency services on a subscription basis to 25 to 50 municipal utilities through the Joint Action Agency, American Municipal Power, since 2010.</p> <p><b>District of Columbia Sustainable Energy Utility (DCSEU)</b> – providing energy efficiency and renewable energy programs and services to all electric and gas utility customers in the nation’s capital</p>   |
| <b>Co-op EE Contracts</b>                                 | <p>Through Efficiency Vermont, we work closely with the Vermont Electric Cooperative (VEC) and Washington (Vermont) Electric Cooperative (WEC).</p>  |
| <b>EE Capabilities and Products of Interest to Co-ops</b> | <p>For the programs we support, we provide program design, program implementation, marketing, community engagement, technical assistance, incentive processing, financing options, measurement and verification, customer data analytics. Of interest to co-ops, VEIC received conditional approval to borrow up to \$46 million from the USDA Rural Utilities Service (RUS) as part of their Energy Efficiency and Conservation Loan Program (EECLP). Leveraging our experience obtaining this approval, VEIC is available to help co-ops navigate through this application process and to design an effective loan program to complement energy efficiency incentive offerings. Our experience with financing spans across all market sectors and in addition to energy efficiency projects supports a broad range of clean energy improvement projects, such as the installation of solar panels, insulation, and biomass heating systems. This loan resource will enable thousands of new customers to participate in energy efficiency programs.</p>  |

*Continued*

| <b>Vermont Energy Investment Corporation (VEIC) (cont.)</b>       |   |
|---|---|
| <b>EE Capabilities and Products of Interest to Co-ops (cont.)</b> | A program of potential interest to co-ops is our pilot Mobile Home Replacement Program at Efficiency Vermont which was developed in response to ongoing concerns about Vermont’s manufactured housing stock. Major problems addressed include high heating costs, poor indoor air quality, durability, and depreciation of homes. We have worked with the affordable housing authority and modular home manufacturers to develop a High Performance Modular Home (HPMH), which sits on the same site as the old mobile home, has low or no energy costs, meets the highest standards of air quality, and hold their value over time by incorporating advanced EE technology, quality materials and the latest construction practices. HPMHs can access the traditional mortgage market and offer stable monthly costs, while the cost to own and operate a typical MH escalates with rising energy prices and maintenance expenses.   |
| <b>Other Relevant Company Departments or Capabilities</b>         | <p>VEIC has a team of 80 energy efficiency, renewable energy, transportation efficiency, engineering, EM&amp;V, and finance experts available to consult directly with IOUs, munis, and co-ops in jurisdictions where we are not the program implementer. We offer services in policy and regulatory review and testimony, program design, program review, implementation support, EM&amp;V, data analytics, and finance.</p> <p>VEIC’s subsidiary Commons Energy, is a new innovative public-purpose energy services company (ESCo) designed to improve the comfort, safety, and efficiency of public purpose buildings and common areas by lowering overhead costs and creating positive cash flow. Types of customers include educational and health care institutions, municipal buildings, and multi-family affordable housing. Commons Energy combines a full complement of energy services with capital from several sources to remove many of the market barriers that prevent these organizations from taking full advantage of energy savings from building improvements.</p> |
| <b>Years in Operation</b>   | 30 years  |
| <b>EE Employees</b>   | 350   |
| <b>Offices</b>  | Burlington, VT, Columbus, OH, and Washington, DC  |
| <b>Website</b>  | <a href="http://www.veic.org">www.veic.org</a>  |
| <b>Contact</b>  | Joanne Bachmann, VEIC Business Development and Sales Manager, (802) 540-7838, <a href="mailto:jbachmann@veic.org">jbachmann@veic.org</a>  |

| <b>WECC</b>   |   |
|---|---|
| <b>Overview</b>   | WECC has an extensive history delivering energy efficiency programs for Cooperatives, Investor-Owned Utilities, Municipals, state and local governments, and businesses throughout the United States. Our team of industry experts is versed in energy efficiency program design, administration, implementation, trade ally recruitment, building science education, and marketing and outreach.   |
| <b>Utility EE Programs Implemented</b>                    | ENERGY STAR® Appliance and Lighting, Home Performance, Manufactured Home, Online Home Audit, Low Income, Residential New Construction, HVAC, Agriculture/Farm, Business Efficiency, Smart Thermostat, Behavioral Programs   |
| <b>Major Utility EE Contracts</b>                         | Alliant Energy, MidAmerican Energy, Xcel Energy, Minnesota Power, Cedar Falls Utilities, Lansing Board of Water & Light   |
| <b>Co-op EE Contracts</b>                                 | Michigan Electric Cooperative Association (MECA), Southern Minnesota Municipal Power Agency (SMMPA), Central Iowa Power Cooperative (CIPCO)   |
| <b>EE Capabilities and Products of Interest to Co-ops</b> | <p>WECC implements retail markdown programs to help consumers make the simple switch to energy-efficient lighting by offering special pricing on ENERGY STAR® qualified CFL and LED bulb purchases. The program provides an instant rebate structure—there are no coupons to fill out. The channels and retailer mix includes: home improvement, mass merchant, warehouse clubs, hardware, and specialty retailers. National and regional and local independents participate in our programs. WECC provides field outreach, sales associate training and retailer, QA/QC, education, point-of-purchase materials, and website development to support the program.</p> <p>WECC developed and implements a Manufactured Homes Direct Installation with Duct Sealing program that delivers energy savings to this hard-to-reach market. This program focuses on the needs of this particular housing stock, by working with trade allies to install upgrades that quickly offer efficiency and a more comfortable home. The program also educates the homeowner on measures installed.</p> <p>WECC can also provide support functions for programs such as call center, rebate processing, marketing, planning and program design.</p> |
| <b>Other Relevant Company Departments or Capabilities</b> | Energy efficiency program implementation and financing is our overall business.   |
| <b>Years in Operation</b>                                 | 36  |
| <b>EE Employees</b>                                       | 107   |
| <b>Offices</b>  | Madison, Wisconsin  |
| <b>Website</b>  | <a href="http://www.weccusa.org">www.weccusa.org</a>  |
| <b>Contact</b>  | Gary Ambach, Director of Business Development, (608) 807-3029   |

### About the Authors

**Amy Wheeless**, Associate, provides writing and research support to the work at Collaborative Efficiency. Previously she worked at the environmental consulting firm Ross Strategic on a variety of policy projects, primarily focusing on air quality and energy use. She also worked on the Database of State Incentives for Renewables and Efficiency (DSIRE) at the NC Clean Energy Technology Center. Amy received her Master of Public Administration from the University of Washington, focusing on environmental management and urban affairs.

**Patrick Keegan** is the founder of Collaborative Efficiency, an energy services firm specializing in support for all phases of energy efficiency program development at electric cooperatives and municipal utilities. Pat began his career in the 1980s at the Washington State Energy Office, managing pioneering energy conservation programs and working with all types and sizes of utilities. He left the region in the 1990s, worked for the National Renewable Energy Laboratory on energy efficiency and renewable energy initiatives, and then became Executive Director of the Colorado Energy Science Center, focusing on energy efficiency and solar programs. Hired by Ecos in 2008, he was the VP of residential programs. When Ecos became Ecova Pat led the effort to develop markets with rural electric cooperatives and municipal utilities.

**Christine Grant**, Senior Associate, provides research, analysis, technical writing and project management for Collaborative Efficiency. Her previous work experience includes five years with Cascadia Consulting Group where she worked with municipalities, utilities, and businesses on resource conservation strategies and programs. Energy efficiency and sustainable transportation were her primary areas of focus while at Cascadia. Her writing has appeared in numerous publications and a major newspaper. Christine holds a B.A. degree in Environmental Studies from Wellesley College.

### Questions or Comments

- Brian Sloboda, Program and Product Line Manager – Energy Utilization/Delivery/Energy Efficiency, NRECA Business and Technology Strategies, End Use/Energy Efficiency Work Group: [Brian.Sloboda@nreca.coop](mailto:Brian.Sloboda@nreca.coop)
- Thomas Kirk, Technical Research Analyst, Business and Technology Strategies, NRECA, [Thomas.Kirk@nreca.coop](mailto:Thomas.Kirk@nreca.coop)
- Business and Technology Strategies [feedback line](#).
- To find more *TechSurveillance* articles on business and technology issues for cooperatives, please visit our [website archive](#).

#### BUSINESS AND TECHNOLOGY STRATEGIES END USE/ENERGY EFFICIENCY WORK GROUP

The **Business and Technologies Strategies — End Use/Energy Efficiency Work Group** is focused on identifying the opportunities and challenges associated with electricity end-use and demand-side management strategies. *TechSurveillance* research relevant to this work group looks at the various aspects of energy efficiency technology, including market status, related policies and regulations, and business models. For more information about technology and business resources available to members through the End Use/Energy Efficiency Work Group, please visit [www.cooperative.com](http://www.cooperative.com), and for the current portfolio of work by the Business and Technology Strategies department of NRECA, please see [www.nreca.coop/what-we-do/bts](http://www.nreca.coop/what-we-do/bts).

### Legal Notice

This work contains findings that are general in nature. Readers are reminded to perform due diligence in applying these findings to their specific needs, as it is not possible for NRECA to have sufficient understanding of any specific situation to ensure applicability of the findings in all cases. The information in this work is not a recommendation, model, or standard for all electric cooperatives. Electric cooperatives are: (1) independent entities; (2) governed by independent boards of directors; and (3) affected by different member, financial, legal, political, policy, operational, and other considerations. For these reasons, electric cooperatives make independent decisions and investments based upon their individual needs, desires, and constraints. Neither the authors nor NRECA assume liability for how readers may use, interpret, or apply the information, analysis, templates, and guidance herein or with respect to the use of, or damages resulting from the use of, any information, apparatus, method, or process contained herein. In addition, the authors and NRECA make no warranty or representation that the use of these contents does not infringe on privately held rights. This work product constitutes the intellectual property of NRECA and its suppliers, and as such, it must be used in accordance with the [NRECA copyright policy](#). Copyright © 2016 by the National Rural Electric Cooperative Association.