Business & Technology Strategies

TechSurveillance

PROGRAM IMPLEMENTERS:

Energy Efficiency Program Implementers as an Extension of Co-op Staff

Part one of a two-part series

BY **CHRISTINE GRANT** & **PATRICK KEEGAN**, COLLABORATIVE EFFICIENCY
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ARTICLE SNAPSHOT:

What has changed?
There is growing pressure coming from various sources for increase to the number and extent of energy efficiency programs offered by utilities, including federal and state mandates, as well as consumer expectations.

What is the impact on cooperatives?
The resources and expertise needed to significantly extend energy efficiency programs may exceed some co-ops' current capabilities, leading to gaps that must be filled. Launching and managing energy efficiency programs is an effort that in the right circumstances can be outsourced to specialized firms called Implementation Contractors. These firms are often used by Investor-Owned Utilities (IOUs) and large municipal utilities, and likewise, could be of benefit to electric cooperatives in successfully meeting energy efficiency expectations.

What should cooperatives know or do about it?
Co-ops can benefit from understanding the options, business models, and impacts that a contracted implementer could have for their energy efficiency program. Outsourcing the management of an energy efficiency program would be similar to some traditional uses of contractors, such as vegetation management. This article, the first of two in this series, describes the pressures facing cooperatives in expanding energy efficiency efforts and the benefits of Implementation Contractors as an extension of cooperative staff in meeting present and future energy efficiency resource and expertise needs.

INTRODUCTION:

Co-op staff are often stretched thin and asked to wear multiple hats—meaning that co-ops generally have limited staff time to dedicate to energy efficiency (EE) program implementation. However, due to government-mandated EE goals and targets, more

Hiring experienced contractors often results in cost efficiencies, better services for members, and reduced risk for co-ops.

and more co-ops will need to launch new EE programs or make existing EE programs more effective. How will co-ops fill this staffing and expertise gap?

The use of Implementation Contractors (ICs) may be a cost-effective way to design, manage, and implement EE programs and meet increasingly stringent EE targets. This article describes the services ICs can offer to support EE programs, the policy and market forces that may push more co-ops to work with ICs, and the factors co-ops and G&Ts should consider before deciding to work with an IC. A second volume in this series, ***Identifying, Hiring, and Managing an Energy Efficiency Implementation Contractor***, will focus on how to identify, select, and manage ICs.

BEFORE AND AFTER IMPLEMENTATION

The services described below often occur before and after ICs are engaged on an EE program:

EE Program Consulting and Design:
Before an EE program launches and an IC is hired, many design decisions need to be made. Utilities and co-ops will frequently hire program design consultants to quickly define key program elements and procedures, such as eligibility for participation, size of rebates/incentive payments, measurement and verification requirements, training needs, and savings targets. A written plan that serves as a guide for program implementation—or a Request for Proposal (RFP) that can be used to solicit proposals from firms offering EE program implementation and management—is commonly produced at the conclusion of the consulting and design phase.

Evaluation, Measurement, and Verification (EM&V):
Evaluation, measurement, and verification (EM&V) is the process of verifying and documenting the energy savings resulting from an EE program. Most program implementation providers do not perform EM&V services due to inherent conflicts of interest. Utilities typically hire a third contractor with EM&V expertise after an energy efficiency program is completed. In many states, third party EM&V is mandated to meet EE regulations.

WHAT IS AN ENERGY EFFICIENCY IMPLEMENTATION CONTRACTOR?

Electric cooperatives already outsource many aspects of their operations to contractors. For example, co-ops commonly outsource vegetation management, smart meter installation, and distribution line repair to contractors with specialized equipment, experienced technicians, and the capacity to meet tight deadlines. In these examples, hiring experienced contractors often results in cost efficiencies, better services for members, and reduced risk for co-ops. From the member perspective, these contractors are often perceived as highly able extensions of co-op staff. Many utilities require implementation contractor (IC) field staff to brandish utility logos and trade names on their clothing and vehicles. Sometimes the IC provides day-to-day program management, other times the IC may only provide back office support and be completely invisible to the public.

Outsourcing EE program delivery is no different than the examples provided above. Due to the complexities that can exist in developing and administering an EE program, many utilities and an increasing number of co-ops choose to work with ICs on portions of EE programs. There are hundreds of firms across the country ranging in size, specializations, and target market that offer services to support the design, implementation, and evaluation of EE programs. Many utilities may find that working with third parties is a more efficient use of staffing and programmatic resources, due to the experience and past work on which these partners can draw.

The primary role that ICs play is delivering program energy savings goals within a specified budget and timeline. In order to achieve savings goals, ICs provide a wide range of services that can include: outreach, marketing, engineering assessments, audits, direct installs, procurement, trade ally recruitment and trainings, data tracking, customer service, incentive processing, and appliance recycling.

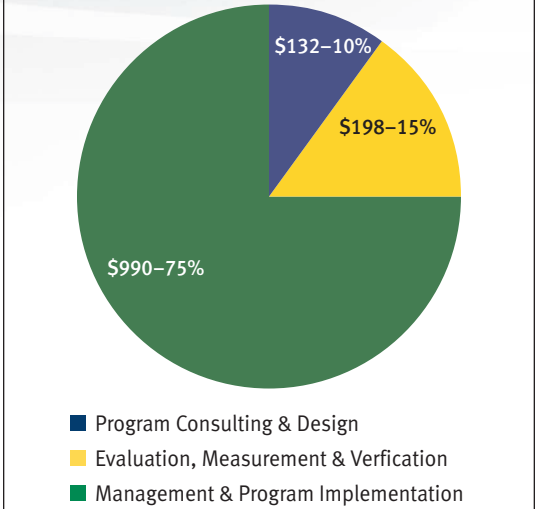
THE ENERGY EFFICIENCY IMPLEMENTATION CONTRACTOR INDUSTRY

Currently, about 30 percent of EE program services are outsourced. According to an industry trend analysis of the EE program services industry, approximately $1.3 billion was spent on outsourced EE program services in 2009 (Harris Williams, 2010).

As shown in Figure 1, program implementation and management services account for a large majority of the roughly $1.3 billion spent on outsourced EE program services, while program consulting and design and EM&V services account for about a quarter of total spending on ICs.

In general, ICs—especially the larger firms—have not pursued work with the electric cooperative market. However, Investor Owned Utilities (IOUs) have a history of working with ICs. This is in part because IOUs have been subject to more EE mandates and regulations than co-ops. IOUs have had to scale up quickly to meet mandates and be very accountable to regulators about how ratepayer funds have achieved EE mandates. According to a 2014 E Source report, "the vast majority of, if not all, IOUs outsource some aspect of their DSM [demand side management] program delivery—from comprehensive program implementation by one third-party administrator at the portfolio level; to different implementers administering different programs for the same utility; to utilities that administer programs internally for the most part, but still outsource aspects of program implementation such as energy audits or lighting installations." (Behringer, 2014) IOUs, generally far larger than co-ops, can easily attract the interest of ICs, especially when they are required to scale up to meet a regulatory mandate.

Unlike IOUs, most co-ops are not currently regulated in terms of meeting specific EE/DSM targets. However, this is changing and may change the way that co-ops work with ICs. These regulatory changes are described in the next section.



Source: Based on graph from Harris Williams & Co., 2010

FIGURE 1: Outsourced Energy Efficiency Program Services (2009; in millions)

A CHANGING REGULATORY ENVIRONMENT RESULTING IN HIGHER ENERGY EFFICIENCY TARGETS FOR CO-OPS

Policies that address customer end uses of energy and aim to achieve greater energy efficiency are not new, but more states are adopting these policies and often the policies become more stringent over time. For example, an Energy Efficiency Resource Standard (EERS) is a common state policy that requires utilities to annually save a certain percentage of energy over a multi-year period. Texas was the first state to adopt an EERS in 1999. Today, 24 states have an EERS. Although not all states require co-ops to comply with the EERS, in 15 of the 24 states with an EERS, some or all co-ops must comply with the EERS (ACEEE, 2015). In many states, the energy savings mandated by EERS legislation increases incrementally over the course of several years.

Engaging with an Implementation Contractor on EE programs can provide electric cooperatives with needed expertise to fill resource gaps.

At the national level there is a strong likelihood that carbon pollution from electricity generation will be regulated in the near future by federal law. Energy efficiency is likely to be a key strategy for meeting the carbon reductions mandated by that federal environmental policy.

For more information on this aspect of EE, please see related NRECA *TechSurveillance* articles, a recent article written for the Electricity Journal by NRECA's Keith Dennis, **Environmentally Beneficial Electrification: Electricity as the End-Use Option**, and NRECA's Energy Efficiency website on **http://www.nreca.coop**.

Primarily as a result of growing regulatory pressure related to meeting new demand for energy cost-effectively and with minimal impacts on the environment, national spending on EE is increasing. As shown in Figure 2 below, from 2007 to 2013, the average annual growth rate for electric efficiency budgets was approximately 18 percent.

Figure 2 depicts national spending, however, certain states increased spending even more dramatically. For example, Oklahoma more than doubled its EE budget in 2013 and three other states increased their EE budgets by over 50 percent in 2013—Missouri, South Dakota, and Virginia (Cooper, 2014).

THE BENEFITS OF ENERGY EFFICIENCY IMPLEMENTATION CONTRACTORS

Increasing EE regulatory mandates, resulting in increasing EE budgets, are indicators of the mounting pressure utilities are under to pursue more energy efficiency opportunities.

As co-ops face these new pressures, they will need the support of individuals with EE expertise. Engaging with an IC on EE programs can provide electric cooperatives with a number of advantages. The section below highlights the key reasons why co-ops may hire ICs—rather than using or hiring internal staff—for the design, implementation, and evaluation of EE programs. Viewpoints from both co-ops and ICs are presented.

Regulatory Expertise

Many state EE mandates require co-ops to develop rigorous program tracking systems that capture energy and demand savings, the persistence of the savings, avoided emissions, and market effects estimations. In order to capture these metrics and meet targets, co-ops will need to conduct in-depth upfront planning, develop tracking systems, follow evaluation protocols, and meet reporting requirements. Many co-ops do not have experience with these regulatory requirements—however, many ICs have extensive experience helping utilities meet regulatory mandates related to EE.

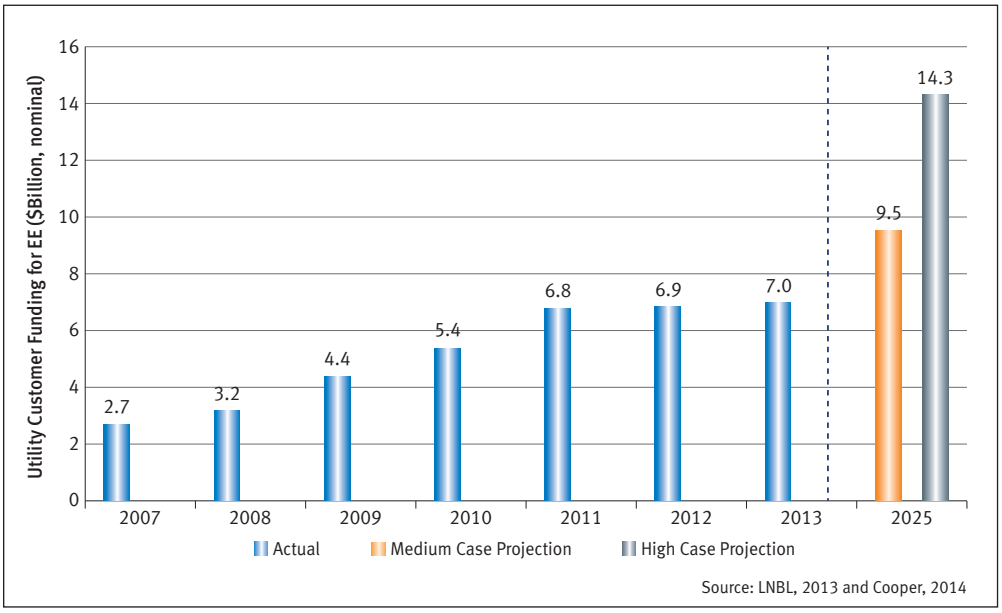


FIGURE 2: Energy Efficiency Budgets: 2007 – 2013 and 2025 Forecast

ICs who work on EE programs have accumulated extensive expertise on program design and implementation, and are familiar with national best practices.

For example, Jeff Cromie, Director of Marketing and Key Accounts at Wells Rural Electric Cooperative in Wells, Nevada, says that working with Efficiency Services Group (ESG), an IC based out of Portland, OR, helped his team meet regional reporting requirements related to their EE program. "We have 2.5 FTEs working on our EE programs, but there is so much going on there, we needed the staff at ESG. They helped us maintain our database and conduct financial and energy savings reporting for our Board and Bonneville Power Administration (BPA). ESG has experience with BPA requirements and programs. It is really helpful to work with a firm that is familiar with the BPA policies and can provide that monthly reporting support," explains Cromie.

In Michigan, the Energy Optimization (EO) program—a collaborative of eight co-ops and four municipal utilities working together to meet Michigan Public Act 295—hired the Wisconsin Energy Conservation Corporation (WECC) to help with EE program implementation. Public Act 295 mandates that all electric utilities implement EE programs that produce one percent year over year kWh savings. Additionally, implemented EO Portfolios need to be cost-effective, according to the Utility System Resource Cost Test (USRCT). According to Art Thayer, Director of Energy Efficiency Programs at Michigan Electric Cooperative Association (MECA), "partnering with an experienced firm like WECC gives us assurance that we are developing programs that will meet the energy savings targets, cost-effectiveness tests, and impact evaluations mandated by PA 295."

Even for co-ops that are not regulated, working with an IC can help maintain strong relationships between regulators and co-ops. Laura Matney, Energy Efficiency Programs Manager at Wabash Valley Power Association (WVPA), a Generation and Transmission company (G&T) in Indiana, works with both Navigant Consulting and Franklin Energy on the implementation of WVPA's EE programs. Navigant designed and evaluated the program—while Franklin was the implementer. According to Matney, "WVPA values keeping an open line of communication with the Indiana Utility Regulatory Commission (IURC). We don't want to be regulated, but we do realize that they want to know what we're doing. The fact that we're working with the same companies that IOUs are working with lends us some credibility. The evaluation, measurement, and verification conducted by Navigant helps us proactively provide the type of information regulators are seeking. We can demonstrate that we're running good programs and using member's money wisely. For example, we can show that for every dollar we spend on an EE program, we save $4.97 at the wholesale level. Working with the third party implementers gives those numbers even more credibility with the IURC."

Technical and Programmatic Expertise

Energy efficiency encompasses many technologies, building types, and approaches. Rather than spending cooperative staff time on learning about energy efficiency nuances, cooperatives can rely on an IC for specific technology questions. Also, ICs who work on EE programs have accumulated extensive expertise on program design and implementation, and are familiar with national best practices. They can leverage this experience to help cooperatives offer superior service to their members.

Mary Schlaefer, the President and CEO of WECC, explains how IC firms offer technical and programmatic benefits to co-ops: "WECC offers expertise that a co-op wouldn't have the ability, or need, to carry. ICs can bring in additional expertise—for example, deep knowledge about energy efficiency retrofits in manufactured homes or direct install lighting program designs. ICs can offer that expertise as part of the co-op's branded program and, as a result,

"ICs can offer that expertise as part of the co-op's branded program and, as a result, serve the co-op member in an enhanced way."

– Mary Schlaefer, President and CEO, WECC

serve the co-op member in an enhanced way." Schlaefer also adds that ICs have the ability to reach a broader number of members in a targeted way. "More boots on the ground means more members are served by a program."

Members may also feel more comfortable working with a company or individual with explicit and documented energy efficiency expertise (Crisostomo, 2011). Jan Dean, the energy conservation specialist at Fall River Electric Cooperative, explained that Fall River hired a contractor to help with home energy audits because the co-op lacked staff with the training to perform audits. Fall River also found that their members liked working with a third party that was vetted by the co-op but had specialized building science qualifications.

Staffing Flexibility

ICs are able to quickly ramp up or down staffing levels on projects. Because of this ability to throttle up the amount of staff time directed on projects, ICs can quickly design and launch new programs—and then scale back the amount of staff time used once a project is in maintenance mode.

Hybrid program management and delivery, where the co-op and IC staff work jointly, is common.

If a co-op has a particularly rural territory with long distances between members, hiring an IC to promote and implement a program may reduce workload on co-op staff while providing valuable services to members that might not otherwise directly engage with the co-op. For example, Wells Rural Electric Cooperative serves a sparsely populated territory throughout parts of Nevada and Utah. With the help of its IC, ESG, Wells was able to reach all of its commercial members and 80 percent of its residential members with a snapshot energy audit and a direct install program; the data from its snapshot audit helps the co-op know who to target for future energy efficiency programs.

For a cooperative that is interested in eventually running an EE program completely in-house, using an IC to launch and initially implement the program can be a practical way to educate the cooperative staff that will take over program management. Mark Gosvener, the COO of ESG, reports that ESG frequently conducts trainings with the co-ops and utilities they are working with to help build internal capacity around EE and DSM concepts relevant to the projects they are helping to implement. Hybrid program management and delivery—where the IC and the co-op staff jointly administer the program—is also common. For example, Laura Matney reports that many of the Wabash Valley Power Association distribution co-ops regularly accompany their IC—Franklin Energy—on site visits. She encourages this. "My advice to other co-ops is to really set up systems where you encourage a hybrid or side-by-side approach to implementation. Working together is an opportunity to build trust, know that the IC employees are doing a good job, and make improvements to the program collaboratively" says Matney.

Cost Efficiencies

Working with an IC on specific energy efficiency goals and programs can be more cost-effective than using existing staff or hiring additional staff to do the same work. ICs have staff members with highly specific skillsets related to online marketing, building technology infrastructure, or energy efficiency finance that can answer program design and implementation questions very efficiently. Rather than the cooperative hiring or training a staff member with a specific skillset, they can use a few hours of IC staff time to address the same challenge or task. "It is a great deal financially for the co-op. It is expertise that we don't have internally and likely would not hire internally, but we are still able to offer that expertise to our members,"

says Ted Austin of Fall River Electric Cooperative, about contracting out energy auditing program services for co-op members. Art Thayer, Director of Energy Efficiency Programs at MECA, also adds that hiring an IC cuts down on all of the "costs associated with hiring and firing. You can spend a lot of time hiring full-time people, training them, and then if they leave unexpectedly, that is a big cost. With an IC, all those human resources costs are outsourced. The ICs have a contract to fulfill." In co-op territories with a small workforce of available energy efficiency contractors, bringing on an IC can provide immediate access to training and expertise, as well as available staff to implement needed EE work in homes and businesses. Franklin Energy, for example, has opened new offices to have staff located closer to their utility and co-op clients, and regularly hires and trains local staff to support their contracts. Additionally, some ICs offer trade ally management services, which include recruitment, technical training, and business development tools specifically aimed at growing the workforce of EE tradespeople in a service territory.

Because ICs have experience with other EE programs, they can offer economies of scale.

Because ICs have experience with other EE programs, they can offer economies of scale. For example, many ICs have existing call centers, training curriculum for trade allies, and information technology infrastructure that cooperatives can use or tailor to their needs. Dan Tarrence, Executive Vice President of Franklin Energy, explains "building a custom technology platform can be very expensive for a co-op. We offer tracking systems that can provide all the reporting that a co-op might need to report back to their utility commission. We also have online tools that can make program implementation much easier. For example, we use the Efficiency Navigator for many of our residential rebate programs to make selecting and processing rebates more user-friendly (see Figure 3). By working with an IC, co-ops can get access to technologies that they wouldn't otherwise be able to afford to build from scratch."

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In addition to economies of scale, cooperatives can help ensure best-cost services by issuing a Request for Proposal (RFP) and receiving multiple bids. (Volume 2 of this series, ***Identifying, Hiring, and Managing an Energy Efficiency Implementation Contractor***, discusses the RFP process for procuring IC services.) Soliciting bids from non-profit ICs may result in a better price for co-ops. Schlaefer of WECC, explains: "As a non-profit, we are mission based. Our mission is to deliver environmental and economic benefits and reach hard-to-reach segments of the population. Because of the size of co-ops, there are challenges in terms of delivering. You can't make the margins on delivering to co-ops. But,

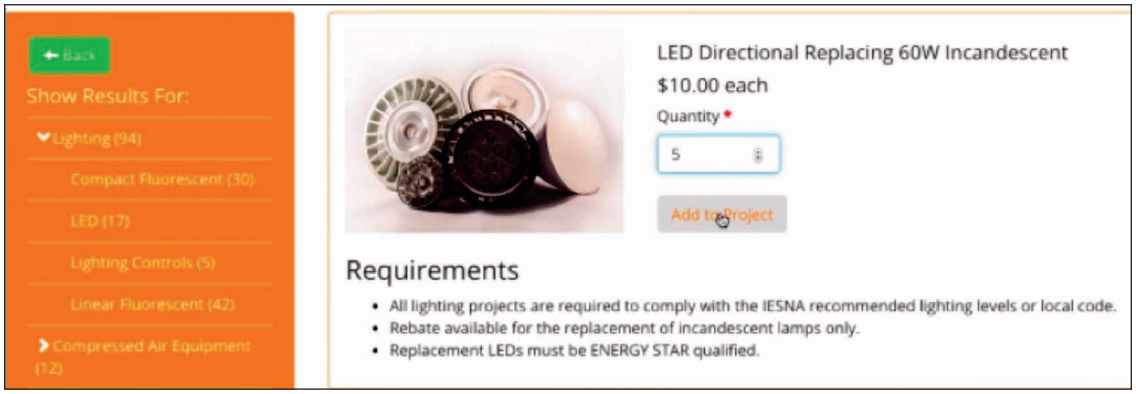

FIGURE 3: Screenshot of Franklin Energy's Efficiency Navigator

as a non-profit, we are not focused on margins. We need to find opportunities where we can break even and earn some surplus that we can reinvest—but we have more flexibility in terms of the size of projects we can go after." In addition to non-profit ICs, ICs that frequently work with co-ops are often accustomed to and willing to work on EE programs with smaller budgets. For example Mark Gosvener, COO of ESG, said that his firm frequently works on program implementation projects in the $30,000 to $40,000 range. "Our business model is set-up to work on smaller projects with co-ops and municipal utilities. Some of the larger implementation companies can't make those budget constraints work—but we focus on serving smaller rural areas and are almost always more cost effective than if the co-op were to hire a full-time employee with benefits."

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Co-ops may also consider collaborating with a group of distribution co-ops under a single G&T or statewide contract in order to offer a larger budget that could attract interest from a wider range of ICs. A related ***TechSurveillance*** article about multi-cooperative collaboration on EE programs, *Practical Partnerships: Collaborative Approaches to Energy Efficiency*, elaborates on the economies of scale and cost efficiencies of collaborative approaches to EE.

Reduced Liability

Because co-ops do not typically have established expertise in many of the trades employed for EE program delivery, co-ops can limit their liability through outsourcing. Once an IC is identified, a contract that ties payment to performance metrics can reduce financial liability to the cooperative and is a common practice (Burke, 2011). A recent E Source Forum found that many regulated utilities that used ICs incorporated performance incentives to reward progress toward energy savings goals and hold ICs accountable for poor performance (Wemple, 2013). Dan Tarrence of Franklin Energy says that "a meaningful portion of our compensation (e.g., 10 percent) is often tied to meeting specific program goals. Sometimes it is to save a certain amount of energy or a customer service metric—like number of completed applications. If there is a good methodology in place and a measurable metric, we're happy to make part of our compensation contingent on meeting performance goals."

SAFEGUARDING THE MEMBER-CO-OP RELATIONSHIP WHILE WORKING WITH AN IMPLEMENTATION CONTRACTOR

A critical concern some co-ops have related to contracting out EE program implementation is how ICs may negatively impact the member-co-op relationship. They are fearful of another entity getting between the co-op and the member. However, this is a concern that all co-ops interviewed for this paper did not find to be true in practice. Laura Matney explained that "at first, WVPA had some fears about how working with an IC would impact the member-co-op relationship. However, now, after two years of working with our IC, Franklin Energy, that fear has mostly gone away. Franklin Energy staff are now an extension of the co-op staff. As the manager of our contract with Franklin, I try to stay in close touch with Franklin's boots on the ground people. I'm lucky that Franklin's Indiana office is nearby. I go to lunch regularly with the Franklin staff and am available to them by phone and email. I ask what they are seeing and hearing. We take a strong team approach so that, if for example, a member says they weren't happy with the service they received from a Franklin staff member, I have a relationship with that staff member and can better evaluate the situation."

Mary Schlaefer, the President and CEO of WECC, says that many of the concerns co-ops may have about contractors harming the cooperative-member relationship can be alleviated by good selection and management of an IC. "There is really an opportunity for ICs to enhance

"Working with an IC should be almost all upside. Really, the only risk is if you select the wrong IC."

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the cooperative-member relationship. When we run programs, they are always branded as the co-op's program. Working with an IC should be almost all upside. Really, the only risk is if you select the wrong IC. Look for an IC that has served co-ops; this is the best hedge. Get good recommendations about who is delivering the best services," says Schlaefer.

Art Thayer, Director of Energy Efficiency Programs at MECA, noted that "the MECA Energy Optimization Program, implemented by WECC, has been so successful—and member satisfaction with the program is so high—that most of the co-ops would continue to pay into and participate in the EO collaborative even if the Michigan Legislature got rid of PA 295."

One of the best ways to alleviate confusion about the role of ICs is to truly treat ICs as an extension of the co-op staff.

One of the best ways to alleviate confusion about the role of ICs is to truly treat ICs as an extension of the co-op staff. Jeff Cromie of Wells Rural Electric Cooperative, had uniforms and car magnets made for ESG's direct install staff with the Wells and Touchstone logo prominently displayed. Co-op members were informed about the direct install program via the annual meeting and newsletters. "We communicated with the members about what we were trying to accomplish with the direct install program. At the meeting and in our newsletter, we referred to ESG staff as partners of the co-op," said Cromie.

Finally, another perspective is that hiring an IC to provide the back office support, like regulatory reporting, can actually free up the co-op to spend more time with their members. Cromie, the Director of Marketing and Key Accounts at Wells, noted that the reporting services performed by ESG allow him to do what he is best at: "I'm a people person, not a numbers person." Co-op staff filling roles like Cromie's should be spending as much time communicating with members and key accounts in order to meet changing needs and keep member satisfaction high.

CONCLUSION

Co-ops are under more regulatory pressure to pursue EE. Because many co-op staff are stretched thin and have limited experience with EE program implementation, co-ops will need additional support. Implementation contractors (ICs) can fill this staffing and expertise gap. The primary role that ICs play is delivering program energy savings goals within a specified budget and timeline. In order to achieve savings goals, ICs provide a wide range of services. IC firms and IC contracts come in all shapes and sizes.

ICs can be very cost-competitive—especially when compared to the costs of bringing on full-time employees to run a program—but most are used to competing for large contracts with IOUs. If co-ops want to attract the big ICs, they will have to offer big contracts, which they might be able to do if they aggregate all the distribution co-ops under a single G&T. It is also possible to find smaller ICs that are willing to work on smaller contracts.

ICs can offer regulatory expertise, technical expertise, staffing flexibility, cost efficiencies, and reduced liabilities. Co-op experience to-date indicates that the cooperative-member relationship can not only be safeguarded while working with an IC, but it can actually be enhanced by the services that an IC offers. ■

Volume 2 of this series, ***Program Implementers: Identifying, Hiring, and Managing an Energy Efficiency Implementation Contractor***, discusses how to:

- Write an RFP and solicit proposals from ICs
- Evaluate proposals and budgets from an IC and select an IC
- Common pricing structures for ICs: performance-based payments versus time- and materials-based payments
- Best practices for managing an IC
- When and how to terminate an IC

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About the Authors

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.

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.

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
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