

All Together Now! How Collaboration Works in Arkansas

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Abstract

Too often EM&V activities are conducted in a vacuum, in which the evaluation results are not incorporated into either current program activities or future program planning. But the Parties Working Collaboratively (PWC) in Arkansas has developed a new model that incorporates the energy efficiency findings and updates in a timely manner, creating a true EM&V feedback loop. By developing a truly collaborative process involving the seven investor-owned gas and electric utilities, the EM&V contractors, program implementers, and key stakeholders, Arkansas has been able to address critical policy issues and make timely revisions to both its EM&V plans and savings goals in real time. Although there are many divergent viewpoints, the PWC has been able to successfully work through thorny evaluation issues and come to unanimous agreements on materials they have been directed to develop including Technical Reference Manuals, EM&V Protocols, and Net-to-Gross (NTG) savings adjustments, approaches to quantify non-energy benefits and carbon cost assumptions for energy efficiency planning.

The PWC has been so effective that the Arkansas Public Service Commission is now looking to expand its role to include deliberations on policy issues as well. Some new issues that will be explored in this collaborative setting include identifying the best approaches for offering statewide weatherization programs and strategies to attract Commercial and Industrial (C&I) customers to participate in both prescriptive and custom program offerings. This paper will summarize the viewpoints and perspectives from five key vantage points: the General Staff, the utilities, the Independent Evaluation Monitor, the EM&V contractors and program implementers.

Introduction

When the Public Service Commission named the first set of Arkansas energy efficiency programs “Quick-Start” programs they were not that far off the mark. In just three years the energy efficiency community in Arkansas has made stellar progress. It is now ranked fourth in the Southeast and is viewed as a major leader in energy efficiency in the Southeast- a big jump from its 37th ranking in 2010, according to ACEEE’s State Energy Scorecard (<http://aceee.org/state-policy/scorecard>).

These significant accomplishments are due to the hard work of the Parties Working Collaborative (PWC) established by the Arkansas Public Service Commission in 2006. The PWC members include the seven investor-owned gas and electric utilities, the Evaluation, Measurement & Verification (EM&V) contractors, program implementers and intervenor groups.

This paper provides an overview of the decision-making process used in Arkansas to achieve these remarkable accomplishments, thus making the Arkansas PWC model is now becoming the “one to watch” in other nearby jurisdictions including Oklahoma, Missouri and Mississippi.

Background of Energy Efficiency in Arkansas

Energy efficiency was an idea ahead of its time, when Arkansas Attorney General Bill Clinton and the General Assembly passed the Energy Conservation Endorsement Act of 1977. This act authorized the Arkansas Public Service Commission (APSC) to approve utility programs to conserve energy. However, the APSC did not initiate work to establish a regulatory framework and rules for energy efficiency programs until January 2006-- nearly 30 years later.

But Arkansas has made up for lost time. Just one year later, in January 2007, pursuant to its authority under Ark. Code Ann. §23-3-401 et seq., the Commission approved and adopted “*Rules for Conservation and Energy Efficiency Programs*” (*C&EE Rules*), which directed the Investor Owned Utilities (IOUs) to design and implement energy efficiency programs in Arkansas.

Since May 2007 the seven investor-owned gas and electric utilities have been offering energy efficiency programs. The first suite of programs, launched in July 2007, were “Quick Start” programs based on proven models from other jurisdictions (Honorable 2013). In addition, the seven utilities sponsor and fund a statewide program which installs comprehensive energy efficiency measures designed to reduce energy use including building envelope measures, energy efficiency heating, cooling, ventilation (HVAC) and water heating measures, and direct install measures. These comprehensive programs are referred to in the United States as “weatherization” programs.

In 2010, the APSC further established the importance of energy efficiency as a resource by adopting an energy efficiency resource standard (EERS), guidelines for efficiency program cost recovery and a shareholder performance incentive, and new guidelines for utility resource planning, which include provisions for demand-side resources. Since then, electric and gas utilities have significantly expanded their energy efficiency program portfolios in order to meet the annual energy efficiency targets. Recovery of direct program costs associated with commission-approved energy efficiency programs is accomplished through an energy efficiency cost recovery rider on customer bill (Byrd 2011).

Evaluation, Measurement & Verification (EM&V) was also viewed as an integral part of the Arkansas energy efficiency program framework. The evaluations are governed by several orders including 10-100-R which established the role of first an EM&V Advisor and then an Independent Evaluation Monitor to develop the evaluation framework and supporting materials in a collaborative setting.

Throughout the development of these energy efficiency policies and programs, the APSC has relied on a collaborative process to work through specific issues among key stakeholders and then provide recommendations back to the Commission.

Purpose of the PWC

The Parties Working Collaboratively (PWC) develops and reports findings and recommendations to the Commission in accordance with the Commission directives (PWC Procedural Guidelines 2014). The Commission established a collaborative process initially to work through issues directly related to energy efficiency rules and policies, specifically related to EM&V issues. It also serves as a forum to solicit feedback from subject matter experts and provides a way for these interested parties to discuss issues and thus minimize litigation.

As Chairman Colette Honorable remarked at a recent energy conference, “All of our stakeholders have had to learn to speak “EE” together” (2013). And indeed they have.

For example, the EM&V Advisor worked with the PWC to develop an EM&V Framework, which included a review of industry best practices for EM&V as well as the evolution of a deemed savings document into a formal Technical Reference Manual.

The PWC has worked together on collaborative rule-development for EM&V, including the creation of a jointly funded Independent Monitor to verify savings and suggest continuous program improvements, development of a comprehensive Technical Reference Manual (“TRM”) that is updated annually to keep up with technology and Industrial Self-Direct rules. (Honorable 2013).

Over the past eight years, the PWC has grown and evolved from a few key stakeholders in 2006 to representatives from nearly 20 different organizations or entities. Initially, the PWC included:

- All gas and electric utilities (including electric cooperatives)
- Commission Staff
- Attorney General and expert consultants

- Industrial customer group
- Commercial customers
- Community action agencies with expert consultants
- State Energy Office

Since 2010, the collaborative, now formally known as the Parties Working Collaboratively (PWC), includes a wide range of both stakeholders and interested parties including low income advocates, college and technical schools, the EM&V contractor and implementation contractors who participate in the meetings and activities. This diversity provides a valuable sounding board to the Commission by integrating the feedback and expertise from these various perspectives to develop recommendations on ways to enhance the current energy efficiency programs offered throughout the state.

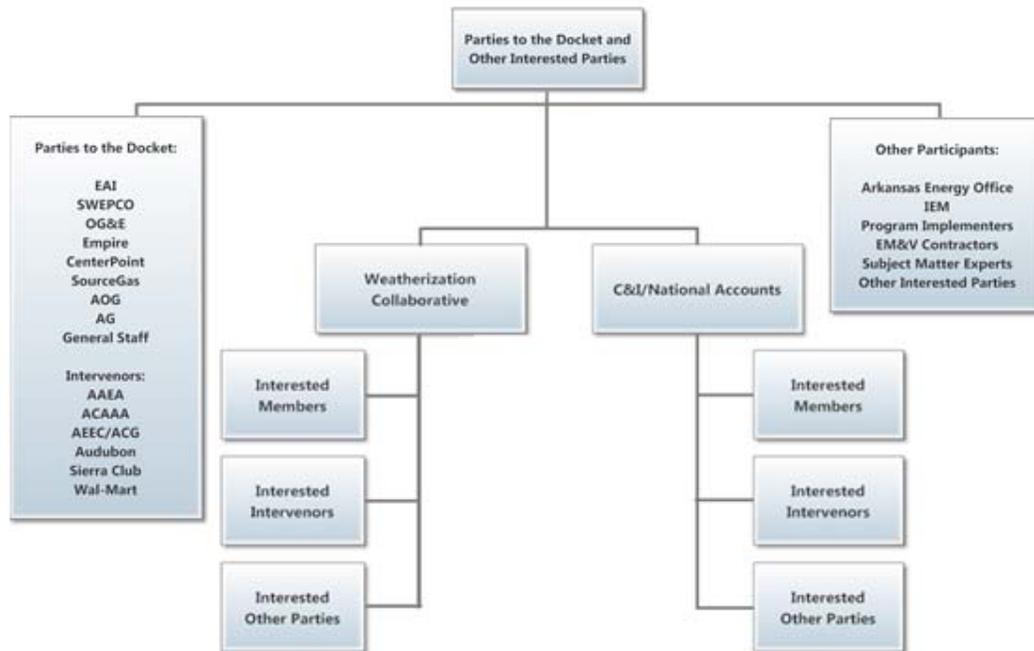


Figure 1: Organizational Chart of the PWC

Roles and Responsibilities of the PWC Members

The PWC is composed of representatives from a variety of organizations including state organizations, electric and gas utilities, energy advocacy groups, and private consulting firms. Their responsibilities are summarized next.

General Staff- Consists of state employees who work for the APSC. Their responsibilities include providing leadership of PWC activities, manages outside consultants retained by the PWC and files testimony to support the PWC recommendations;

Parties to the Applicable EE Docket: These are individuals from a variety of private and public entities including utility staff, employees from state organizations including the Attorney General’s office, Arkansas Community Action Agencies Association (ACAAA) and advocacy groups such as The Sierra Club, Audubon Arkansas, Arkansas Advanced Energy Association (AAEA) and the Clinton Climate Initiative. In addition, several of these organizations employ subject-matter experts to participate and advocate on their behalf in these meetings. Their role is to identify specific issues;

needs; concerns; and other matters that need to be discussed by the PWC; provide timely feedback and advice on proposed actions as developed by the Parties and other PWC participants; offer suggestions and assistance; and develop supporting testimony or other filings as required

Meeting Facilitator: This position is either filled by the APSC General Staff or an outside consultant who has specialized expertise in particular matters. The meeting facilitator ensures that the proposed activities of the PWC conform to industry “best practices” to the greatest extent practicable; provides guidance and insight regarding critical issues facing the PWC; facilitates the discussion among the Parties and other PWC meeting participants. coordinates meeting activities; consolidates comments received on the draft materials and shares revised materials with the Parties and other PWC meeting participants in a timely manner and works towards a positive resolution of all issues related to its assigned work scope

Program Administrators/Technical Experts/Advisors to the Parties: In addition to the technical experts employed directly by some PWC members, other technical experts may also be to provide expertise and input as appropriate to inform the PWC and provide timely feedback on materials; participate in formal discussions. These individuals include representatives from energy consulting firms and engineering firms.

EM&V Contractors (Technical Experts/Advisors to the Parties): These individuals are staff members from consulting firms hired by the electric and gas utilities to perform program evaluation, including statewide market assessment and baseline studies, savings, impact studies and related activities; verify annual energy and capacity savings claims for each program and portfolio; participate in formal discussions as needed, especially regarding best practices in other jurisdictions.

Other Non-Party PWC Participants: This group may include representatives from a variety of other interested organizations, including technical colleges, and staff from the Arkansas Energy Organization (AEO). These individuals attend PWC meetings; participate in meetings, and provide information to the Parties and PWC meeting participants (PWC Procedural Guidelines 2014, p. 5)

In 2013, the PWC expanded its role from EM&V issues to also provide advice on energy efficiency policies including non-energy benefits and carbon pricing. In addition, the Commission has also implemented two specific working groups --the Weatherization Collaborative and the C&I/National Accounts Collaborative – entrusted to develop new program designs and recommended strategies to create a unified statewide approach (Order No. 7, Docket 13-002-U). These broadened responsibilities reflected the APSC’s confidence in the both the ways in which the PWC members addressed issues as well as arrived at critical decisions to improve the overall delivery of energy efficiency programs throughout the state.

Mechanics of the Decision-Making Process

The PWC developed its decision-making process over time. Many of informal procedures used from 2006 to 2013 have now been codified into a new set of meeting procedures described in Commission Order No. 17, Docket 13-002-U and summarized in the PWC Procedural Guidelines. Specifically, these guidelines encourage an open dialog with all interested parties regarding energy efficiency matters.

The PWC strives to arrive at consensus decisions on issues, to the greatest extent possible, in a collaborative manner. However, consensus is not required. In addition, the new procedural guidelines have a well-defined process in which minority parties may petition the Commission directly to appeal any decision agreed upon by the majority of the PWC members. Furthermore, the PWC now has a codified decision-making process described in the new procedural guidelines issued

in 2013.

“In the event that the PWC cannot achieve complete consensus, the PWC will make a concerted effort to identify an alternative that is acceptable to all Parties. The facilitator may solicit the participation of a subset of PWC participants who represent conflicting positions to jointly develop an alternative for presentation to the PWC.

If the Parties, after a good faith effort, are unable to reach complete consensus, the Parties will present the disputed issue or issues to the Commission for resolution. The Parties may present the disputed issues to the Commission in joint filings or in separate filings.

To the greatest extent practicable, the Parties should strive to present their recommendations to the Commission in a single joint filing and to keep the number of separate, individual Party filings before the Commission to a minimum.” (Procedural Guidelines, 2014, p. 4).

The PWC and EM&V

The PWC is responsible for an ever-growing range of tasks, expanding from EM&V to program design and policy issues. However, one of the largest and most important responsibilities of the PWC is to update the Arkansas Technical Reference Manual (TRM) annually so it reflects the best information available regarding new technologies, savings estimates, and critical data gathered during the EM&V process. The TRM evolved from a Deemed Savings Document, originally at more than 600 pages, to a streamlined TRM (approximately 300 pages) and was formally accepted in 2011.

The TRM consists of three separate volumes. Volume 1 contains the EM&V Protocols, which is an extensive framework developed within the PWC under the guidance of the EM&V Advisor in 2011. These protocols were based on industry best practices.

The second volume of the TRM incorporates the deemed savings equations and algorithms used to estimate energy savings for all non-custom programs in Arkansas. From mid-May through August each year, the PWC meets regularly in both conference calls and on-site meetings to review measure assumptions, incorporate measure updates, and make improvements to the TRM. In this way, the PWC is a prime example of the integrating evaluation findings into both program planning as well as program management, as recommended by the National Action Plan for Energy Efficiency (2007).

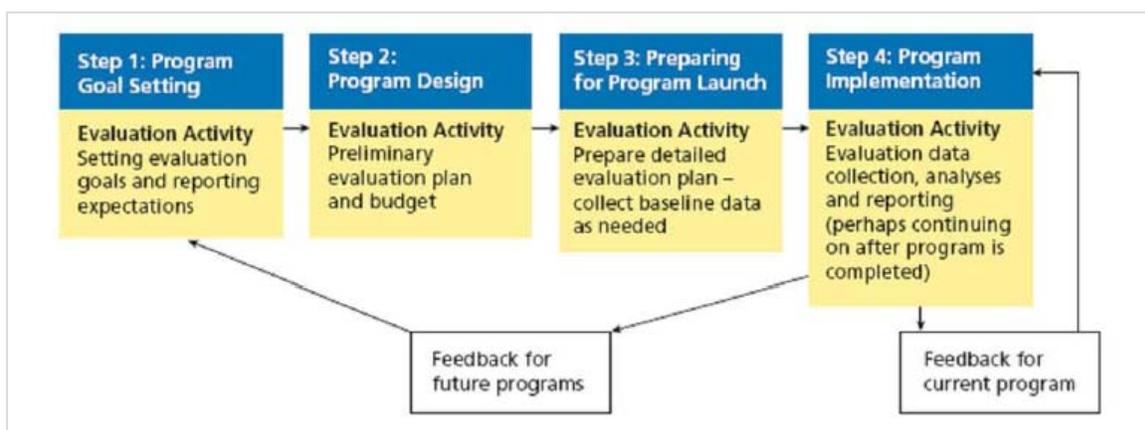


Figure 2: Feedback Loop Incorporating EM&V

The TRM update process provides an excellent example of how the divergent members of the PWC work together to accomplish this significant task by August 31 each year. The following extract from the Arkansas EM&V Protocols – Protocol H- summarizes this update process.

TRM Update Process: The PWC should work cooperatively to identify any necessary revisions and to present any revisions to the Commission by August 31 each year. The flow chart in Figure 3 outlines the steps for regular TRM updates. The PWC will work cooperatively to identify any necessary revisions to the TRM. To ensure there is a clear differentiation between policy and technical matters, the PWC should establish regular meetings devoted to policy issues and resolving technical issues in which the PWC can discuss these matters and determine any necessary revisions to the TRM for recommendations to the Commission for approval.

The process outlined in Figure 3 requires a number of different roles to ensure effectiveness, sufficient review, and independence. The following is a list of key roles and responsibilities for this process.

- **Arkansas Public Service Commission (Commission)**
 - Approves or denies any changes to the TRM, as well as this TRM process.
- **Independent Evaluation Monitor (IEM)**
 - Ensures compliance with national Evaluation, Measurement, and Verification (“EM&V”) “best practices,” and Commission approved protocols and the Arkansas TRM.
 - Manages timely updates and/or expansion of deemed savings and the TRM are pursued.
 - Oversees and coordinates the activities of the TRM Technical Manager.
 - Gives feedback on draft measure characterizations from other parties
 - Coordinates with Staff on recommendation for TRM revision to the Commission.
 - Manages and updates TRM manuals (after Commission approval of changes).
 - Ensures proper use of TRM in annual savings verification process.
- **Program Administrators / Utilities / Program Implementers**
 - Identify need for new or revised measure characterization – usually due to program changes or program/market feedback.
 - Communicates need for new or revised measure to IEM.
 - Give feedback on draft measure characterizations from other parties.
 - Participate in formal discussion and dispute resolution.
- **TRM Technical Manager**
 - Identifies need for revised measure characterization (usually based on knowledge of local or other relevant evaluation studies).
 - Reviews, researches and/or develops draft measure characterizations identified either by itself, EM&V Contractor, Utility, IEM or other party.
 - Incorporates revisions to draft and final TRM documents.
- **EM&V Contractors**
 - Identify need for revised measure characterization (usually based on local evaluation studies it has conducted or managed).
 - Research and/or prepare draft measure characterization for consideration by the PWC,
 - Provide input/feedback on draft measure characterizations developed by other parties.
 - Perform program evaluation - includes statewide market assessment and baseline studies, savings impact studies (to measure the change in energy and /or demand use attributed to energy efficiency), and other energy efficiency program evaluation activities.
 - Verify annual energy and capacity savings claims of each program and portfolio.
- **Staff**
 - Works with PWC and IEM to identify any necessary changes to TRM.

- Annually, by August 31, submits recommended revisions to the TRM to the Commission for its approval.
- Provides supporting testimony for any recommended revisions.
- **Other Parties to the Docket/ Interveners**
 - Identify need for new or revised measure characterization (usually based on knowledge of local or other relevant evaluation studies).
 - Give feedback on draft measure characterizations from other parties.
 - Provide input and assist in identifying necessary revisions to the TRM.
 - Provide testimony as needed addressing recommended revisions to the TRM.

This process includes several potential stages of discussion and feedback on draft modifications to the TRM. The IEM also convenes a Technical Forum for the PWC and other key stakeholders. This forum identifies the changes made to the annual TRM update, and highlight the findings in the Annual TRM update. It will also provide an opportunity for the Parties to ask questions and provide more detailed information regarding the scope of these changes.

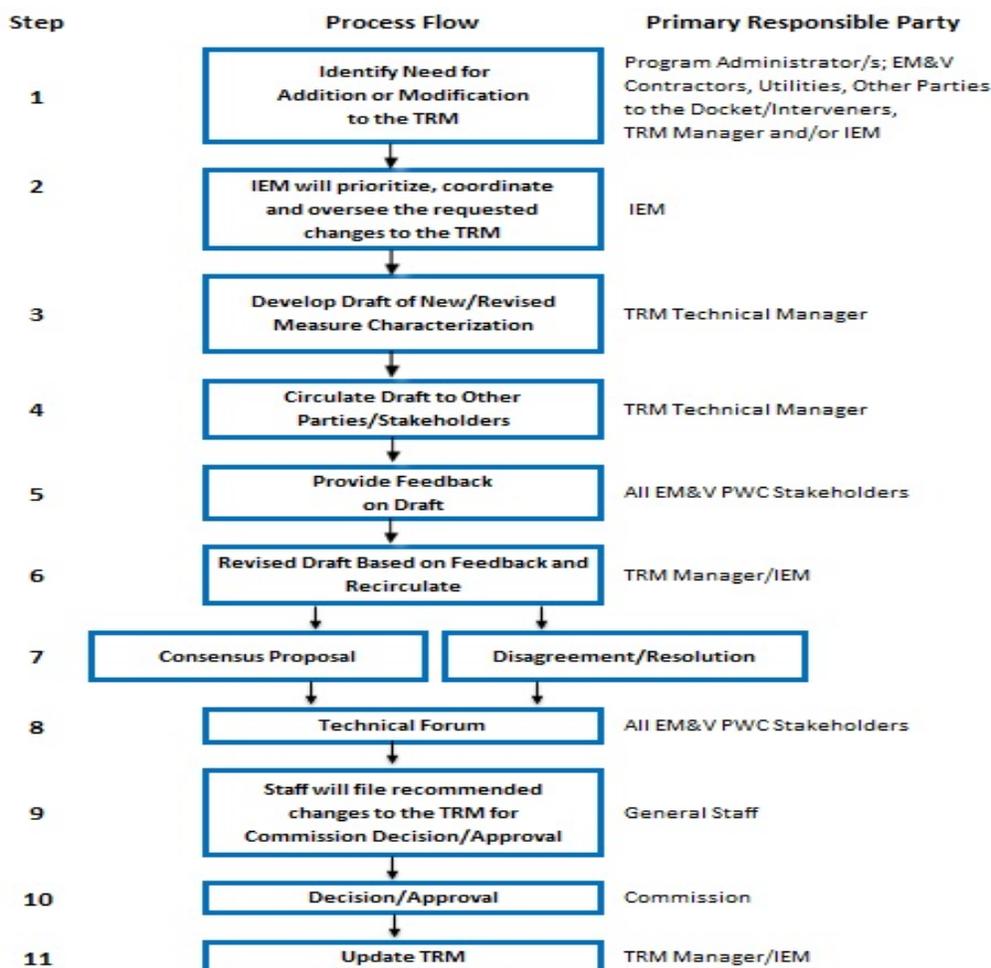


Figure 3: Flowchart for Annual TRM Update Process

Accomplishments

Although this process is often akin to “herding cats” as there are many divergent viewpoints, the PWC has been able to successfully work through thorny evaluation issues and come to unanimous agreements on Technical Reference Manuals, EM&V Protocols, and Net-to-Gross (NTG) savings adjustments, approaches to quantify non-energy benefits and carbon cost assumptions for energy. To date, The PWC has accomplished the following:

In 2011:

- The PWC successfully transformed its 600-page Deemed Savings Document into a Technical Reference Manual (TRM) under the guidance of the EM&V Advisor (now the IEM)
- The PWC reviewed the findings from a literature review of EM&V Best Practices and developed an EM&V Framework leveraging materials developed in other jurisdictions including the Northeast Energy Efficiency Partnership (NEEP) and the California Evaluator’s Protocol

In 2012

- The PWC addressed critical issues including prioritizing the list for measure updates based on the findings from nine EM&V results and feedback from program implementers. These updates were completed in a four-month timeframe.

In 2013

- The Commission issued Order No. 2 in Docket 13-002-U which proposed a number of new activities for the PWC to undertake including developing a separate Collaborative focused on Continuous Improvement (p. 41 of 65). Although the PWC members had differing opinions regarding the best way to address these issues, a smaller group of members developed and filed a response which proposed an alternative to the proposed approach of setting up a second statewide collaborative. This subgroup, described as Joint Commenting Parties (JCP) instead demonstrated to the Commission the ways in which the current PWC is already engaged in addressing the majority of the issues raised by the Commission through the PWC. After reviewing these comments, the Commission agreed and the PWC was able to continue in its current form, selecting and hiring additional experts as needed to address those topics currently not covered in the PWC. In this way, the PWC was able to avoid a lengthy, drawn out and perhaps contentious hearing and instead focus its efforts directly on those issues of critical importance to the Commission.
- The PWC continued to improve the TRM and developed version 3.0. This version incorporated industry best practices regarding the appropriate methodologies to evaluate behavioral programs, provided expanded guidance on conducting limited process evaluations, and included updates on energy algorithms reflecting changes in ENERGY STAR specifications.
- The PWC role expanded significantly, based on the Commission’s direction to address additional topics to promote continuous improvement and cross-fuel coordination. Through a series of Commission Orders, the PWC was directed to address the following through a new docket- 13-002-U.
- Develop and manage a potential study to determine the market opportunities for energy savings in Arkansas. The study will estimate potential over a ten-year period, with a separate estimate for the 2015-2017 three-year period. While it will focus primarily on existing

technology, bidders will be asked to account for anticipated technology during the ten-year study period. The PWC, with the IEM as the facilitator, wrote and issued an RFP to conduct a market, technical and achievable potential study conforming to the guidelines set forth by NAPEE (2007) and industry-best practices. This entire activity was completed within five months and was unanimously submitted to the Commission for approval (Order No. 7).

- The PWC was also directed to establish two new collaboratives focusing on specific issues to promote cross-fuel coordination. Specifically, the Weatherization Collaborative is working to establish a unified statewide approach to meet the needs of residential customers, particularly those in severely inefficient homes, while the new C&I/National Accounts Collaborative is working to achieve similar coordination in the commercial sector.
- The Weatherization Collaborative facilitator was approved in Commission Order No. 12 in December 2013, and work began immediately to address these issues. The facilitator for the C&I/National Accounts collaborative was selected through an RFP process and the work began in early 2014.
- The PWC reviewed a variety of carbon pricing scenarios and put forth recommendations for Commission review in late 2013. The decision to include carbon prices will be delayed until the potential study is completed in late 2014 or early 2015.

In 2014:

- The PWC is currently engaged in both working through the development of new coordinated approaches for the weatherization and C&I sector. Recommendations are due to the Commission by October 1, 2014.
- The PWC is also currently reviewing the use of non-energy benefits as part of the utility program planning process. (Order No. 7)

Due to the hard work and diligence of the PWC members, along with the guidance of outside experts and consultants, the PWC has made remarkable progress in increasing the overall depth and scope of energy efficiency programs throughout the state. While the process can be a bit messy, the PWC members remain committed and engaged to work towards these ambitious goals.

This progress is even more remarkable given that the majority of these decisions were made based group discussions, usually held via a webinar or teleconference. The PWC members meet in-person approximately six times a year; but hold regular meetings biweekly or monthly, depending upon the topic. For example, the majority of progress made to update the TRMs and develop a new statewide unified weatherization approach is handled through discussions using teleconferencing tools. The fact that these discussions can lead to timely resolution of rather difficult and complex topics, like carbon prices, non-energy benefits, and the scope of potential study, is truly remarkable. It is even more telling that although sometimes the PWC members are split on their opinions, they come together as a unified group to present their recommendations to the Commission for resolution. Perhaps the most remarkable aspect of the Arkansas approach is that all of these recommendations have been developed through a consensus-building approach and none of these issues have been litigated in Arkansas.

Key Conclusions/Recommendations

This paper identifies the key ingredients that are essential to an effective collaborative decision-making process. The key take aways from the Arkansas experience are summarized next.

Collaboration is sometimes messy- but very worthwhile.

It is not always easy to bring together a group of divergent opinions –especially when discussing issues via telephone rather than face to face. However, the approach in Arkansas including having a neutral facilitator, drawing on industry best practices and experts for guidance as well as the continued guidance and feedback from the Commission made this collaborative process a stellar example of the benefits of consensus-building decision-making. It is not always easy, but the results make it all worthwhile.

You can disagree without being disagreeable.

PWC members are composed of a wide variety of energy organizations ranging from investor-owned utilities to energy advocates like the Sierra Club and the National Audubon Society. Some PWC members are relatively new to the process, but all are dedicated to doing the very best to support the Commission goals. Discussions sometimes are lively with the PWC, but the procedural guidelines ensure that all parties have the ability to express their opinions. Moreover, the PWC members have learned to state their positions and arguments in a constructive manner.

Consensus decision-making can work if minority opinions are allowed.

A few years ago, some PWC members wanted to require unanimous approval of all decisions. However, the Commission opted for a consensus-building approach instead that allowed all opinions to be valued, but did not require unanimous approval. Given the difficulties of the issues addressed in the PWC, this approach has proven to be correct. Rather than trying to get everyone to agree on the lowest common denominator, this approach leads the PWC to aspire and attain ambitious goals. But it works because all parties are allowed to participate and minority opinions are both respected and considered throughout the entire decision-making process. In addition, having a neutral facilitator ensures that all major areas of the discussion are recorded in meeting minutes, and that all parties' opinions are welcome and encouraged.

Rome was not built in a day; neither was the Arkansas PWC

This was a phrase that was often used to start the early PWC meetings, as the EM&V Framework was being discussed. The work scope for the PWC is quite ambitious and thus it needs to be broken down into manageable tasks. Through the procedures established both formally and informally, the PWC tackles in task in a logical and step-by-step manner. Big issues are broken down into bite-size chunks for specific discussions. By taking a careful and measured approach, the PWC is able to consider all the nuances of each topic area, and thereby arrive at a reasonable and achievable course of action for the Commission to consider.

Conclusions

As Chairman Honorable observed, “Despite the challenges, the time to complete tasks has been much shorter than otherwise would have occurred” (Honorable 2013).

This approach, unique to Arkansas, should be reviewed and incorporated in other jurisdictions because it offers the ability for diverse stakeholders with conflicting goals and perspectives to work productively together to optimize energy efficiency programs statewide. While the process may be at times challenging, it is a key reason that Arkansas has made such remarkable progress in just seven years, and is now a leader in promoting energy efficiency in the Southeast. Other states, like

Mississippi, are looking to follow Arkansas' lead towards improving not just energy efficiency programs, but the overall quality of life for their citizens and rate payers.

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