

June 28, 2021

Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Re: Docket 20200181 - Proposed amendment of Rule 25-17.0021, F.A.C., Goals for Electric Utilities.

Dear Commissioners, Staff, and Interested Parties:

ACEEE welcomes this opportunity to respond to Staff's ongoing proceeding regarding changes to Florida's goal-setting process for utility demand side management. ACEEE is a national independent non-profit research organization with expertise in state, utility, federal, and local energy efficiency policy. We have been participating in this proceeding because this is an important opportunity to revise rules to bring utility demand-side management in Florida into standard practice around the region and country.

Utility performance in the state lags peers in the region and nationwide, resulting in concerning outcomes for Florida ratepayers, especially low-income customers. Florida utilities' energy efficiency investment and savings are significantly below the national and regional average, and have been declining over time, with many utilities proposing zero savings targets in 2020.¹ This represents a lost opportunity for utility customers as well as the utility system as a whole. Energy efficiency is on average the least cost resource, with our most recent analysis finding the average cost of saving electricity to be just \$0.024 cents per kWh.² As a result, Floridians are missing opportunities to lower rates over the long term and address bill affordability in the short term.

The comments below concern three key areas for improvement we have identified in the Commission's current approach, following on the workshop of May 18, 2021: income-qualified programs, EM&V (evaluation, measurement and verification), and cost-effectiveness testing.

Income Based Programs – Goals and Strategies

Demand-side solutions such as energy efficiency upgrades and weatherization offer particularly important value for low-income customers, so policies that ensure access to such programs are crucial. Low-income groups are disproportionately likely to be "energy burdened" than the

¹ York, D. and C. Cohn. 2021. *Unrealized Potential: Expanding Energy Efficiency Opportunities for Utility Customers in Florida*. Washington, DC: ACEEE. <https://www.aceee.org/white-paper/2021/01/unrealized-potential-expanding-energy-efficiency-opportunities-utility>

² Cohn, C. 2021. *The Cost of Saving Electricity for the Largest U.S. Utilities: Ratepayer-Funded Efficiency Programs in 2018*. Washington, DC: ACEEE. <https://www.aceee.org/topic-brief/2021/06/cost-saving-electricity-largest-us-utilities-ratepayer-funded-efficiency>

average customer, meaning they pay a higher proportion of their monthly income for energy costs than the general population.³ They are also more likely to rent, rather than own their housing, and that housing is more likely to be of lower quality than the general housing stock, requiring more extensive upgrades to become energy-efficient.⁴ Income-qualified programs in the U.S. are generally offered at little to no cost to the customer, and typically all associated costs, from measure costs to installation and administration, are covered by the utility. These programs are pursued based on their many benefits. These include both energy savings and additional non-energy benefits, such as: improved home value and comfort, reduced housing turnover and bill arrearages, public health, increased productivity in work and school, and addressing historic inequality. For these reasons, income-qualified programs are generally exempt from cost-effectiveness screening in many jurisdictions, including Florida.⁵

In the discussion around cost-effectiveness testing, Staff expressed a concern that broadening Florida utilities' low-income programs would negatively impact the cost effectiveness of the portfolio as a whole. Staff are concerned this will lead to adverse impacts by increasing costs for all customers. Our research suggests that Florida utilities have ample opportunities to increase low income customer offerings without such impacts.

First, analysis of the cost of saved electricity in 48 of the largest U.S. utilities finds that even when including low- and moderate-income qualified programs, overall energy efficiency portfolios were found by local commissions to be cost effective at an average cost of \$0.024/kWh saved. Excluding income-qualified programs, the average cost of saved electricity was 15% lower at \$0.021/kWh. While low-income programs are frequently more expensive because the utility has to cover a larger proportion of participant costs, there is strong evidence that utilities can maintain a cost-effective portfolio while also achieving low-income savings. For example, utilities with high levels of low-income savings, such as Commonwealth Edison, DTE Energy, and Pennsylvania Power & Light maintained a portfolio-wide average cost of saved electricity below \$0.03/kWh while investing 10% or more of their total demand-side budget in low income programs.⁶

Additionally, Florida utilities underspend on demand-side programs in general, with utilities' spending as a percentage of revenue equal to less than a quarter of the national average across investor-owned utilities (see Figure 1).

³ ACEEE has conducted comprehensive analysis of energy burdens in cities and regions across the United States. <https://www.aceee.org/energy-burden>

⁴ Ibid.

⁵ Berg, W. and Dreobl, A. 2018. *State-Level Strategies for Tackling High Energy Burdens: A Review of Policies Extending State- and Ratepayer-Funded Energy Efficiency to Low-Income Households*. Washington, DC: ACEEE Summer Study Buildings. <https://www.aceee.org/files/proceedings/2018/index.html#/paper/event-data/p390>

⁶ Relf, G., Cooper, E., and Gold, R. 2020. *The Utility Energy Efficiency Scorecard*. Washington, DC: ACEEE. <https://www.aceee.org/utility-scorecard>

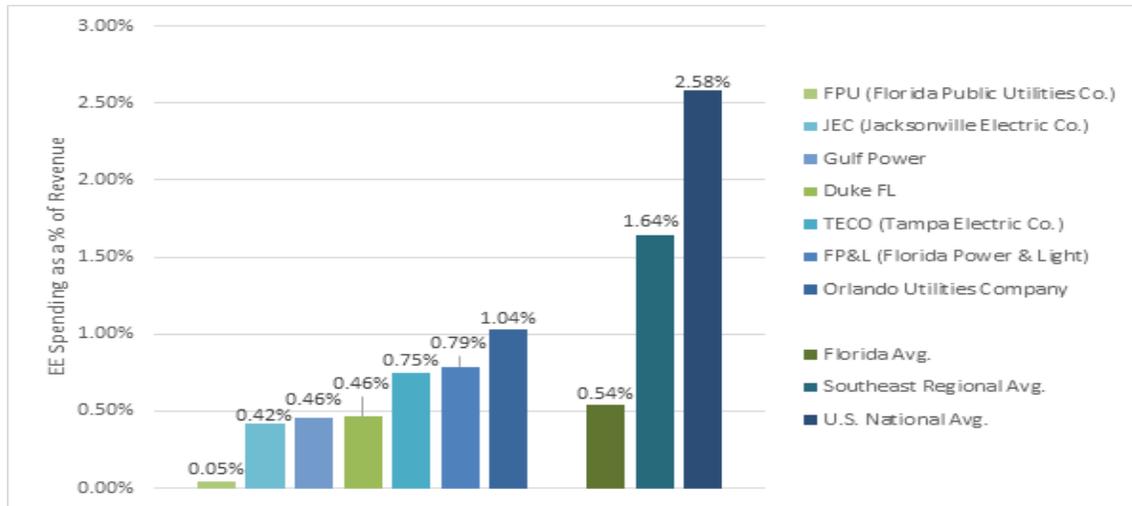


Figure 1. Florida Utilities' Demand-Side Spending as a Percentage of Overall Revenue

Most comprehensive demand-side portfolios include a range of programs that are more or less cost-effective; those that are less cost-effective may be earlier stage technologies or may serve a historically underserved segment, such as rural, small business, or low-income customers. Currently, Florida's utilities can stand to offer many more cost-effective options in addition to its income-qualified programs. Expanding both program types will result in a portfolio that serves to reduce consumer costs across all demographics. We note for example that eliminating the 2-year payback screen for free-ridership may open up more opportunities for utilities to offer more cost-effective options to all customer sectors.

During the past workshop, Staff posed questions about what portion of DSM spending utilities should allocate to low-income programs. Actual spending and savings targets for all types of programs should be based on energy efficiency potential studies. For income-based programs specifically, utilities should aim to engage low-income customers in the planning process so that they can tailor solutions that will directly serve their highest need. Income-qualified solutions should be open to including all types of demand-side opportunities, including weatherization, appliance replacements, energy audits, and demand flexibility as well as education and behavioral programs. Lastly, energy savings for all programs, including low-income programs, should be measured and validated through robust EM&V practices that are integrated throughout all stages of program delivery.

Evaluation, Measurement, and Verification

Evaluation, measurement, and verification (EM&V) is a critical component of any demand-side program and should be incorporated into the program plan from the earliest stages. EM&V serves to deliver quantitative data that program administrators and regulators can use to monitor ongoing impacts such as energy and cost savings. There are two main reasons for

evaluation: improvement in program delivery and accountability on behalf of program manager, implementers and rate-payers. Independent and credible evaluation can facilitate well-informed decision-making and goal setting for future demand side programs. It should be integrated into program design for all types of ratepayer-funded programs. The specific EM&V approach may vary based on the type of program and specific policy goals. Evaluation costs should be considered among other costs associated with program administration, and should be recovered through standard cost-recovery mechanisms, such as on-bill riders, revenue adjustment mechanisms and/or utility rate cases.

There are multiple different approaches to conducting EM&V, but the industry has developed a set of well-accepted best practices.⁷ Effective EM&V should:

1. Be independent
2. Be transparent
3. Allow for public and stakeholder input
4. Be incorporated into program plans from the start
5. Be adequately funded

EM&V may be conducted by either PUC staff, the utilities themselves, or a separate agency with commission oversight. A 2020 survey by ACEEE of state EM&V practices found that utilities conduct evaluations in 45% of states, while 23% of the time the PUC was responsible for evaluation.⁸

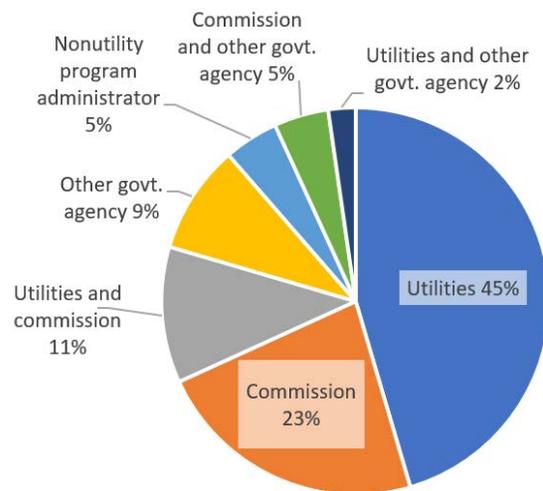


Figure 2. Entities responsible for EM&V. Source: ACEEE National Survey of Evaluation Practices, 2020

⁷ The State and Local Energy Efficiency Action Network (SEEAAction) has developed a comprehensive guide to types of EM&V, as well as various approaches and best practices: SEEAAction 2012. *Energy Efficiency Program Impact Evaluation Guide*. Washington, DC: DOE. <https://www7.eere.energy.gov/seeaction/publication/energy-efficiency-program-impact-evaluation-guide>

⁸ York, D., Kushler, M., and Cohn, C. 2020. *National Survey of State Policies and Practices for Energy Efficiency Program Evaluation*. Washington, DC: ACEEE. <https://www.aceee.org/research-report/u2009>

In terms of the Commission’s role, even if it does not directly contract with evaluators itself, Commissioners and Staff still play a role in terms of formally reviewing and approving evaluation plans submitted by utilities, injecting accountability and oversight into the EM&V process, as shown in Figure 3.

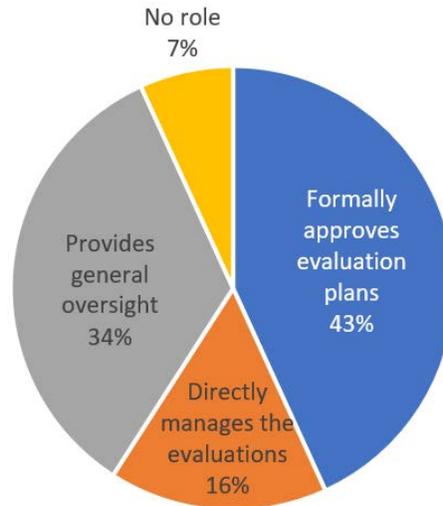


Figure 3. Role of Public Service Commissions in Evaluation. Source: ACEEE National Survey of Evaluation Practices, 2020.

Cost-Effectiveness Testing

The current rule 25-17.0021 gives the Florida Commission the discretion to choose which cost-effectiveness test(s) to use to evaluate demand-side programs. Currently, Florida is the only state that still uses the Ratepayer Impact Measure (RIM) test as its primary test for cost-effectiveness. As prior comments from ACEEE and others have indicated, the RIM is not an appropriate or accurate method of evaluating cost effectiveness of energy efficiency and other demand side programs.

The Rate Impact Measure Test is not a true measure of program cost-effectiveness. Firstly, cost-effectiveness analyses should account for only future, incremental benefits and costs; the RIM Test accounts for sunk costs (i.e., lost revenues) and as such is inappropriate to use for benefit-cost analysis.⁹ While the RIM test does help to determine *whether* investments will increase or decrease rates, it doesn’t offer any useful information about what happens to costs, in terms of the magnitude of impact, either in terms of the increase in rates or the increase in bills. As a result, the RIM test risks rejection of investments that will reduce utility system costs (perhaps even by millions of dollars) in order to avoid what might be small or insignificant rate impacts. For these reasons, we discourage use of the RIM as a method of screening programs for cost-

⁹ National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources, 2020. <https://www.nationalenergyscreeningproject.org/national-standard-practice-manual/>

effectiveness.¹⁰ RIM should only be used to inform whether a long-term rate, bill and participation impact analysis is required; if so, those more robust analyses will reveal useful information for Commission decision-making.

Instead, ACEEE recommends the Florida Commission use a more commonly accepted test for cost-effectiveness that captures relevant impacts on the utility system, including benefits and costs, in a way that parallels the tests used for other types of utility spending such as supply-side investments. For example, the Utility Cost Test is currently employed as a primary test in 10 states and a secondary test in 22 additional states.¹¹ The primary test chosen should be used for both goal setting and program assessment.

In response to questions about the appropriate level of aggregation for application of a cost-effectiveness test. (e.g, at the measure, program or portfolio level), we recommend application at the portfolio level because it indicates the benefits and costs of the entire suite of EE programs. It also avoids some of the perverse impacts from measure-level application, for example in which a non-cost-effective measure is needed to safely enable the installation of other cost-effective measures (e.g, mechanical ventilation to enable acceptable indoor air quality while installing building envelope measures).¹² In practice, 84% of states apply cost-effectiveness testing at the program or portfolio level, with 39% applying at the portfolio level.¹³ Some states apply testing at multiple levels of aggregation.

Additionally, the reliance on a 2-year payback screen is not a reasonable or fair method of addressing free-ridership. Those values should instead be built into the EM&V process for the program. Figure 5 demonstrates various approaches taken by states to address free-ridership. Many states use approaches such as customer surveys or analysis of market data (market studies), including unit sales and regional or historical trends. Because customer surveys are often retrospective and may suffer from self-selection or other types of bias, ACEEE recommends using data from market studies as a more objective approach to estimate free-ridership.¹⁴

¹⁰ See the National Standard Practice Manual, section E.6 for more detailed discussion on the RIM and why it should not be used to screen for cost-effectiveness. <https://www.nationalenergyscreeningproject.org/national-standard-practice-manual/>

¹¹ Data from the National Energy Screening Project Database of Screening Practices. <https://www.nationalenergyscreeningproject.org/state-database-dsesp/>

¹² National Standard Practice Manual. <https://www.nationalenergyscreeningproject.org/national-standard-practice-manual/>

¹³ Data from the National Energy Screening Project Database of Screening Practices. <https://www.nationalenergyscreeningproject.org/state-database-dsesp/>

¹⁴ See SEEACTION Program Impact Evaluation Guide, Chapter 5: Determining Net Energy Savings.

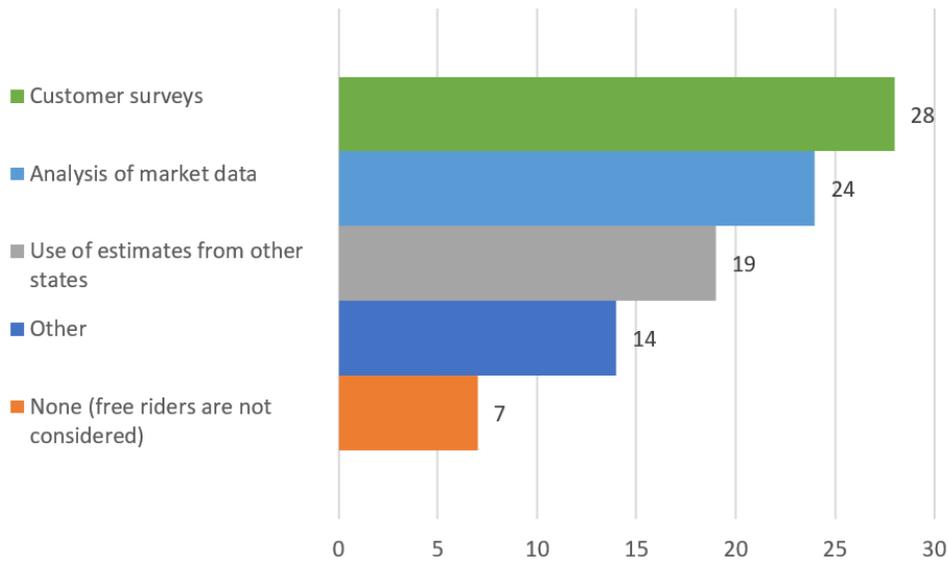


Figure 5. State Approaches to assessing Free-Ridership. Source: ACEEE National Survey of State Evaluation Practices, 2020.

We look forward to continued engagement with the Public Service Commission on these issues. ACEEE is committed to helping Floridian ratepayers access this crucial resource. We welcome opportunities to provide additional input and technical assistance to revise and improve the rules and processes affecting energy efficiency planning and implementation in Florida.

Sincerely,

Rachel Gold
Director, Utilities Program
ACEEE
rgold@acee.org
202-507-4005

Charlotte Cohn
Policy Analyst, Utilities Program
ACEEE
ccohn@acee.org
617-968-0434