



March 1, 2017

Ms. Terri Lemoine Bordelon Records Section Louisiana Public Service Commission P.O. Box 91154 Baton Rouge, LA 70821-9154

Re: Louisiana Public Service Commission Docket No. R-31106; In re: rulemaking to study the possible development of financial incentives for the promotion of energy efficiency by jurisdictional electric and natural gas utilities

Dear Ms. Bordelon,

The American Council for an Energy-Efficient Economy (ACEEE) and the Southeast Energy Efficiency Alliance (SEEA) welcome this opportunity to provide comments to the Louisiana Public Service Commission (Commission) on the above-referenced docket.

ACEEE is a nonprofit research organization based in Washington, D.C. that conducts research and analysis on energy efficiency. ACEEE is one of the leading groups working on energy efficiency issues in the United States at the national, state, and local levels. We have been active on energy efficiency issues for more than three decades. In Louisiana, we developed an energy efficiency potential study covering electricity savings opportunities in 2013,<sup>1</sup> and for several years have provided technical assistance on energy efficiency topics to various stakeholders.

The Southeast Energy Efficiency Alliance (SEEA) is one of six regional energy efficiency organizations in the United States working to transform the energy efficiency marketplace through collaborative public policy, thought leadership, outreach programs and technical advisory services. SEEA promotes energy efficiency as a catalyst for economic growth, workforce development, and energy security across 11 southeastern states. These states include Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia.

Our comments below begin with some introductory remarks on energy efficiency in Louisiana, followed by comments in direct response to the Commission's list of topics.

#### Introduction

Investments in energy efficiency help to reduce energy waste, lower customer bills, create local jobs, and stimulate local economic development by attracting businesses and improving business competitiveness. Utility energy efficiency programs cost about 2 to 5 cents per kilowatt-hour,

<sup>&</sup>lt;sup>1</sup> See ACEEE, Louisiana's 2030 Energy Roadmap (2013), <a href="http://aceee.org/research-report/e13b">http://aceee.org/research-report/e13b</a>.

which is much less than the cost of new power plants. Because utility energy efficiency programs generally cost less than supply-side options, investments in energy efficiency reduce costs for *all* ratepayers by allowing utilities to spend less on adding electricity and natural gas supply capacity. The average dollar invested in these programs typically produces more than \$2 in benefits for all customers.

Given the expected growth in electricity use in Louisiana (largely in the industrial sector), now is an important time for utilities to invest in energy efficiency as a resource and help avoid or defer the need for more expensive supply investments. Energy efficiency is therefore an important tool to protect all consumers by helping to mitigate rate increases. And for customers who directly invest in efficiency upgrades, whether those are residences, small businesses, or large manufacturers, efficiency can help customers reduce energy waste and lower their bills.

In Louisiana, energy efficiency is still in its earliest stages. Louisiana ranked 47<sup>th</sup> in ACEEE's 2016 State Energy Efficiency Scorecard, one spot behind Mississippi. However, recent actions in the state demonstrate that policy and program actions can make a difference. For several years, Entergy New Orleans has been rolling out its Energy Smart programs, and the quick start programs rolled out by electric utilities statewide create a foundation for building more energy efficiency success.

## **Utility Participation**

In determining utility participation in Phase II of the energy efficiency programs, we encourage the Commission to consider the following principles. Successful energy efficiency programs should:

- Provide access to energy efficiency to the broadest possible customer base;
- Provide stability and consistency of program offerings;
- Enable utilities to effectively plan to deliver high quality offerings; and
- Evolve over time to build on successes, lessons learned, changes in technology and markets, and other factors.

Accordingly, we support the inclusion of all utilities, regardless of governance structure or fuel type. Twenty-six states currently set targets for electric utilities, and commissions in sixteen states also set targets for natural gas utilities, although programs are delivered even in states without explicit targets.<sup>2</sup> There are many examples of various utility types offering successful energy efficiency programs throughout the Southeast, including joint electric-gas programs in Arkansas and wide-reaching programs delivered by electric cooperatives in North and South Carolina.<sup>3</sup>

To provide stability and predictability, other commissions have: established reasonable and escalating savings targets; required various levels of coordination and consistency of program

<sup>&</sup>lt;sup>2</sup> For information on specific targets, see ACEEE, EERS Policy Brief (2017), <a href="http://aceee.org/sites/default/files/state-eers-0117.pdf">http://aceee.org/sites/default/files/state-eers-0117.pdf</a>. For details on statewide gas savings, see ACEEE, 2016 State Energy Efficiency Scorecard (2016), <a href="http://aceee.org/sites/default/files/publications/researchreports/u1606.pdf">http://aceee.org/sites/default/files/publications/researchreports/u1606.pdf</a>.

<sup>&</sup>lt;sup>3</sup> ACEEE details many successful combined gas and electric programs in its 2014 report, *Successful Practices in Combined Gas and Electric Utility Energy Efficiency Programs* (2014), <a href="https://aceee.org/research-report/u1406">http://aceee.org/research-report/u1406</a>.

offerings; and/or required the participation of certain utilities. In addition to supporting the Commission's goals, these policies provide customers and trade allies operating in various parts of the state consistent access to energy efficiency programs, which can improve program effectiveness and reduce costs and confusion.

# **Opt-Out**

Industrial energy efficiency programs can provide significant energy savings at a lower cost than programs targeted at most other sectors, making large customer participation one of the best ways to keep energy prices low for all customers.<sup>4</sup> Because industrial operations vary widely, a one-size-fits-all approach to program design is not likely to meet the needs of large customers, but many states have successfully implemented a variety of approaches to industrial efficiency programs. Successful approaches have entailed technical assistance and knowledge sharing, prescriptive rebates, custom incentive programs, and strategic energy management, with some programs offering an option for some customers to self-direct their contributions.<sup>5</sup>

In Louisiana, the growth of industrial load is a significant contributor to the need for utility future capacity investments, so saving electricity through industrial energy efficiency can directly displace some of these costs. By design, industrial customers did not participate in the Quick Start phase, because programs to serve them had not yet been developed or implemented. Utilities should now be well-positioned to provide good industrial energy efficiency program offerings in Phase II that respond to the needs of the large customer class. The current provision from the Quick Start rule allowing industrial customers with aggregated demand of 5 MW or greater to opt-out of participation should be eliminated from the Phase II rules.

We recommend the Commission convene a workshop facilitated by a neutral party to discuss large customer program options with stakeholders. If it is determined that traditional utility program offerings cannot meet the needs of large customers, stakeholders, regulators and utilities should work together with large customers to develop a self-direct program option. A self-direct option would allow certain classes of customers, usually large industrial or commercial, to "self-direct" their fees toward energy efficiency investments at their own facilities, instead of putting them into a broader, aggregated pool of funds. Self-direct programs can be structured to give large energy users greater flexibility and control of their fees for efficiency, while ensuring measurable, cost-effective energy savings are achieved for all customers in the utility system.

ACEEE has studied many of the known self-direct programs administered across the country and found a wide variation in structure and requirements. They typically have four common elements:

- 1. they define who is eligible;
- 2. they offer some form of "relief" from energy efficiency fees paid to the utility, such as a rebate against paid fees, escrow of fees, or credit of fees to the customer;

<sup>4</sup> ACEEE, Industrial Efficiency Programs Can Achieve Large Energy Savings at Low Cost (2016), <a href="http://aceee.org/sites/default/files/low-cost-ieep.pdf">http://aceee.org/sites/default/files/low-cost-ieep.pdf</a>.

<sup>&</sup>lt;sup>5</sup> For a more detailed discussion of best practices and examples of program designs that respond to manufacturers' needs, see the State and Local Energy Efficiency Action Network's (SEE Action) guide, *Industrial Energy Efficiency: Designing Effective State Programs for the Industrial Sector* (2014), <a href="https://energy.gov/sites/prod/files/2014/03/fil/industrial">https://energy.gov/sites/prod/files/2014/03/fil/industrial energy efficiency.pdf</a>.

- 3. they are officially sanctioned by a utility, public service commission, or state energy agency; and
- 4. they expect some energy savings from participating customers.

Stakeholders should consider each of these elements when designing a self-direct program option for large customers. There are several key elements of successful self-direct programs. In general, they should be developed as part of a larger portfolio of robust energy efficiency program options. They should also allow a wide range of eligible technologies, including CHP, and offer flexibility with respect to timing. A transparent mechanism is needed for customers to manage their individual fee contributions and apply funds towards their projects. It's important that all stakeholders participate in the design and development of the self-direct program to ensure the approach to administration, implementation, and evaluation meet the needs of large customers while also serving the public interest.

Energy savings that result from the investment of self-directed funds are useful for system resource planning only if they are adequately measured and verified, so good programs require routine and robust progress reporting, which enables savings to be counted toward utility savings goals and allows them to be included in long-term resource planning. ACEEE and SEEA feel strongly that if or when new self-direct programs are developed, they should not allow credit for prior efficiency investments.

### **EE Program Budget and Cost Caps**

Cost caps are not an effective ratepayer protection measure, and we recommend that the Commission eliminate stipulations that limit spending as a percentage of retail revenues or as a dollar per customer amount for the Comprehensive Phase. Current rules require energy efficiency portfolios to be cost effective, and that every dollar invested in energy efficiency generates more than a dollar in benefits for ratepayers. Setting a cap on spending artificially limits utilities' ability to invest in this cost-effective resource, forcing them to meet demand by investing in resources that ultimately are more expensive for ratepayers. Particularly in a state with increasing load growth, it is important that utilities can draw upon the most cost-effective resources to the maximum extent possible. By placing a cap on efficiency expenditures, the Commission is effectively requiring utilities to invest in higher cost resources to meet rising demand. This is likely to result in higher, not lower, bills for customers.

Furthermore, current spending limitations in Louisiana fall well below national average expenditures on energy efficiency. In 2015, median statewide expenditures for electricity efficiency programs was 1.28%. In Arkansas, statewide spending topped 2% of retail revenues. Maintaining program spending limits of 0.5% of 2012 revenues and \$75/month for both commercial and residential customers will effectively limit Louisiana's programs well below the national average.

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<sup>&</sup>lt;sup>6</sup> Anna Chittum, ACEEE, Follow the Leaders: Improving Large Customer Self-Direct Programs (2011), <a href="http://aceee.org/research-report/ie112">http://aceee.org/research-report/ie112</a>; see also ACEEE, Overview of Large Customer Self-Direct Options for Energy Efficiency Programs (2016), <a href="http://aceee.org/sites/default/files/self-direct.pdf">http://aceee.org/sites/default/files/self-direct.pdf</a>.

<sup>&</sup>lt;sup>7</sup> ACEEE, 2016 State Energy Efficiency Scorecard (2016), <a href="http://aceee.org/sites/default/files/publications/researchreports/u1606.pdf">http://aceee.org/sites/default/files/publications/researchreports/u1606.pdf</a>.

## **Look Back Provision, Right to Reimbursement**

As noted in our comments on opt-out, energy efficiency programs should be focused on generating additional energy savings that will lower customer bills, not crediting projects already implemented. Moving into the Comprehensive Phase, a look back provision is no longer needed. Rather, utilities should be encouraged to capture new energy resources. ACEEE and SEEA feel strongly that the Commission should not allow credit for prior efficiency investments.

### **Cost Recovery and Incentive Mechanisms**

The sustainability of energy efficiency programs requires that both utilities and customers see value in the delivery of these programs. Therefore, it is necessary to adjust the utility business model so that utilities are not harmed by any loss in sales resulting from efficiency programs, and have an incentive to deliver excellent programs to all customers and to achieve results. Quick Start rules currently address two of these three legs. We do not believe changes are needed to the cost recovery mechanism. However, we do recommend an adjustment to the lost contributions to fixed costs (LCFC) mechanism, and suggest that the Commission consider adopting performance-based incentives for utilities participating in the Comprehensive Phase.

LCFC – The current LCFC mechanism does address the issue of lost sales due to implementation of efficiency programs. However, it does not completely remove the throughput incentive. It also may pose a risk to ratepayers should utilities sell more energy than calculated in the test case. ACEEE outlines several drawbacks to lost revenue adjustment mechanism in its 2015 paper Valuing Efficiency: A Review of Lost Revenue Adjustment Mechanisms. In particular, lost revenue adjustment mechanisms do not remove the throughput incentive. In fact, utilities may have an incentive to sell more electricity. Should utilities earn profits above their revenue requirement, the current mechanism does not effectively protect ratepayers from paying for this overearning. We recommend that the Commission consider ways to address the issue of ratepayer protections, either by adopting full revenue decoupling in place of the LCFC, or by modifying the existing LCFC to require refunds in the case of overearning.

*Performance Incentives* – We suggest that the Commission allow utilities an opportunity to earn performance-based incentives. In a 2015 white paper, ACEEE found that states with performance incentives in place realized electricity savings nearly double that of states without performance incentives (0.9% and 0.5% of retail sales, respectively). Currently, 25 states allow utilities to earn performance-based incentives. States use a variety of incentive structures, including rewarding utilities based on shared net benefits, energy-savings, or multiple factors including energy savings as well as demand savings, job creation, and/or customer service quality. While we do not feel that any one of these approaches is preferable to another, we do recommend that any performance

<sup>&</sup>lt;sup>8</sup> See Dan York & Marty Kushler, ACEEE White Paper, *The Old Model Isn't Working: Creating the Energy Utility for the 21st Century* (2011), http://aceee.org/sites/default/files/pdf/white-paper/The\_Old\_Model\_Isnt\_Working.pdf.

<sup>&</sup>lt;sup>9</sup> Annie Gilleo et al., ACEEE, Valuing Efficiency: A Review of Lost Revenue Adjustment Mechanisms (2015), <a href="http://aceee.org/valuing-efficiency-review-lost-revenue-adjustment">http://aceee.org/valuing-efficiency-review-lost-revenue-adjustment</a>.

<sup>&</sup>lt;sup>10</sup> See Maggie Molina & Marty Kushler, ACEEE White Paper, *Policies Matter: Creating a Foundation for an Energy-Efficient Utility of the Future* (2015), <a href="http://aceee.org/sites/default/files/policies-matter.pdf">http://aceee.org/sites/default/files/policies-matter.pdf</a>.

<sup>&</sup>lt;sup>11</sup> Seth Nowak et al., ACEEE, Beyond Carrots for Utilities: A National Review of Performance Incentives for Energy Efficiency (2015), http://aceee.org/sites/default/files/publications/researchreports/u1504.pdf.

incentive include the following best practices:

- Performance incentives should be linked to verified energy savings, not spending.
- Performance incentives should be set in conjunction with specific energy savings targets.
- Performance incentives should be tiered, awarding utilities that surpass targets.
- Performance incentives should be capped at a reasonable amount.

ACEEE research also finds that performance incentives are far more effective in states where these targets are tied to specific energy savings goals. Only seven states with performance incentives in place do not have energy savings targets. These states realized average savings of 0.4% in 2015. The 18 states with both incentives and energy savings targets in place realized savings of 1.1%. 12 Since every dollar invested in energy efficiency generates benefits equivalent to about \$2 in Louisiana, ACEEE and SEEA encourage the Commission to set policies that encourage the maximum amount of energy savings possible. We strongly suggest that the Commission consider setting performance incentives in conjunction with energy savings targets. These targets should be based on experience during the Quick Start phase, and ramp up at a reasonable rate. For example, energy savings targets in Arkansas began at 0.25% in 2011, and ramped at 0.25% per year, reaching 0.75% in 2013. For the period 2015-2018, the Arkansas PSC adopted steady targets of 0.9% per year. Targets will rise to 1% in 2019. This schedule allowed utilities to ramp up programs at a reasonable rate, while also offering a wide variety of stakeholders time to weigh in on a future path for efficiency programs. We suggest that the Commission consider setting long-term targets with a similar ramp-up rate to give utilities and consumers long-term certainty, allow strong programs to develop, and deliver maximum savings to businesses and households throughout the state.

#### **CHP**

We support the use of highly-efficient CHP as an eligible technology for meeting state energy efficiency goals. According to ACEEE's 2016 State Energy Efficiency Scorecard, 16 states allow CHP to qualify as a measure for reaching energy savings targets. If CHP is included as an eligible measure, total energy savings target levels should be increased to take CHP potential into account, or a separate CHP-specific target should be established. Appropriate methods for accounting for energy savings from CHP must also be developed. Including CHP within state energy efficiency goals and utility programs is a good way to maximize the benefits of CHP and encourage the use of existing, but underutilized capacity for meeting Louisiana's energy needs.

In addition, the state should explore ways in which utilities can build, own, and operate CHP projects at their customer sites as a generation resource. CHP can be a low-cost resource available to utilities when compared with other options for meeting future demand. Utility-owned CHP systems are viewed as energy supply resources and the costs of constructing them are recovered through rates like other generation assets. The Commission should establish a separate proceeding to consider how it can facilitate utility-ownership of CHP when it benefits ratepayers or is in the public interest. <sup>13</sup>

<sup>&</sup>lt;sup>12</sup> Molina & Kushler, *supra* note 10.

<sup>&</sup>lt;sup>13</sup> For more information on CHP policies, see ACEEE, Combined Heat and Power, <a href="http://aceee.org/sector/state-policy/toolkit/chp">http://aceee.org/sector/state-policy/toolkit/chp</a>.

### **Phase II Implementation Timeframe**

We encourage the Commission to design the transition from Phase I to Phase II to be seamless by ensuring that utilities have the resources they need to sustain their energy efficiency program offerings without interruption. Without a directive from the Commission, Quick Start programs will end in summer, leaving a gap with no program offerings until the Comprehensive phase begins. This gap in program offerings would be a step backward for utilities and customers alike, as customers lose access to these important programs and utilities lose the contractor networks they rely on for program delivery. Accordingly, we recommend that the Commission provide additional clarity around the extension of Phase I, including extending the Phase to eliminate any potential gap in program offerings.

To enable utilities to plan and deliver high quality energy efficiency programs, the Commission may wish to establish a timeline that accommodates existing obligations utilities have, such as other filing deadlines. Whatever timeline the Commission chooses, we encourage the Commission to establish and clearly communicate timelines well in advance to enable the utilities, their trade allies and customers to effectively plan and maximize the success of these programs.

Finally, as discussed above, other states have established reasonable and escalating savings targets to support the evolution of energy efficiency programs and allow the broadest possible customer base to access energy efficiency. A survey conducted by SEEA in 2015 found that utilities throughout the Southeast have regularly achieved and exceeded savings targets (expressed as a percentage of annual sales) that increase by 0.25% per year.<sup>14</sup>

### **Program Design Issues**

Best-practice energy efficiency portfolios offer a diverse set of programs that are available to all customer classes. Here we provide some specific comments the public-sector allocation, low-income energy efficiency programs, and overall portfolio design.

We recommend that the Commission significantly adjust the requirement that utilities allocate 50% of program budgets for programs for school districts, local governments, state agencies, higher education institutions, and public entities. While it may be appropriate to include a carve-out for public entities, the 50% spending requirement is much larger than similar public agency carve-outs in other states. For example, Pennsylvania legislation initially required electric utilities to achieve 10% of portfolio savings from programs delivered to government agencies, schools and universities, and non-profits. However, the Pennsylvania PUC recently revised the carve-out based on statewide potential study estimates that showed limited potential for savings in this sector across the state. The current carve-out is set at 3.5% of total portfolio savings. In public comments, one utility in the state argued that even this carve-out was too high and would not be achievable, while another utility asserted that this carve-out limited flexibility.

<sup>&</sup>lt;sup>14</sup> See SEEA, Southeastern Utility Program Ramp-Up Rates (2015), <a href="http://seealliance.org/wp-content/uploads/">http://seealliance.org/wp-content/uploads/</a> Resource-Paper-2-Ramp-up-Rates-FINAL.pdf.

<sup>&</sup>lt;sup>15</sup> See Pennsylvania Act 129, http://www.puc.pa.gov/electric/pdf/Act129/HB2200-Act129\_Bill.pdf.

Pennsylvania PUC, Docket No. M-2014-2424864, Implementation Order (June 2015), <a href="http://www.puc.pa.gov/pcdocs/1367313.doc">http://www.puc.pa.gov/pcdocs/1367313.doc</a>.

Furthermore, under the recently approved spending allocation, it is likely that Louisiana's residents and businesses will subsidize the energy efficiency investments made in schools and public buildings, while programs available to private businesses and residential customers will be curtailed to account for additional spending in public buildings. To maintain fairness, prioritize the most cost-effective programs, and meet the needs of the state's commercial and residential customers, we suggest that energy efficiency spending be allocated generally in proportion to the funding collected from each customer class. <sup>17</sup> This approach ensures that all customer classes receive a fair opportunity to utilize a portion of the efficiency resources.

We recognize that efficiency upgrades in public buildings could relieve significant pressure on statewide budgets. Therefore, we encourage the state to investigate ways to involve the private market in these upgrades, including exploring performance contracting opportunities in public buildings. This approach has been successfully employed in states like Kentucky, Virginia, and Georgia. There are several resources available discussing how states can encourage and expand performance contracting opportunities.<sup>18</sup>

SEEA and ACEEE also recommend that the Commission explicitly require utilities include targeted programs for low-income customers within their portfolios. More than 20% of Louisiana's population lives in poverty. These low-income customers tend to have higher-than-average energy demand, often due to older appliances and inefficient housing stock. Utility programs are an important mechanism for lowering energy burden across the state. On average, about 18 percent of electric efficiency expenditures across the country went toward low-income programs in 2014; this spending was largely driven by commission directives. While the Commission may not wish to recommend a specific spending or savings requirement for low-income programs at this time, we recommend that the Commission explicitly require all utilities to include a low-income program offering within their portfolios. We also suggest that utilities report on low-income program participation, and that the Commission continue to consider ways to best meet the needs of low-income customers.

Finally, energy efficiency portfolios should include a variety of programs for all customer classes. ACEEE and SEEA have found that the most successful efficiency portfolios evolve over time to include specific programs targeted at segmented customer groups. ACEEE has several research reports on program types and program design, from comprehensive reviews<sup>20</sup> and best practices in behavior programs,<sup>21</sup> to specific market segments such as small business,<sup>22</sup> residential homes,<sup>23</sup>

<sup>&</sup>lt;sup>17</sup> Many states have made an exception for programs delivered to low-income customers; ACEEE and SEEA support this exception.

<sup>&</sup>lt;sup>18</sup> For example, see the discussion of performance contracting in ACEEE's State Government Lead by Example guide, available at <a href="http://aceee.org/sector/state-policy/toolkit/lbe">http://aceee.org/sector/state-policy/toolkit/lbe</a>.

<sup>&</sup>lt;sup>19</sup> See Consortium for Energy Efficiency, 2015 State of the Efficiency Program Industry (2016), https://library.cee1.org/content/cee-2015-state-efficiency-program-industry.

<sup>&</sup>lt;sup>20</sup> Dan York et al., ACEEE, New Horizons for Energy Efficiency: Major Opportunities to Reach Higher Electricity Savings by 2030 (2015), http://aceee.org/research-report/u1507.

<sup>&</sup>lt;sup>21</sup> Dr. Reuven Sussman & Maxine Chikumbo, ACEEE, Behavior Change Programs: Status and Impact (2016), <a href="http://aceee.org/research-report/b1601">http://aceee.org/research-report/b1601</a>.

<sup>&</sup>lt;sup>22</sup> Seth Nowak, ACEEE, Big Opportunities for Small Business: Successful Practices of Utility Small Commercial Energy Efficiency Programs (2016), <a href="http://aceee.org/research-report/u1607">http://aceee.org/research-report/u1607</a>.

<sup>&</sup>lt;sup>23</sup> ACEEE, Scaling Up Participation and Savings in Residential Retrofits (2016), http://aceee.org/research-report/a1605.

and multifamily buildings.<sup>24</sup> We can provide additional resources if that would be useful.

Many of these program issues take time to work out. The Commission may wish to convene a stakeholder advisory group or similar collaborative to inform development of portfolio composition going forward. Many models for these working groups exist, from utility-specific collaboratives to statewide stakeholder groups with formal requirements for participation. Typically, these working groups give stakeholders a chance to collaborate and come to agreement outside of Commission proceedings, allowing for streamlined formal processes and better program design.

#### **Cost-Effectiveness Test**

In considering changes to cost-effectiveness testing on Phase II, we encourage the Commission to clearly establish the policy goals it expects to achieve with energy efficiency programming, and ensure that cost-effectiveness screening supports those goals. The application of conventional (e.g., the California Standard Practice Manual) cost-effectiveness tests can vary from one jurisdiction, and even one utility to the next. Should the Commission choose to employ these tests, it should note both the limitations of the tests, as well consider lessons learned from other jurisdictions, and apply judgment in the applications of these tests.

ACEEE research has found that the most widely used benefit-cost test is the Total Resource Cost (TRC) test, followed by the Utility Cost Test (UCT). We have also observed that the Ratepayer Impact Measure (RIM) test has become almost universally rejected<sup>25</sup> as a primary test for decision-making, because it does not really measure the cost-effectiveness of an energy efficiency program. Rather, it is an indicator of the distribution of already sunk utility system costs. For that reason, we recommend that states not use the RIM test to make determinations about the cost-effectiveness of energy efficiency programs.

ACEEE research has also found that even for the commonly-used cost-effectiveness tests, in many jurisdictions there is either an inconsistent or sometimes inappropriate application of those tests. For example, the TRC test, although most widely used as the primary test, can be challenging to implement because it requires quantification of all costs and all benefits (including participant costs and benefits in addition to utility costs benefits). While costs to utilities and participants are relatively straightforward, some of the participant benefits can be less straightforward, and as a result these benefits are often underreported. Another example is the utility system benefits, such as avoided energy and capacity costs, which are often underreported. We encourage stakeholders in Louisiana to review ACEEE's recent national review that examined best practices on utility system benefits of energy efficiency.<sup>26</sup>

Owing to these challenges in ensuring consistent and appropriate use of the various tests, we

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<sup>&</sup>lt;sup>24</sup> Lauren Ross et al., ACEEE, Reaching More Residents: Opportunities for Increasing Participation in Multifamily Energy Efficiency Programs (2016), <a href="http://aceee.org/research-report/u1603">http://aceee.org/research-report/u1603</a>.

<sup>&</sup>lt;sup>25</sup> In ACEEE's last national survey in 2012, Virginia was the only state that reported still using the RIM test as its primary cost-effectiveness test. We understand that subsequent Virginia legislation has clarified that four different tests should be considered, and that no single test should be the primary determinant.

<sup>&</sup>lt;sup>26</sup> Brendan Baatz, ACEEE, Everyone Benefits: Practices and Recommendations for Utility System Benefits of Energy Efficiency (2015), <a href="http://aceee.org/everyone-benefits-practices-and-recommendations">http://aceee.org/everyone-benefits-practices-and-recommendations</a>.

recommend that the Commission use a guide developed by the National Efficiency Screening Project for analyzing and screening energy efficiency measures and programs based on their benefits and costs.<sup>27</sup> The guide provides a set of principles that resulted from a national collaboration of a diverse set of energy efficiency program stakeholders and technical experts. Under these principles, energy efficiency cost-benefit analysis should:

- 1. Support the public interest;
- 2. Account for the energy policy goals of each state;
- 3. Ensure that tests are applied symmetrically, where both relevant costs and relevant benefits are included in the screening analysis;
- 4. Not exclude relevant benefits on the grounds that they are difficult to quantify and monetize; and
- 5. Be transparent by using a standard template to identify state energy policy goals, to ensure consistency across utilities and to document assumptions and methodologies.

Finally, there are cases in which the Commission may wish to waive strict cost-effectiveness screening, such as in the case of energy efficiency programs that are designed to address the specific needs and challenges of low-income customers. These programs are, by nature more expensive to implement, but achieve other public policy goals than just energy savings. According to an analysis conducted by SEEA in 2016, no other state in the region explicitly requires low-income energy efficiency programming to be subject to the same cost-effectiveness screening criteria as other energy efficiency programs.<sup>28</sup>

By following these principles, the Commission and stakeholders can improve transparency and consistency of cost-effectiveness results.

#### EM&V

Energy efficiency EM&V methodologies and practices must meet the three critical objectives of evaluation:

- 1. Accountability of the impacts: Did the program deliver its estimated benefits?
- 2. Risk management to support energy resource planning: How certain are these savings?
- 3. Continuous improvement: What can be done to improve program performance in the future?

In meeting these objectives, a key challenge is balancing rigor and accuracy with ease of implementation and costs. There is no one way to strike this balance. Instead, it requires a series of decisions at the portfolio level, program level, and measure level, and a transparent and collaborative process with stakeholder input. In general, we find that the level of costs and rigor of EM&V should be commensurate with the magnitude of savings and the degree of uncertainty around existing estimates of savings. As a result, this may mean that different programs within a portfolio of programs require different EM&V approaches, and that periodic assessments examine whether the level of rigor versus costs are meeting the core objectives of evaluation.

<sup>&</sup>lt;sup>27</sup> Natl. Efficiency Screening Project, *The RVF Template*, <a href="http://www.nationalefficiencyscreening.org/rvf-template">http://www.nationalefficiencyscreening.org/rvf-template</a>.

<sup>&</sup>lt;sup>28</sup> Abby Fox, SEEA, *Utility-Administered Low-Income Programs in the Southeast* (2016), <a href="http://seealliance.org/wp-content/uploads/Low-Income-Landscape-Assessment-FINAL.pdf">http://seealliance.org/wp-content/uploads/Low-Income-Landscape-Assessment-FINAL.pdf</a>.

For program administrators, typical costs for energy efficiency EM&V are currently 3-5% of annual portfolio budgets (based on data from the Consortium of Energy Efficiency). The cost of EM&V varies with the frequency, complexity, and scope of data collection and analysis. Depending on the desired level of certainty in the results, measurements may be taken on an entire system or a single parameter, on every measure or a sampling of projects, more or less often, and for longer or shorter periods. Recent advances in data analytics and data availability provide a ripe opportunity to use enhanced EM&V techniques while also managing costs. ACEEE recently examined opportunities for these tools in a detailed report. ACEEE

Uniform protocols are a useful means to ensure consistency and transparency in the EM&V process. While states have been developing and implementing EM&V methodologies for decades, recently a broader recognition of the need to coordinate has led to more national and regional initiatives focused on energy efficiency EM&V.<sup>31</sup> These national and regional initiatives are explained in more detail in ACEEE's EM&V Toolkit.<sup>32</sup> We recommend that Louisiana draw upon this large toolkit of best practices, protocols, and resources such as reporting guidelines when developing state-specific uniform protocols and incorporating Louisiana-specific information and data.

One mechanism that several states have used successfully is to establish a stakeholder working group that is responsible for oversight and input into decision making regarding EM&V considerations, such as those described above. Having a well-designed collaborative stakeholder process to oversee EM&V activities and reporting can help assure that evaluation is independent and objective, and minimize subsequent disputes and litigation over reported results. Because EM&V is an ongoing activity — occurring throughout the energy efficiency planning, implementation, and evaluation process — there is need for continuous involvement by an EM&V stakeholder group throughout the process. We encourage the Commission to consider working with stakeholders to establish such a working group or collaborative in Louisiana.

Technical resource manuals (TRMs), which are reports or databases that hold information on the features and energy savings of energy efficiency measures, are also a helpful way to improve consistency by clearly communicating information such as deemed savings values and deemed savings calculations. TRMs are typically developed for entire states or regions, and require periodic reviews and updates. For Louisiana, the existing Arkansas TRM is a helpful and appropriate resource to draw upon. State-specific information could then be used as available and

<sup>&</sup>lt;sup>29</sup> Consortium for Energy Efficiency, Annual Industry Reports, https://www.cee1.org/annual-industry-reports.

<sup>&</sup>lt;sup>30</sup> Ethan A. Rogers et al., ACEEE, How Information and Communications Technologies Will Change the Evaluation, Measurement, and Verification of Energy Efficiency Programs (2015), aceee.org/research-report/ie1503.

<sup>&</sup>lt;sup>31</sup> For example, see the Uniform Methods Project by the US Department of Energy (DOE), available at <a href="https://energy.gov/eere/about-us/ump-home">https://energy.gov/eere/about-us/ump-home</a>, and the National Efficiency Screening Project, available at <a href="http://www.nationalefficiencyscreening.org/">http://www.nationalefficiencyscreening.org/</a>; see also SEEAction, Energy Efficiency Program Impact Evaluation Guide, <a href="http://www4.eere.energy.gov/seeaction/publication/energy-efficiency-program-impact-evaluation-guide">http://www4.eere.energy.gov/seeaction/publication/energy-efficiency-program-impact-evaluation-guide</a>.

<sup>32</sup> http://aceee.org/sector/state-policy/toolkit/emv.

<sup>&</sup>lt;sup>33</sup> For example, see stakeholder working groups in Michigan and Arkansas. Michigan PSC, Evaluation Working Group, <a href="http://www.michigan.gov/mpsc/0,1607,7-159-52495\_53750\_54587-217193--,00.html">http://www.michigan.gov/mpsc/0,1607,7-159-52495\_53750\_54587-217193--,00.html</a>; Glen Garland, Collaborating for Success – How Arkansas Got it Right (2008), <a href="http://aceee.org/files/proceedings/2008/data/papers/5\_183.pdf">http://aceee.org/files/proceedings/2008/data/papers/5\_183.pdf</a>. For a national overview of best practices, see SEEAction, <a href="mailto:Energy Efficiency Collaboratives: Driving Ratepayer-Funded Efficiency through Regulatory Policies Working Group">https://www4.eere.energy.gov/seeaction/system/files/documents/EECollaboratives-0925final.pdf</a>

necessary to make certain amendments or supplements. The stakeholder working group is an appropriate way to determine and clarify a path forward.

# **Quick Start Evaluation Metrics**

With only one year of program reporting, it is difficult to make specific remarks about the success of individual programs within Louisiana's Quick Start offerings. However, SEEA and ACEEE believe that Quick Start programs have been a success for several reasons.

- 1. All electric IOUs volunteered to deliver programs, proving that they see value in delivering efficiency services to customers.
- 2. Based on Year 1 reporting, electric portfolios delivered almost \$2 in benefits for every dollar invested. Furthermore, all participating utilities surpassed their energy savings goals without going over-budget. Every program delivered in PY1 proved more cost-effective than initially projected.
- 3. Quick Start programs generated significant customer demand. It is evident that residents and businesses alike value Quick Start programs, and that the availability of these programs spurred significantly energy-efficient activity within the state.
- 4. Electric utilities have gained important experience with program delivery, which they can build on going into the Comprehensive Phase.

While we look forward to seeing the results of the second year of program implementation, we believe that even with the limited quantitative information available it is clear that the Quick Start phase has been successful, and that these programs provide an important service to residents and businesses within the state. We encourage the Commission to build on this success moving into the Comprehensive phase.

#### **General Feedback**

ACEEE and SEEA are pleased the Commission is considering such a wide range of topics related to energy efficiency program delivery in Louisiana. We hope that moving into the Comprehensive Phase, the Commission will pay special consideration to the following:

- Delivery of energy efficiency programs should reach the most customers possible. The Commission can enable this by ensuring programs are delivered by all types of utilities to all customer classes.
- Both utilities and customers should benefit from delivery of efficiency programs. The Commission can enable this by adopting the three-legged stool approach to the utility business model and setting long-term energy savings targets.
- Program offerings should be well-thought out and evolve over time. The Commission can enable this by engaging a stakeholder working group to provide input on the best ways to target segmented customer classes and explore innovative program approaches.
- Program success should be verified and tracked in a standardized way. The Commission can enable this by setting clear rules for cost-effectiveness testing and evaluation and by working with utilities to ensure standardization in annual reporting.

ACEEE and SEEA welcome this opportunity to provide comments, and as needed can provide additional information on specific topics.

Sincerely,

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