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# The Clean Energy Ministerial's US Strategic Engagement on Energy Efficiency in Arkansas

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# ACRONYM LIST

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|---|---|
| ACAAA | Arkansas Community Action Agencies Association |
| ACEEE | American Council for an Energy Efficient Economy |
| ADEQ | Arkansas Department of Environmental Quality |
| ADHS | Arkansas Department of Human Services |
| AEO | Arkansas Energy Office |
| AWP | Arkansas Weatherization Program |
| CAP | Community Action Program |
| CEM | Clean Energy Ministerial |
| CES | Clean Energy Standard |
| CHP | Combined Heat and Power |
| CPI | Continuous Program Improvement |
| DOE | (US) Department of Energy |
| EAI | Entergy Arkansas, Incorporated |
| EE | Energy Efficiency |
| EECR | Energy Efficiency Cost Recovery Rider |
| EECR | Energy Efficiency Cost Recovery rider |
| EPA | (US) Environmental Protection Agency |
| IOU | Investor Owned Utility |
| IRP | Integrated Resource Plan |
| JCP | Joint Commenting Parties |
| LCFC | Lost Contribution to Fixed Cost |
| LIHEAP | Low Income Home Energy Assistance Program |
| NAAQS | National Ambient Air Quality Standards |
| NARUC | National Association of Regulated Utility Commissioners |
| NEBs | Non-Energy Benefits |
| PAC | Program Administrator Cost test |
| PWC | Parties Working Collaboratively |
| RAP | Regulatory Assistance Project |
| RIM | Ratepayer Impact Measure |
| RTO | Regional Transmission Operator |
| SD | Self-Direct Customers |
| SIP | State Implementation Plan |
| SWEPCO | Southwestern Electric Power Company |
| TRC | Total Resource Cost Test |
| WAP | Weatherization Assistance Program |

# FOREWORD

The Clean Energy Ministerial (CEM) is a unique forum, in which ministers from the world's major economies are driving progress on clean energy innovation and deployment.

The CEM selected two regions–the United States and India–in which to conduct comprehensive efforts, otherwise known as a "deep dive," with the idea of making noticeable progress in a concentrated timeframe on select topics. The Regulatory Assistance Project (RAP) was asked by the US Department of Energy (DOE) to develop and implement a deep dive into a state within the US, creating an in-depth work stream to better inform policymakers on utility program designs and regulatory policies that improve end-use energy efficiency. To that end, RAP selected the state of Arkansas for its deep dive after a thorough screening process. What follows in this report is a discussion of the selection process, work stream and accomplishments, lessons learned, and recommendations for using this deep dive model in other jurisdictions. This report is prepared to be of assistance in deliberations at the upcoming CEM5 in Seoul, Korea, in May, 2014.

# ACKNOWLEDGEMENTS

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# INTRODUCTION – THE SELECTION CRITERIA

The task of the Regulatory Assistance Project (RAP) was to select one state to assist in developing its energy efficiency (EE) policies and programs. RAP chose Arkansas after evaluating numerous criteria for determining the best venue. The selection criteria that RAP developed included the following:

- **Level of Energy Efficiency:** RAP used the scorecard developed by the American Council for an Energy Efficient Economy (ACEEE), which ranks the 50 states and the District of Columbia in accordance with how much EE is being undertaken in each state, with a score of 1 being the best state. RAP wanted to select a state with a high score because the opportunities for progress were much greater in those states. States with low scores for the most part had EE programs and policies in place and were moving forward. Those states were eliminated from further consideration, as it was deemed that progress would be in small increments. Arkansas scored a 38 in 2011 and one measure of progress will be to see if its ACEEE score has improved after the Comprehensive Energy Efficiency Road Map is implemented. The impact will probably not be seen until the 2015 scorecard.

- **Regulatory Climate:** Unlike the former criteria based on empirical information, this criterion was more subjective. The goal here was to choose a state that had a strong desire to move forward with EE and was interested and open to receiving assistance. To make this determination, RAP looked at political trends in the state and interviewed stakeholders in the state in question. The discussions with the Arkansas Public Service Commission advisors revealed that Arkansas (with assistance from RAP years earlier) had implemented a "Quick-Start" energy efficiency program, but was eager to take the next step and develop a more comprehensive framework. The very strong interest that Arkansas exhibited played a strong role in selecting this state. It would be far easier (and feasible) to make progress in a state that had an appetite for such progress than in a state that was less sanguine.

- **Commitment:** Although the outcome of any undertaking that involves a legal proceeding and the participation of stakeholders cannot be predicted in advance, it was important to have a serious commitment from the regulators to examine the issues thoroughly and to examine the best course of action for the state in light of the substantial time, effort, and resources to be invested by RAP and DOE. Arkansas recognized and appreciated the magnitude of the resources sponsored by the DOE that were being brought in to help forge a strong energy policy and was willing to commit to a good faith examination of these issues. Arkansas has been faithful to its part of the bargain. Each of the Commissioners fully and thoroughly engaged in the deliberative process, giving careful consideration to comments by the stakeholders and to policy objectives for the benefit of Arkansas and its utility customers.

- **Population and Geography:** The size of the state also mattered in terms of significance, and although Arkansas ranked 33rd in population, its geographic location made Arkansas a state of interest. A map of where EE was advancing demonstrated that there was significant activity in the Northeast, Mid-Atlantic, and West, with smatterings of activity in the Southwest and Midwest. There was little activity in the Southeast. Experience in legal and regulatory proceedings had taught us that the precedents of neighboring states generally carried more weight with decision-makers than precedents in states from other regions. RAP felt it was important to make inroads into the Southeast, and Arkansas seemed like an excellent place to start.

- **Average Electric Rates:** This criterion could be evaluated from two diametrically opposed standpoints, which made this a little challenging. A state with high rates not engaged in EE would need a method to avoid even higher rates, and EE as a least-cost option could help manage spiraling costs. On the other hand, a state with low rates could probably better absorb the initial investment in EE. Arkansas has among the lowest average rates in the country. Yet, due to high usage, residential bills are near the national average. With the existing low base rates and with the recent decrease in fuel costs, Arkansas was presented with an opportunity to invest in EE without incurring significant overall rate increases, in order to manage bills and cost volatility over time. This factor was considered to be an added bonus in choosing Arkansas.

- **Clean Air and Fossil Fuel Reliance:** Because the goal of engaging in EE is predicated in part on reducing the carbon footprint of a state, reliance on fossil fuels was also a factor. Progress in EE in a state with less than average reliance on fossil fuels, although important, would not contribute as greatly to reducing $CO_2$ emissions as in a state with a high reliance on fossil fuels. While Arkansas' overall coal consumption was below average in terms of tons consumed, because it is a smaller state, the percentage of fossil fuels consumed to produce electricity was nevertheless significant.

- **Timing:** Another factor given consideration was timing and regulatory orders in progress in a state. A few states that were considered had orders in place such that the next review of EE policy was years off. It was important to select a state where the timing was right for a comprehensive review and where the policy framework developed could be implemented. At the beginning of the project in early 2012 Arkansas was in the middle of its first 3-year comprehensive planning cycle and was considering how to proceed with the next cycle of programming.

- **Legal Authority:** RAP reviewed the genesis of the Commission's authority to engage in EE to ensure that it would not be subject to challenge. A review of the Commission's authority under the law demonstrated it did have the authority to advance an EE agenda. In addition, the Quick-Start program provided further assurance that the Commission was on firm ground. When RAP began the project, the Commission's

authority to grant incentive payments to utilities was under challenge in the courts by the industrial users. Fortunately, the Arkansas Court of Appeals concurred with the Commission that it had the authority to award incentives for good performance in meeting EE benchmarks and by late summer 2012 the Arkansas Supreme Court denied further review. The first performance incentives were thus implemented for four qualifying utilities in the fall of 2012.

- **RAP Review:** RAP had created its own internal policy grid to monitor activity in the states and help strategically direct internal resources. This document was carefully studied in narrowing down the list of possible states to conduct the deep dive. Again, Arkansas emerged as a likely candidate.

Of all the criteria evaluated, the three most significant criteria were the first three listed. To make the investment in this project worthwhile, it was of critical importance to choose a state where there was room for substantial progress. That progress could not occur without the buy-in and strong desire of the Commission to make it happen. In Arkansas, RAP found both and was grateful for the warm welcome we received.

## THE PROCESS

Once Arkansas was selected, RAP met with the Arkansas Commissioners and their Staff to outline a work plan with rough timelines. Led by Chairman Honorable, the group met over the course of a day and developed an ambitious consensus outline of areas the Commission wanted to address. These included:

- Doubling of electric EE targets and more than doubling gas EE targets over the course of the next 3-year planning cycle (now scheduled for 2015-2017);
- A new incentive structure for electric and gas utilities designed to promote longer-term achievement and more in-depth EE projects, particularly at industrial sites;
- More robust utility avoided cost analysis;
- Proposed inclusion of customer non-energy benefits and societal benefits in EE screening;
- Proposed continuous program improvements through creation of a statewide collaborative for electric and gas utilities;
- Creation of dual-fuel programs, including leveraging utility dollars with weatherization programs;
- Statewide data reporting protocol;
- Consideration of decoupling sales from revenues; and
- Moving the Integrated Resource Plan (IRP) process from guidelines to comprehensive rules.

The first phase of the mission involved reviewing the portfolios and filings of the utilities under the Quick Start program to determine compliance with Commission orders and to also allow the team an opportunity to develop a solid understanding of Arkansas EE programs and what utilities were doing to comply. The second phase which was extended an additional nine months, focused on the topics listed earlier in this section. Part of the reason for the extension was the Commission's granting of the joint request of stakeholders (including the utilities, Commission General Staff, the Attorney General, and intervenors – collectively dubbed the Parties Working Collaboratively or the PWC), who stated that they needed more time to evaluate and comment on the extensive proposal that was released for comment on January 4, 2013.

## PHASE ONE – THE FIRST SIX MONTHS

In early 2012, the Arkansas Public Service Commission accepted the offer by the RAP and the US DOE to provide extensive technical assistance regarding the Commission's EE policies. According to the Commission, RAP's assistance came at a critical time as they were in the second year of a three-year ramp-up of comprehensive EE programs in Arkansas. It was the first year in which the Commission reviewed and approved a tariff rider providing lost revenue adjustment (Lost Contribution to Fixed Cost, or LCFC) and performance incentives for utility companies. It was also the period during which the Commission had to begin developing policies applicable to the second three-year cycle of utility EE programs. Also, during the second half of the year, each electric utility was required to develop and file its triennial IRP, and the state's three largest electric utilities were to examine the need for scrubbers at large coal-fired units. Finally, the Governor had tasked three agencies (the Commission, the Arkansas Energy Office, and the Arkansas Department of Environmental Quality) with developing a state energy plan to potentially be introduced in the upcoming legislative session.

During the first six months of that effort, the Commission and RAP accomplished the following tasks:

- **Expert review and commentary on the first-ever utility LCFC and incentive tariff filings.** In both 2012 and 2013 the Commission issued orders for every investor-owned utility (IOU) approving continued funding for each utility's EE program, and funding for LCFC and utility EE incentives in the case of most utilities. RAP's review greatly assisted the Commission in its first-year implementation of the new LCFC and utility incentive policies that have been essential in greatly expanding EE programs in Arkansas. The initial Entergy Arkansas, Inc. IRP, presented on July 31, 2012, demonstrated the importance of successfully implementing these utility revenue and incentive policies:
    a. Entergy (or "EAI," Arkansas's largest electric utility) proposed to continue its ramp-up and to maintain an investment of approximately $100 million per year for the rest of the decade. Absent EE efforts, EAI projects load growth of approximately 0.80 percent per year. The proposed EAI EE program would reduce kWh sales during the next decade by 0.70 percent to 1.0 percent,

effectively eliminating growth and demonstrating significant progress in EE in comparison to levels three years earlier. Utility representatives repeatedly attributed its commitment to EE programs to the Commission's implementation of supportive cost-recovery and incentive policies.

- **Expert analysis and on-the-ground assistance to optimize and coordinate Arkansas weatherization programs.** As in most states, federally designated community action agencies and non-profits provide weatherization to low-income residents in Arkansas through the federal Weatherization Assistance Program for Low-Income Persons (WAP). In addition, the Commission requires electric and gas public utilities to provide funding to the WAP network to implement an Arkansas Weatherization Program (AWP), which is targeted to severely inefficient homes (rather than to low-income households).[1] Furthermore, one electric and one gas utility jointly deliver a weatherization program that is free of charge to the customer regardless of income. At least three other utilities provide weatherization services as part of other programs. RAP provided a series of memos and conference calls analyzing the strengths and weaknesses of these programs and recommended coordination between the programs and other improvements. If implemented, these recommendations would result in increased funding for weatherization, reduced time and administrative effort at each house, and a financial structure that will sustain expansion of weatherization beyond traditional WAP target populations. On the basis of this analysis, the Commission reached out to the Arkansas Department of Human Services (ADHS), the Arkansas Energy Office (AEO), and the Arkansas Community Action Agencies Association (ACAAA) to discuss coordination. In July 2012 representatives of the Commission and three RAP experts traveled to the annual Arkansas WAP conference and met with each of the principal weatherization entities. On July 1, 2013, the Arkansas Energy Office assumed administrative responsibility for the federal WAP and the employees responsible for WAP were transferred to AEO from the former administrator and DOE grantee, ADHS.

  As part of its new responsibilities, AEO is now in the process of refining the structure of the WAP by completing the re-bid of the program to a reduced number of Community Action Program (CAP) agencies so as to better address weatherization needs for low-income households across the state. Following the re-bid the AEO has awarded sub-grant contracts under the approved FY 2014 WAP State Plan to six CAP agencies – down from the original 16 that delivered services for many years.

  As the result of already diminished federal funding for WAP and Low Income Home Energy Assistance Program (LIHEAP), as well as uncertainties regarding future funding,

[1] In 2003 the Arkansas Supreme Court ruled in response to a legal challenge by industrial customers that the Commission is not authorized to implement social programs based on income, which has been interpreted by some parties to mean that the Commission cannot require the implementation of weatherization programs targeted to low-income customers.

the pending State Plan contains elements that direct the sub-grantee agencies to increase their efforts to leverage the federal DOE funds and the federal LIHEAP funds that are combined for the overall WAP, including leveraging funds that are available from Arkansas's investor-owned utilities under the AWP, as well as looking for opportunities to perform "fee for service" programs for non-low-income residential utility customers.

- **Initiating CHP analysis in Arkansas.** Industrial customers comprise nearly 40 percent of electricity demand in Arkansas, and half or more of the demand in some utility territories, when commercial customers are included. The Commission expressed interest in a variety of industrial EE policies, and RAP responded by obtaining assistance on combined heat and power (CHP) through another DOE program. The Commission agreed to have RAP analyze standby rates for Arkansas electric utilities and to invite cooperation by the utilities in developing solutions, and the Commission involved the Governor's office and AEO in the project. The first joint Commission-RAP-Governor's office call took place on August 1, 2012, and the AEO sponsored an industrial EE and CHP conference in June 2013. It was reportedly considered one of the more successful events under that program. Chairman Honorable spoke at the event. The analysis that RAP prepared is not yet published but should be in the near future. The draft analysis indicates that significant changes could be made to more accurately reflect the cost of service to customers using CHP, likely making CHP more attractive to customers.

- **Laying the groundwork for the next three years.** RAP provided significant analytical work in early and mid-2012 that formed the basis for Commission deliberations initiated in late 2012 and resolved in 2013. This analysis greatly accelerated a process that otherwise could take many years: rather than seeking comment by parties to gradually develop policies, RAP assistance enabled the Commission to propose a suite of coordinated policies for comment by interested parties. Even one of the efforts outlined below would constitute a major undertaking for both the Commission and for the parties involved in the necessary proceedings. Initial plans to implement all three within the second six months proved to be too ambitious. Even extending initial project deadlines for a second six months required aggressive action, but most goals proved to be achievable.

  - **Next three-year EE cycle**: The Commission's prior policy, established in late 2010, was to award an EE performance incentive to utilities based on 10 percent of net benefits (as measured by the Total Resource Cost test, or TRC), and capped at either 5 or 7 percent of program budgets, based on the level of achievement. RAP analyzed this incentive structure, noting that it provides inadequate incentive for long-term, cumulative achievement, or for overachievement. RAP recommended a refined incentive structure to correct these problems that became the basis for a January 2013 order proposing guidance for the next three-year program cycle. The next cycle

was delayed one year to 2015-2017 at the unanimous request of all utility and public interest parties.

RAP also helped develop guidance on coordinating programs by gas and electric utilities, better serving large commercial and industrial customers, and implementing a formal collaborative structure for continuous program improvement. RAP extensively analyzed the development of utility avoided costs and the potential to recognize non-energy benefits from EE programs in Arkansas. Each of these major analytical efforts was incorporated in an order issued on September 9, 2013, as detailed further below, that initiated proceedings to establish guidance for EE programs and utility plans to be filed in June 2014 for implementation during the 2015-2017 three-year cycle.[2]

- **IRP Rules:** Arkansas has no binding rules for resource planning. Instead, the Commission issued IRP Guidelines in 2007, and electric utilities file informational plans that are not subject to review or approval. In practice, major resource decisions are and have recently been made on a case-by-case basis, particularly without long-term commitments to meet a significant portion of demand through demand-side resources. With RAP assistance, proposed rules to fully integrate demand-side and supply-side resource analysis and planning were drafted during the first six months and have since been completed for the Commissioners' review.

- **Decoupling:** Arkansas gas utilities are partially decoupled. Electric utilities are not decoupled. As part of the review of EE tariffs this year, RAP examined the question of whether ratepayers would benefit more from a policy of decoupling electric utility revenues from sales than from the current LCFC policy. RAP provided analysis that formed the basis of an order issued in January 2013 inviting electric utilities submitting rate case filings in 2013 and 2014 to propose decoupling mechanisms. One utility (EAI) has signaled its intention to file a decoupling proposal upon completion of its pending rate case, which should be decided by the end of 2013.

- **Arkansas Energy Plan.** The Commission had a grant of technical assistance through the National Association of Regulatory Utility Commissioners (NARUC) to help develop renewable energy policies to incorporate within the Arkansas Energy Plan. Although RAP was not the prime contractor on that project, RAP reviewed early drafts of the plan and provided substantial comments. In particular, RAP recommended a structure for a Clean/Renewable Energy Standard as the basis for a major part of the Energy Plan. RAP advised the Commission on the drafting of legislation creating a Clean Energy Standard (CES), which included a proposed renewable energy requirement. RAP particularly helped draft a cost cap that appropriately accounted for the long-term rate impact of

incorporating new renewable energy and capacity into utility portfolios. RAP also helped with overall design, which included CHP as a "clean" energy resource.[3]

- **Coordination of utility and environmental planning.** Historically there has been little or no coordination in the planning or approval of major environmental controls or in major resource decision between the Commission and the Arkansas Department of Environmental Quality (ADEQ). Furthermore, the major metropolitan areas of Arkansas have never been out of attainment with the Clean Air Act National Ambient Air Quality Standards (NAAQS) (although an area bordering Memphis is out of ozone attainment and the area surrounding the state capital has been on the cusp of nonattainment for approximately a decade). As a result, the focus by state and local political leaders on air quality is at a lesser level than in states with longstanding nonattainment challenges. In short, Arkansas may present an opportunity to prevent nonattainment, rather than a struggle to regain it after violation, and the Commission might be able to play a role in that effort. Any effective coordination of these two complex areas of regulation requires the development of familiarity and cross-competencies by staff and principals at several levels of both agencies. At a more basic level, it requires the development of relationships among people who work in very different technical and regulatory spheres, with different primary constituencies.

  With RAP's assistance, the Commission has begun to educate its own staff about air quality regulation in a series of conference calls and through attendance at a regional meeting in Dallas and meetings in Washington, DC, as well as webinars and conference calls sponsored by DOE, the US Environmental Protection Agency (EPA), and NARUC. Commission staff has sought the views of other key air quality stakeholders. The Chairman of the Commission and the Executive Director of ADEQ have generally agreed to support efforts to coordinate, and ADEQ provided a briefing on air quality regulation attended by Commission staff. Advisors to the Commission and to the Executive Director have met and developed initial goals for jointly understanding the role that utility regulatory decisions may have on attainment. Although these efforts have not produced a tangible plan, the education and agreements that have taken place so far required considerable time and expertise and are a necessary precondition for more tangible accomplishment. The work has set the stage and planted the seeds for joint cooperation, which the Commission believes will be furthered by the supportive efforts at the federal level by EPA, DOE, NARUC, and other national organizations focused on the increased integration of environmental and EE objectives.

[3] As it turned out, the Governor determined that passage of the Clean Energy Standard legislation would be unlikely during the 2012-2013 General Assembly and pursued other clean energy policies instead.

# PHASE TWO – THE SECOND FIFTEEN MONTHS

Phase two was a culmination of all the groundwork that had been laid in Phase One and resulted in draft orders or proposals as appropriate on three broad topics that will be discussed below in more detail. Those topics were: a comprehensive EE roadmap; an order on decoupling; and an IRP Rule. These were at the very heart of the project goals.

**The Energy Efficiency Roadmap:** On January 4, 2013, the Commission issued a 65-page Order, ("Proposed Order") requesting comments from the stakeholders on a variety of subtopics germane to creating a more comprehensive EE program. Comments and reply comments were ordered to be filed on February 15 and March 1, respectively. However, all the stakeholders (the Joint Commenting Parties, or JCP)[4], citing the complexity of the myriad issues to be addressed and other pending commission proceedings, jointly filed for a revised schedule for comments and reply comments of May 15 and June 1, respectively, which was granted by the Commission. An intervening fact was also that the utilities would be filing their compliance reports for Program Year 2012, which would be useful to stakeholders in preparing comments. The delay became one of the lessons learned in terms of the aggressive schedule, which will be discussed more herein. The Proposed Order requested comments on straw proposals developed by the RAP team and the Commission Staff Advisors. The Commission decision ("The Final Order") was issued on September 9, 2013, and is discussed below.[5]

- **Issue 2—Energy Efficiency Goals:**[6] In the 2011-2013 EE program cycle, the Commission established the following energy savings goals, as a percentage of 2010 retail kWh or therm sales:

**Annual Energy Savings as a Percentage of 2010 Retail Sales**

| | 2011 | 2012 | 2013 |
|---|---|---|---|
| **Electric** | 0.25 | 0.50 | 0.75 |
| **Gas** | 0.20 | 0.30 | 0.40 |

Under the Commission's proposed order, the EE targets for the next three-year cycle were established as follows:

[4] The Joint Commenting Parties is a subset of stakeholders comprising most of the Parties Working Cooperatively.
[5] In the Matter of the Continuation, Expansion and Enhancement of Public Utility Energy Efficiency Programs in Arkansas, Docket Number 13-002-U-721, September 9, 2013.
[6] Issue 1 addressed the procedural schedule, adopting the JCP proposal. The parts relevant to the substantive outcomes are discussed in Issue 2. The discussion that follows tracks the Commission's Final EE Roadmap Order in terms of the numbering of the issues and discussion.

**Annual Energy Savings as a Percentage of 2012 Retail Sales**

| | 2014 | 2015 | 2016 | 2014-2016 Cumulative |
|---|---|---|---|---|
| **Electric** | 1.00 | 1.25 | 1.50 | 3.75 |
| **Gas** | 0.60 | 0.80 | 1.00 | 2.40 |

The PWC,[7] which consists of all of the broad range of stakeholders, requested that a Potential Study be performed to assess the EE potential[8] before establishing goals. In its Final Order, the Commission held that a Potential Study could be performed and ordered that the proposal, along with an RFP and testimony, be filed no later than November 1, 2013. The Commission refocused the purpose of the Potential Study as laying the groundwork to maximize the achievement of the cost-effective EE potential, and provided a list of specific issues it wanted addressed in the Potential Study. The Commission further noted that while the Potential Study would help to inform goal setting, it is ultimately the province of the Commission to determine the appropriate goals. During the interim, the goal for 2014 will continue at 2013 levels and will increase in 2015 to 0.90 percent for electric and 0.50 percent for gas utilities. Once the Potential Study is completed, goals will be set by the Commission for 2016 and 2017.[9]

- **Issue 3—Energy Efficiency Incentive Structure:** Arkansas had a two-tiered mechanism in place that awarded an incentive for achievement of 80 to 99 percent of the energy savings goals, and then increased the incentive for compliance at 100 to 110 percent based on the number of kWh or therms saved. The total amount of incentives available each year was based on 10 percent of program net benefits (net benefits include all of a program's EE cost savings over the life of its measures minus the cost to the utility and ratepayers of implementing the program). However, the award was capped at either 5 or 7 percent of the approved program budgets, depending on whether the utility's performance fell within the first or the second tier of the 80- to 110-percent range.

  With RAP's assistance, the Commission determined in the Final Order that the incentive structure had the following potential shortcomings:

[7] The Parties Working Cooperatively consists of Entergy Arkansas, Inc., Southwestern Electric Power Company, Oklahoma Gas and Electric Company, The Empire District Electric Company, CenterPoint Energy, Arkansas Gas, SourceGas Arkansas, Inc., Arkansas Oklahoma Gas Corporation, the Arkansas Attorney General, General Staff of the Commission, Arkansas Advanced Energy Association, Arkansas Community Action Agency Association, Arkansas Electric Energy Consumers, Arkansas Gas Consumers, National Audubon Society, Sierra Club, and Wal-Mart Stores Arkansas, LLC.

[8] Wal-Mart did not join the motion but did not object.

[9] Id. at 18 - 24.

- A utility achieving 99 percent of target would receive no more incentive than a utility achieving 80 percent of target, as long as incentive earnings hit the 5-percent-of-program-budget cost cap.
- A utility was capped at 7 percent of the program budget, irrespective of the amount of EE it accomplishes.
- The incentive mechanism was tied to performance in each individual year as opposed to total performance over the three-year cycle, which limited utility flexibility.

As incentive payments are considered to be an important component in achieving a successful EE program, addressing this issue was important to the overall success of the program. In order to allow a utility to achieve an incentive payment in accordance with its level of compliance, the RAP team suggested a tiered approach that increased the incentive in concert with the level of EE compliance achieved. The new straw proposal would allow the utilities to be rewarded for their achievements toward the three-year goal in each year; however, in order to attain that incentive, the utilities had to meet at least 50 percent of the one-year goal in each of the three years. At the end of the three-year period, a determination would be made as to where the utility's EE performance falls within the 80- to 110-percent range. The incentive amount would rise linearly from 4 percent of the approved budget program to 8 percent, based on the utility's performance in achieving the target. The incentive amount available would be based on a percentage of the budget of the initially approved three-year plan. In the event that the utility did not meet the minimum 80-percent cumulative threshold by year, any incentive over-recovery would be refunded through the Energy Efficiency Cost Recovery Rider (EECR).

While the original proposal was based on a three year measure to give utilities an opportunity to receive incentive payments in the first and second year as long as they made up the deficit in the third year, the JCP thought this was too complex. Therefore, the Commission decided, in its Final Order, to instead retain an annual goal and incentive structure with the incentives being awarded on a linear rather than stair-step basis. Further, the Commission held that the range for award should not reach below 80 percent of performance, and that the upper end of the range should be extended. The Commission retained the original proposal to set the upper end of the performance zone at 120 percent; to cap the incentive at the sliding scale between 4 percent and 8 percent of program budgets (such that the incentive is capped at 4 percent of budgets for 80 percent achievement; 5 percent for 90 percent achievement; 6 percent for 100 percent achievement; 7 percent for 110 percent achievement; and 8 percent for 120 percent achievement). Shared savings were limited to I0 percent of net benefits. Overall, this revised incentive structure provides significantly more motivation for utilities to exceed the new higher energy savings goals.[10]

[10] Commission Order, p. 28 - 29

- **Issue 4—Avoided Costs:** Avoided costs form the basis for evaluating which particular EE programs are cost effective, and can also suggest the proper overall scope of utility EE efforts. Prior to RAP's involvement, the Arkansas Attorney General had urged the Commission to standardize its approach to avoided costs, rather than continuing the prior practice of letting each utility propose its own reasonable method of determining avoided costs for EE purposes. As one example of the need to provide guidance on the methodology for determining avoided costs, the Attorney General pointed out that avoided cost calculations affect the size of awards under the Commission's recently-adopted utility EE performance incentive, so that it would be reasonable for the Commission to standardize utility approaches. RAP's expertise in this policy area helped the Commission develop a detailed proposal for the standardization of each of the many potential avoided cost elements, outlined below. The JCP largely agreed to this Commission proposal, resolving a complex issue that had been pending for several years.[11]
  - **Avoided Energy Costs:** The JCP accepted and the Commission approved the proposal that avoided energy should include the value of energy freed by EE programs and sold into the wholesale market or avoided market purchases. It also held that avoided energy costs should be differentiated between time and season so as to facilitate the valuation of EE programs and measures. The Commission also acknowledged that although there may be differing opinions on the cost of complying with greenhouse gas regulations in the future, the cost is not zero. It therefore proposed that the stakeholders develop a consensus around a third-party published forecast on the price of carbon regulation in order to establish a common per-unit value for the avoidance of greenhouse gas emissions.

  - **Avoided Capacity Costs:** The JCP agreed and the Commission approved the proposal that the cost of a combustion turbine as modified to account for market conditions, and as applied to years in which the utility or relevant market area is not in surplus for capacity, is a reasonable proxy for avoided marginal capital costs. The Commission also determined that avoided capacity costs could be based on market data, taking into account any significant, foreseeable changes to marginal capacity costs including changes due to investments in environmental controls. In its Final Order, the Commission also instructed the Collaborative to address providing a reasonable third party recommendation on the cost of carbon to be included in the screening of EE programs.

  - **Transmission and Distribution:** The Commission noted that with EE comes reduced reliance on transmission and distribution, and thus the avoided cost is not zero. The Commission therefore proposed that each electric utility develop estimates of

[11] Id. at 23 - 40

avoided transmission substation and line upgrade costs, as well as distribution substation and line upgrade costs, as elements of its avoided costs. The Commission proposal that the avoided costs be based on long-run marginal costs was unopposed by any of the parties and was therefore adopted.

- **Line losses**: The Commission proposed that because energy and demand reductions effectuated through EE programs are marginal reductions, and because marginal line losses exceed average line losses, utilities should use marginal line losses to properly reflect the costs avoided by EE programs. This was unopposed and therefore adopted.

➢ **Issue 5—Cost- Effectiveness Screening and Evaluation and Non-Energy Benefits (NEBs):** The Commission's proposal suggested using the four screening tests for program and portfolio approval with the refinement that either the TRC test modified to include NEBs or the Program Administrator Cost (PAC) test should be used as the primary means of screening EE programs. The Commission also left the door open for a utility to voluntarily seek approval of either programs or portfolios that meet the Societal Cost Test. The policy goals of the Commission are to ensure that the broadest range of individual EE measures are considered, that the cost effectiveness of energy savings programs is accurately assessed for both the utility and ratepayers as a whole, and that portfolios are cost effective as a utility resource and serve the public interest. In its Final Order, the Commission accepted the recommendation of multiple parties to rely primarily on the TRC test with NEBs rather than the PAC test for screening measures, programs and portfolios. However, the Commission allowed itself the flexibility to consider other cost tests as appropriate in order to allow programs that do not pass the TRC to be implemented if they pass other tests and the Commission deems that these programs provide value. The Commission also categorically rejected primary reliance for program approval on the Ratepayer Impact Measure (RIM) test as proposed by some of the parties, reasoning that programs should not be developed on a basis that is determined by utility cost allocation and rate design, rather than by comparing the total costs and benefits of alternative resources. The Commission further stated that the TRC test has the value of comparing total resources and is a better test to evaluate overall program cost-effectiveness and performance.

With regard to NEBs associated with weatherization, the Commission accepted the offer of some parties to review the literature on comfort and health benefits and to provide a recommendation on how to quantify that NEB. With respect to the inclusion of other NEBs, the Commission stated that NEBs should be quantified where they reduce cost or increase value. Finally, the Commission provided clarification regarding a concern expressed by some parties that ratepayers might be required to fund non-energy benefits. The Commission stated that the use of NEBs is only in regard to screening programs so that they pass the TRC test; however, at the measure incentive level, the Commission

determined that ratepayer incentives to customers and therefore ratepayer resources would be constrained by avoided costs.[12]

- **Issue 6—Process and Tasks for Continuous Program Improvement:** In order to develop uniform comprehensive programs that are coordinated across the State, the Commission proposed the creation of a statewide Continuous Program Improvement (CPI) Collaborative that would include all the electric and gas utilities and the stakeholders. The Collaborative would be assisted by a facilitator experienced in EE matters. The Commission also proposed that an independent technical consultant be retained to help the parties develop comprehensive statewide programs, including dual-fuel residential home performance programs. The goal is to share information, ideas, and expertise, and to the extent possible, reach consensus. The Order set out in detail goals and objectives for the first three years of the CPI to move in the direction of statewide uniform best practices. In addition to the above, the Commission articulated other concerns as important to advance:
  - Standardizing and achieving efficiencies in the delivery of whole house weatherization services for residential and small commercial customers;
  - Developing joint-utility EE service offerings to national accounts customers;
  - Exploring an expanded role in EE planning and implementation for Arkansas Manufacturing Solutions and the Arkansas Industrial Energy Clearinghouse, which is currently administered by the Arkansas Energy Office, and inviting these organizations' participation in the collaborative;
  - Pursuing opportunities to greatly increase participation levels among and achieve deeper energy and demand savings in the industrial sector and retain potential self-direct (SD) customers in the utilities' programs or attract SD customers to return to participation in the utilities' programs at the end of the current three-year cycle;
  - Developing cost-effective commercial programs;
  - Making utility EE programs more consistent across the state;
  - Separating utility programs for new construction activities from retrofit programs;
  - Strengthening utility EE programs with various delivery options to capture the greatest number of participants;
  - Evaluating and improving utility planning assumptions, so that the EE plans provide a better reflection of the likely energy savings per participant, the cost per participant, and the number of participants; and
  - Exploring the benefits and challenges involved in establishing and maintaining a statewide database containing information regarding the EE activities of all the utilities.

  In the Final Order, the Commission discussed some of the foundational concepts of a collaborative. While noting that a collaborative (the PWC or the Collaborative) has been in

[12] Id. at 50 - 54

place, the Commission pointed out that there is no record evidence of the functioning and deliberative process of the PWC. The Commission accepted that there may not be a need for outside facilitation of each collaborative meeting but left it for the Collaborative to decide if and when that would be desirable. However, the Commission also noted that collaborative meetings should follow some basic guidelines which should be developed and submitted to the Commission for approval. These guidelines should address the designation of a facilitator for meetings, notice and development of agendas, the timely provision of information and materials, and the manner in which decisions are made and recorded, including the recording of any dissenting opinions. The Commission also authorized the PWC to hire technical assistance as needed to assist the members.

With respect to the various weatherization programs discussed in depth in the Final Order, the Commission charged the Collaborative with identifying a facilitator to guide deliberations concerning the standardization of the existing models of weatherization approaches and coordination of weatherization programs in time for implementation during the next three-year EE program cycle. One of the goals of this effort for all residential customers would be to establish financing mechanism[s] that enable customers to implement comprehensive whole-house retrofits including for severely energy-inefficient homes and to avoid lost opportunities for savings. Regarding the utilities' respective commercial and industrial programs, the Commission ordered the Collaborative to develop uniform offerings that allow commercial customers including national accounts customers-to transparently access EE services through a single application process across fuels and utilities. In order to ensure that the objectives of the Final Order are met with due consideration of the budget and process, the Commission ordered the Collaborative to submit on or before November 1, 2013, a plan describing how the Collaborative would engage a facilitator and consultants to develop the unified weatherization and commercial and industrial programs discussed above.[13]

**Decoupling:** The issue of decoupling revenues from sales in order to remove utility barriers to pursuing EE was recognized by the Commission as an important component to achieving a robust EE program. Currently the Commission uses a LCFC mechanism to compensate electric utilities for lost revenues associated with implementing EE. However, the Commission recognized that this did not eliminate the throughput incentive, which is vital especially if targets are going to be increased. Moreover, the Commission had already implemented partial decoupling on the gas side. As part of the deep dive, two orders were contemplated on the subject. One has been issued and the other is to be issued sometime this year:

- **January 2, 2013 Order:** Although the Commission worked on a straw proposal for decoupling, it did not want the timing of that work to potentially prevent opportunities to advance decoupling in rate case filings that were anticipated imminently. The Commission

[13] Id at 76 – 86.

therefore issued an Order inviting electric utilities that filed for rate increases in 2013 and 2014 to include a decoupling proposal. Although many of the details were left to the utility to determine and explain with supporting rationale and evidence, certain requirements with respect to the characteristics that the decoupling proposal must contain were set forth by the Commission in its Order:

- Customer charges must be set at a level low enough to encourage conservation;
- Establishment of separate revenue-per-customer amounts for, at a minimum, residential, small commercial, and demand-metered commercial customers; and
- Establishment of a true-up mechanism that credits or collects from customers any over- or under-recovery of revenue, respectively.

Other issues that the utility will be required to address as part of a decoupling request in a rate case included the following:

- How frequently should revenues be reviewed and adjusted (for example, monthly, quarterly, semi-annually, or annually)?
- Should the rate impact of annual adjustments be capped, and if so what should be the treatment of any unrecovered or undistributed balances?
- Should existing tariff riders be consolidated into a new revenue reconciliation rider under decoupling? If not, should rider costs be coordinated with revenue adjustment?
- Should decoupling apply only to distribution costs or should it also include generation costs?
- Should all elements of power supply, including investment-related costs and variable operating costs be converted into a comprehensive power supply cost recovery mechanism? Should revenue-per-customer amounts for each decoupled customer class be adjusted based on historical trends in use, trends in cost of service for the customer class (sometimes called a “k factor”), or for other purposes?
- What tariff classes, if any, should be excluded from the mechanism (such as tariff classes with less than ten customers, customers with fixed contract demands, and special contracts customers)?
- Should large industrial customers be excluded from the decoupling mechanism?
- Any other significant features of the decoupling proposal that are not specified above.

On March 1, 2013, the state’s largest electric IOU, Entergy Arkansas, Inc. (EAI) filed a rate case and included a placeholder for decoupling as part of their filing. The President and CEO testified that EAI intends to file a decoupling proposal once its revenue requirement is established in the general rate case in late 2013. Also, another Arkansas electric IOU has expressed interest in proposing a decoupling mechanism as part of a near-term general rate case. Implementation of decoupling mechanisms for these two IOUs would eliminate the throughput incentive for 92 percent of Arkansas electric IOU customers.

- **Straw Proposal on Decoupling:** RAP has prepared for the Commission's consideration a straw proposal on decoupling that addresses the requirements and issues outlined above. Because this is under review and an order has not been issued, no further discussion would be appropriate at this time. However, RAP will continue to update this report as more information is made available.

**Integrated Resource Planning:** The Arkansas Public Service Commission currently has Guidelines in place for IRP. These Guidelines, which were adopted in 2007, call for the utilities to file IRPs for informational purposes. The plans set forth in the filed IRP are not approved. Therefore, when, for example, Southwestern Electric Power Company (SWEPCO) filed for approval of a scrubber on its Flint Creek coal plant in 2012, this was done through a separate proceeding. RAP has advised the Commission on the benefits of an IRP process in which all the information is presented in one docket so that the Commission has the evidence it needs to evaluate a decision. A robust IRP will provide the Commission with better tools to evaluate all the alternatives for cost effectiveness. As of the date of this report, the RAP team has been working with the Commission on several drafts of the IRP rules that will provide both more information to the Commission and will create a decision-making process. An Order with the draft rule for comment is expected to be ready soon. Because this is under review and an order has not been issued, no further discussion would be appropriate at this time. However, RAP will continue to update this report as more information is made available.

# LESSONS LEARNED

DOE provided a significant amount of discretion in terms of determining where in the United States to proceed with the project and what to accomplish to advance EE in a significant way in a state. Having the wide latitude left the door open for creativity and accomplishments. It allowed the participants to stretch and do more. Looking back over the last twenty months of involvement in Arkansas, there are several lessons learned that are worth noting:

- **The project should set forth the mission, but leave room for those implementing the mission to determine the best strategies for doing so.** In doing the deep dive, and in approving Arkansas as the state, the US DOE made it clear that it wanted as a goal to see significant progress in EE in the state that was selected. By not defining specifically what measures needed to be accomplished, it allowed RAP to recognize that different states and utilities within the state had different needs. For example, one state might need help with creating a comprehensive EE plan, whereas another state might already have that, but need help with implementing decoupling or incentives. By not setting down the specific measurements of success, US DOE allowed the RAP and Arkansas Commission team to reach further and include many facets to this project that a more limited scope might not have permitted. The plan that was jointly developed stretched far beyond a comprehensive EE roadmap, to also include decoupling and IRP rules among many other issues. Moreover, the scope of the EE roadmap encompassed numerous hallmark issues that serve as an

example for other states to follow. For example, Mississippi recently issued rules that largely follow Arkansas rules and advocates there are basing decisions (such as setting targets, reliance on TRC instead of the RIM test and urging coordination between electric and gas utility programs) on Arkansas.

- **Provide assistance in regions where the assistance is truly well received and desired.** In choosing a state, an important consideration for RAP was to go where we were wanted and where there was an interest in doing something with EE. Perhaps one of the key drivers to choosing Arkansas was the enthusiastic welcome with which we were greeted and their large appetite for being bold and doing many things at once. The time and careful consideration of issues given by the commissioners was highly noteworthy and the participation and hard work of the Commission advisors to this project made it work.

- **Meet early with the regulators to outline their needs and objectives.** In RAP's first full-day meeting with the Arkansas Commissioners , the Commissioners, Staff, and RAP jointly brainstormed what could be accomplished in Arkansas. Led by Chairman Honorable, we jointly outlined a plan for the issues the Commission wanted to cover and a timeline for doing so, factoring in the existing and projected cases on the Commission's docket. It was critical here for the success of the project that the Commission dictate what it wanted to do and not the other way around. Ultimately the Commission controls what gets done, and they are in a better position to weigh their environment in terms of determining what can and cannot be done and what could be subject to challenge in the courts or legislature. Listening and providing guidance and pathways based on information shared is critical in finding the best ways to optimize success.

- **Stay in frequent contact with the Staff.** From the beginning of the project, the RAP team lead established weekly calls with the Commission Staff Advisors working on this project. Because of the many moving parts in this project, this enabled us to better manage all the work being done. It also enabled the team to build a stronger working rapport and communication. The Staff advisors were very willing to share information on what was going on in Arkansas to help RAP better understand exigent circumstances that could impact our work. Often, questions arose on important energy issues outside the scope of the project, which RAP would discuss and provide advice. In other calls, other members of the team would be brought in to discuss project status and to work through proposed policy recommendations on specific issues. This was time well spent that assisted enormously in the development of issue positions. Moreover, it aided in the team's understanding of the overall project, which in turn helped everyone be more efficient. It should be noted that as the RAP team was working with the Commissioners and their Advisors, it was important to treat the communications and development of positions confidential until they were disclosed to the public in a Commission order.

- **Carefully select a team with the right expertise that can work well with the regulators.** Once the areas that the Commission was interested in addressing were identified, the next

task was for RAP to assemble a team that had the expertise to accomplish the task. RAP recruited a number of team members internally, but also sought outside expertise on other issues. Team members included contractors with expertise in program design and incentives, industrial programs and low-income weatherization programs. The interactions of this diverse team provided a richness of information and perspectives that helped make this project succeed.

- **Be realistic about what can be accomplished in the afforded timeframe, giving consideration not only to the competing demands on the regulators, but also the impact on participating stakeholders.** One could describe Arkansas as a case in which "the eyes are bigger than the stomach." There was a great desire to get a lot done in the short period of one year. During the year 2012, the team reviewed all of the gas and electric utility filings under the Quick Start three-year plan, developed a multifaceted comprehensive EE roadmap that contained new cutting edge ideas for addressing incentive mechanisms, weatherization, dual fuel programs, statewide collaboratives, and NEBs. The team also worked on a proposed framework for a decoupling order, which was issued, along with a decoupling straw proposal. Furthermore, the team developed IRP rules that have approval requirements based upon the Commission's original IRP guidelines, which were solely informational filings. The goals, while laudable, were realistically not achievable within one year. The normal course of business fully occupies the advisory staff of many state commissions without compounding the workload with outside projects such as this. For states with a small Commission advisory staff, like Arkansas, the capacity to take on additional issues even with the significant assistance provided through US DOE funding, remains a challenge. Further, this project would have been challenging for the advisory staff without the assistance of ARRA-funded (NARUC facilitated) electricity modernization experts. In addition, when the Order on the Comprehensive EE Roadmap was issued for comment, all of the intervening stakeholders filed a joint motion to extend the deadline for comments by more than three months, arguing that given the breadth of the Order and other factors, more time was needed. The motion was granted, given the importance of this order and the desire to get meaningful, well-constructed feedback from stakeholders. Although the team pushed as hard as it could, we failed to fully account for the needs of the stakeholders. Fortunately, US DOE granted us an extension to complete the project as long as we stayed within the original budget. Another facet of this lesson learned was that the pushback from some of the intervener's on some of these issues resulted in modifications between the Proposed Order and the Final Order which should be anticipated as part of the compromise. The Arkansas Commission is very committed to hearing the views of stakeholders and giving them serious consideration. To that end, it relied very heavily on the record created for reaching its decision. Despite the recalcitrance in some instances regarding aspects of the Proposed Order, there were also solid areas of consensus that helped forge such a strong end product. Thus, it is important to be mindful of the concerns of stakeholders and to be flexible in finding solutions that all parties can be relatively comfortable with.

- **Be flexible and willing to adjust work plans and schedules as needed to achieve the project goals.** Despite the best planning possible, there is always the unexpected. During the course of the year, it became necessary to account for various factors that resulted in changing gears somewhat. For instance, during the period of this project: the General Assembly changed parties for the first time in over a century, altering the political landscape; and the largest electric utility (80% of residential electric IOU customers) sought to transition to an Regional Transmission Operator (RTO), spin off its transmission assets, and seek a general increase in rates—three actions that each continue to absorb major Commission staff resources. Additionally, the original plan was to put the decoupling straw proposal forward for comment, but when it was learned that Entergy (which has roughly 80% of residential electric IOU customers in the state) would be filing a rate case and had indicated an interest in possibly pursuing decoupling, an order was issued to allow that to happen. (See discussion on decoupling above.) By the same token, given this event and the response of the stakeholders to the Commission's EE Roadmap Order, along with other factors, it was decided that it would be best to issue the decoupling straw proposal at a later date. Finally, while it had been the objective to issue the proposed IRP rules for comment that has not yet occurred given time constraints.

- **Remember ultimately that the role is one of advisor and that the decisions belong with the Commission.** The working relationship between the RAP team and the Commission was very strong. While fortunately there was a lot of synergy in how this project proceeded, it is important to be cognizant of the roles of the participants. At the end of the day, it was the Commission that controlled the process and the decisions, as that is their responsibility and duty to do. With a different commission, in which the advisors – and even the Commissioners - are not always on the same page with the decision-makers, this may cause frustration or clashes. Although RAP did not experience this, RAP was mindful of the roles each entity played, and so this lesson learned is added more as a reminder or caution for future endeavors and not because it was an issue here.

## MEASURES OF SUCCESS

In terms of success, the Final Order speaks for itself. The project to date can be deemed a success because of the many topic areas covered, work done, technical assistance and education provided, and work in progress that will alter Arkansas' energy landscape in a positive way. The measurement of success can be determined by simply asking what the goals were and if they were achieved, and what else beyond the goals were also additionally achieved.

- **Success Achieved to Date:**
  - Full review of the EE compliance filings of all three gas and four electric utilities as a foundation to build and move forward on.
  - Technical assistance and education on new issues in Arkansas, such as:
    - Avoided cost and NEBs;

- Presentation of memorandum on new ideas for delivering weatherization more cost-effectively;
- How to design cost caps for a Renewable Portfolio Standard;
- Issues related to CHP;
- Issues related to clean air compliance;
- Issues related to net-metering; and
- Other issues as they arose.

➢ Development and issuance of the comprehensive Energy Efficiency Roadmap Order (Final Order) that addressed the following:
- Increasing the EE portfolio standard for both electric and gas utilities;
- Explicitly allowing for NEBs to be accounted for in cost-effectiveness program screening;
- Creation of an advanced linear incentive mechanism providing utilities with a greater incentive for over-compliance with the targets.
- Strengthening of the existing statewide collaborative (PWC) for both gas and electric utilities and their stakeholders, with access to a professional expert facilitator and an independent consultant to provide information and analysis to the stakeholders;
- Guidance on the operation of the Collaborative to ensure all stakeholders have access to information and a voice in the outcomes which are reported to the Commission;
- Explicit requirements for the development of programs that will specifically benefit each customer class; and
- Requirement to develop dual-fuel home performance programs for residential customers, thereby increasing the opportunities for more efficiency in the homes, while sharing costs that are reduced through the elimination of redundancies.

➢ Ongoing work and meetings with the Arkansas Energy Office to develop a means to integrate federal LIHEAP and WAP dollars with utility home performance dollars to maximize cost-effectiveness.
➢ Meetings with the Department of Environmental Quality to discuss the role of EE in State Implementation Plans and how that can help.
➢ Issuance of an order inviting utilities to file decoupling proposals with their rate case filings, signaling an interest on the part of the Commission to consider and approve reasonable decoupling proposals.
➢ Preparation of straw proposal on decoupling.
➢ Preparation of draft rules on IRP.

- **Successes Anticipated by Year-end:**
  - ➢ Issuance of an Order on IRP
  - ➢ Implementation of the EE Roadmap 2 Order

In reviewing the original criteria for choosing a state, the two most important were whether we could have a significant impact and whether the Commission was sincerely interested in taking advantage of the assistance we could provide. A key measurement of success is that if RAP were to undertake today the selection of a state, using the criteria discussed earlier in this report, the state of Arkansas would not make the short list of states to consider. This is because the work completed under this project was so substantial that any additional progress made through RAP's assistance, would be minimal by comparison. Our work would be incremental and not necessarily ground-breaking. This more than anything demonstrates the success of this project in that we accomplished what we set out to do which was to have a substantial impact in assisting a state develop its EE policies. Of course, the second criterion of being a willing partner remains. The Arkansas Commission has been a true pleasure to work with and it has been an honor to collaborate with such a dedicated team of individuals.

The project team tackled a very wide, comprehensive array of issues, as opposed to focusing on one discrete issue. This can create precedents that will hopefully be transferable not only to other states in the South, but also across the nation.

## PORTABILITY OF THE DEEP DIVE EXPERIENCE

There are many roads that this project can take in terms of being a model for duplication or expansion by others in the future:

- **Duplicating this project in other states:** The Lessons Learned section of this report provides an outline of important steps that should be followed if a deep dive is to occur in another state. There are still many states that have not done much on EE or are in the nascent stages of developing plans. Often as these states launch into these endeavors, the commission staffs understandably lack the background experience to sort through the plethora of technical issues.[14]As well, especially if the utility does not have an affiliate in another state engaged in EE, it may not have staff on hand that can provide the "how to" manual. This is where the work of the collaborative with stakeholders from organizations active in these issues in other states, and an expert hired for the collaborative, can help guide utilities toward best practices. There has been a lot of work in a lot of states, and the advantage of coming in later is the ability to sift through what has been done and emulate best practices. The path and the activities in Arkansas will lend themselves well toward providing a useful glide path that can be replicated in other states. The key will be finding states that are truly ready and eager to embrace EE as part of the state's energy resource strategy and who are willing to allow advisors to

[14] Throughout this document we have referred to the Commission Advisors who are commission staff employees who advise the Commissioners and assist in drafting orders. This is distinguishable from the General Staff whose role is to review utility filings and make recommendations usually as a party to a proceeding through written testimony.

review the state of utility regulation with fresh eyes and make useful recommendations. For example, EE can be implemented as a non-traditional alternative solution for transmission upgrades or congestion or as part of State Implementation Plan (SIP) filed with the US EPA. Given that commission staffs are often overwhelmed managing the plethora of daily cases and filings, they have limited windows of time to investigate novel approaches to traditional problems.

- **Duplication in other regions of the world:** Of significance is to consider some of the demographics of Arkansas. It is largely a rural state with a high percentage of residents below or near 150 percent of the federal poverty guideline. Despite this, Arkansas does have a blend of demographics with populations in different income brackets and also those living in more urbanized/suburban areas. Although utility rates are lower than average, usage is considerably higher than the nationwide average, suggesting that many people live in poorly insulated homes with high rates of infiltration. The success of the Arkansas initiative demonstrates that this program can be duplicated across a wide swath of demographics. In terms of mirroring this project in other countries, there would of course have to be adjustments based on culture, specific demographics, and other factors relevant to the status of the electric system. Moreover, in developing countries where electric service is not ubiquitous and decisions are being made about how to ramp up their service, EE can be an important tool in planning. It can be a least cost option and also allow the electricity available to be spread over a larger group of customers. The work at the front end to analyze where to invest in a deep dive would most likely be more arduous than what would be required for another deep dive in the United States. Moreover, developing the work plan and ensuring that there is agreement among all the parties involved would be more complex, as understanding cultural nuances would be critical here. Similarly, more flexibility to adjust goals might be needed as the project progresses to account for unexpected events. It should be stressed here that the success of a project the size of the Arkansas deep dive requires the cooperation and commitment of multiple stakeholders and attention to political events that can influence direction and strategies. However, the possible benefits that can be achieved by initiating such a project in other countries can be enormous and can facilitate further projects either in that country or others.

- **Expanding the Arkansas deep dive and taking it to the next level:** When RAP's work is done on this initial deep dive, there will be much work to do. The deep dive created the policies and ideas to initiate in a real way substantial EE progress. Post-deep dive is when all the stakeholders will be required to roll up their sleeves and implement these policies. The work that needs to be done going forward includes the following:

  Having the statewide Collaborative (PWC) work together to refine its process and examine and present to the Commission its recommendations on a multitude of EE program issues;

- Developing a suite of statewide programs using best practices and leveraging educational opportunities by standardization and branding;
- Creating joint dual-fuel programs for home weatherization and performance;
- Finding ways to leverage WAP and utility dollars cost effectively to provide services to as many homes as possible, including those homes most in need of services;
- Implementing decoupling; and
- Rulemaking on IRP.

# CONCLUSION

The deep dive into Arkansas can serve as a model for other jurisdictions and other activities. The hallmarks of this project were manifold. The dedication and enthusiasm of the participants, starting with the Chair and the Commissioners of the Arkansas Public Service Commission through to the commissioner advisors who worked tirelessly on this project, were keys to the success. The interest in doing it all and getting as far as we could go in such a short period of time also sets this project apart. What was accomplished in just 20 months is far more than most regions would accomplish in such a short period of time. Furthermore, the level of depth, analysis, dialogue, and consideration that went into each policy recommendation was paramount to achieving the high quality of the outcomes from this project. Attached to this Report are the two Orders that have been issued to date: the Energy Efficiency Roadmap Final Order and the Decoupling Order. These orders speak for themselves in terms of the work that was done here.