

August 7, 2019

Mr. Adam J. Teitzman
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399
clerk@psc.state.fl.us

Re: Docket Numbers 20190015-EG, 20190016-EG, 20190017-EG, 20190018-EG, 20190019-EG, 20190020-EG, and 20190021-EG

Dear Mr. Teitzman,

The American Council for an Energy-Efficient Economy (ACEEE) welcomes this opportunity to provide comments to the Florida Public Service Commission on the above-referenced proposed action on the development of energy efficiency targets for Florida utilities under the Florida Energy Efficiency and Conservation Act (FEECA). 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 Florida, we developed an energy efficiency and renewable energy potential study in 2007 and an energy efficiency job creation potential study in 2019.¹

Energy efficiency is an important tool to deliver economic and environmental benefits to Florida. A recent ACEEE analysis found that ramping up utility energy efficiency programs in Florida to 1% savings as a percent of retail sales per year could support over 105,000 jobs in the state. This level of program investment would deliver net benefits of over \$14 billion across Florida, delivering more than \$2 in benefits for every \$1 spent on programs.

Efficiency also has significant health benefits. A ramp-up to 1% savings could generate over \$12 million in annual health benefits to Floridians, preventing hospital admissions due to respiratory and cardiovascular illnesses and avoiding restricted activity and costly lost work days. In fact, efficiency investments in Florida would deliver some of the most significant health benefits of anywhere in the country. An ACEEE analysis placed it among the top seven states nationwide for

¹ ACEEE. 2007. Potential for Energy Efficiency and Renewable Energy to Meet Florida's Growing Energy Demands. aceee.org/research-report/e072. ACEEE. 2019. Energy Efficiency: A Job Engine for Florida. aceee.org/white-paper/fl-jobs-022719.

potential health benefits from efficiency programs. Tampa, Miami, Orlando, Jacksonville are ranked among the top 35 cities that would see the greatest health benefits from energy efficiency.²

Electric utilities play a critical role in delivering energy efficiency programs to Florida’s families and businesses, but they require direction from state regulators to enable these investments. FEECA calls on utilities to set goals every five years, but recently plans for energy efficiency programs have shrunk to almost nothing, depriving customers of the programs needed to manage electric bills and lower system costs.³

Through the ongoing FEECA proceeding, the Florida Public Service Commission can enable greater levels of energy savings across the state. ACEEE’s comments herein seek to offer recommendations for the Commission in its consideration as it sets energy efficiency standards for Florida utilities. Specifically, we offer the following recommendations:

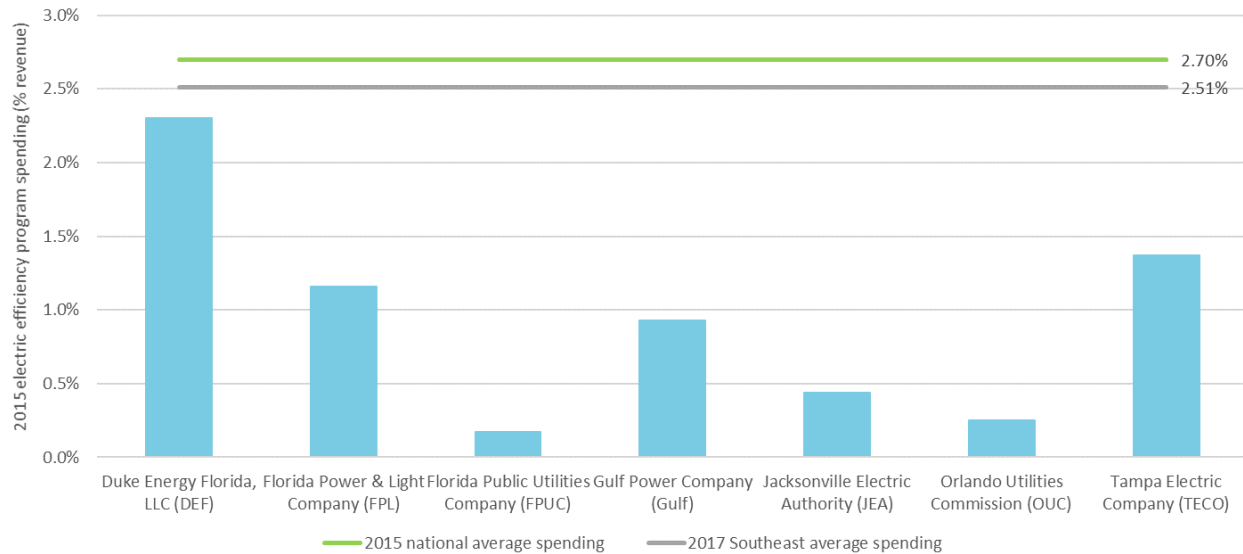
1. Set strong energy savings targets for utilities;
2. Include specific requirements for delivery of comprehensive programs to low-income customers;
3. Fairly apply cost-effectiveness tests; and
4. Eliminate the two-year payback screen.

1. Set Strong Energy Savings Targets for Utilities

Energy and demand savings are the ultimate goal of utility energy efficiency investments, and both savings and spending are strong indicators of a utility and state’s energy efficiency performance. As shown in the chart below, Florida utilities’ historic energy efficiency spending falls well below both national and Southeastern averages.

² ACEEE, *Saving Energy, Saving Lives: The Health Impacts of Avoiding Power Plant Pollution with Energy Efficiency*: aceee.org/research-report/h1801.

³ Florida Power & Light, Duke Energy Florida, Tampa Electric Company, Gulf Power Company, Florida Public Utilities Company, Jacksonville Electric Authority, and Orlando Utilities Commission.



Energy efficiency spending by FEECA utilities compared to national and southeastern utility averages. Source: <https://aceee.org/sites/default/files/florida-utility-ee-performance.pdf>.

Florida utilities also fall behind their regional and national peers for savings, denying customers critical opportunities to reduce their bills, and increasing system costs by neglecting the cheapest utility system resource.⁴ The investor-owned utilities subject to FEECA rules saved on average only about 0.22% of retail sales in 2015 compared to a national average of 0.89%, about 4 times greater. Further, only five states saved less electricity than Florida in 2017.⁵

The FEECA framework is failing to push Florida utilities to deliver energy savings. FEECA 2015-2024 savings goals are just 13% of 2010-2019 targets, and the 2020-2029 goals shrink savings targets even more. For the 2020-2029 cycle, FEECA utilities propose 594,023 MWh in savings from electric efficiency programs, only 41% of 2017 achieved savings. Moreover, three FEECA utilities have proposed electricity savings goals of zero.

⁴ The average utility/program administrator levelized cost of saved energy was \$.031 per kilowatt-hour (kWh) (net savings at the generator) based on 2015 data, on average lower than any other resource.

<https://aceee.org/blog/2018/12/renewables-are-getting-cheaper-energy>

⁵ ACEEE, 2018 State Energy Efficiency Scorecard. aceee.org/research-report/u1808.



Aggregate savings proposed by FEECA utilities (green) as compared to achieved savings in past years (blue). Source: <https://aceee.org/sites/default/files/florida-utility-ee-performance.pdf>.

Significant energy savings opportunities remain in Florida. Utilities in neighboring states have shown that achieving much higher levels of savings is possible. For example, Duke Energy Carolinas (North Carolina) and Entergy Arkansas, Inc. saved 0.93% and 1.79% of 2017 annual retail sales, respectively.⁶ Moreover, in 2017 thirteen states saved at least 1% of retail electricity sales through energy efficiency programs.⁷ These utilities are investing in a range of programs targeting different customer segments and end-uses, including high-efficiency appliances and consumer electronics, custom programs for large energy users, and mid-stream programs that deliver savings to customers at the point of purchase.⁸ In nearly all cases, these high savings are driven by ambitious but achievable goals set by regulators.

ACEEE strongly encourages the Commission to set meaningful energy savings goals for Florida utilities. Targets of 1% would be ambitious but achievable, and ensure Florida keeps pace with the progress of neighboring states.

2. Include specific requirements for delivery of comprehensive programs to low-income customers

ACEEE recommends that the Commission require Florida utilities to expand energy efficiency programs for low-income customers as an important strategy for keeping energy bills low. Energy efficiency reduces energy burdens, the portion of a household income spent on utility bills that is often higher for low-income and rural residents. The national average for energy burdens is 3.5%,

⁶ 2019. "ACEEE Comments to the Virginia Corporation Commission." www.scc.virginia.gov/docketsearch/DOCS/4%23vp01!.PDF. See Exhibit RG-5 for a comparison of energy savings as a percentage of electric sales for ten U.S. electric utilities. Also suggested in "SACE Comments to the Florida Public Service Commission." www.psc.state.fl.us/library/filings/2019/04810-2019/04810-2019.pdf.

⁷ ACEEE, *2018 State Energy Efficiency Scorecard*.: <https://aceee.org/research-report/u1808>.

⁸ ACEEE, *The 2017 Utility Energy Efficiency Scorecard*. <https://aceee.org/research-report/u1707>.

yet half of the low-income households in Jacksonville, Tampa, Orlando, and Miami have an energy burden greater than 7.2%, with a quarter of residents facing burdens as high as 12%. Energy efficiency can eliminate nearly one third of this burden, and comprehensive utility efficiency programs are needed to facilitate these investments.⁹

The advanced age and poor condition of much of the housing stock occupied by low-income communities means that these families are more susceptible to the consequences of extreme weather events and could benefit from installing efficiency measures that create healthier indoor spaces. Leaky windows and poor insulation can lead to cold drafts and extreme temperatures in a home during summer and winter months, which can trigger asthma attacks and exacerbate other respiratory illnesses. Inefficient and malfunctioning appliances not only waste energy but may also degrade air quality through incomplete combustion or improper venting. Poorly sealed building envelopes make it easier for pests and moisture to infiltrate; both can harm respiratory health through mold growth and the introduction of allergens and disease. Targeted energy efficiency can mitigate all of these risks and make homes healthier, particularly for vulnerable populations such as low-income communities.¹⁰ FEECA utilities are currently required to educate low-income customers on energy efficiency opportunities, but the Commission does not require them to achieve any specific energy savings outcomes. In an assessment of the 50 largest electric utilities in the country, ACEEE found that FP&L's spending and savings for low-income energy efficiency programs ranked in the bottom ten.¹¹

In order to ensure that low-income customers are receiving the full benefits of energy efficiency programs, we recommend that the Commission set a minimum threshold for utility spending on programs for low-income customers or require that a minimum level of energy savings is achieved in this sector. In addition to education programs, utilities should be required to deliver low-income programs that install energy-savings measures at no cost to customers who meet income requirements, ensuring that these programs result in actual bill savings.

3. Fairly Apply Cost-Effectiveness Tests

Florida is the only state to still rely primarily on the ratepayer impact measure test (RIM) test which looks at rate impacts rather than the complete costs and benefits of energy efficiency to customers' bills and the utility system. Other states have moved away from this test in recent years, recognizing that it does not appropriately value energy efficiency as a resource. Virginia, for example, was until recently the only other state to rely on the RIM as its primary cost-effectiveness test. In 2018, the Virginia General Assembly adopted new rules that reduced its reliance on this

⁹ ACEEE, *How energy efficiency can help low-income households in Florida*: aceee.org/sites/default/files/pdf/fact-sheet/ses-florida-100917.pdf

¹⁰ ACEEE, *The Next Nexus: Exemplary Programs That Save Energy and Improve Health*: <https://aceee.org/research-report/h1802>.

¹¹ ACEEE, *The 2017 Utility Energy Efficiency Scorecard*. <https://aceee.org/research-report/u1707>.

test, requiring regulators to approve programs that passed other cost-effectiveness tests even if they did not pass the RIM test.¹²

There are several reasons why the RIM test has been widely rejected as a primary test for decision-making about the cost-effectiveness of utility energy efficiency programs.

First, the RIM test 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. It treats lost sales revenue as a cost. However, those lost revenues address costs that have already been incurred elsewhere on the system, as they are typically reflective of the utility's existing fixed costs. They are not actually a cost of delivering the energy efficiency program. For this reason, the RIM test does not tell you whether a program is cost effective in terms of reducing total *future* costs from what they would be absent the program. The appropriate test for economic efficiency indicates whether the benefits from delivering the program exceed the costs of delivering the program.

Second, the RIM test can produce perverse outcomes. The more energy a program saves, the worse it will do on the RIM test because the RIM test treats the lost sales revenue as a cost. A simple exercise can demonstrate why the RIM test is an unacceptable device for measuring economic efficiency. Assume a utility with the following typical conditions:

- An average retail rate of 9 cents
- An avoided cost of additional supply of 6 cents
- An energy efficiency program that saves electricity at a cost of 2 cents per kWh

Under the RIM test, the benefits of 6 cents would be compared to the program costs of 2 cents plus the costs of the 9 cents of lost revenue, and the program would be judged not cost effective even though saving electricity in this case costs one-third as much as acquiring additional electricity. Even if the energy efficiency program was free, the program would fail the RIM.

Third, it is inconsistent and unfair to selectively apply the RIM test to energy efficiency programs, when the RIM test is not applied to supply side investments such as new power plants or new distribution system infrastructure. Those would by definition all fail the RIM test because they would result in some rate increase over current rates.¹³

We recommend that the Commission evaluate proposed programs for this cycle of FEECA using the TRC results presented by utility proposals. However, for future cycles, we strongly recommend that the Commission facilitate a robust stakeholder process to improve cost-effectiveness testing methodologies and inputs to utility potential studies (as discussed below).

4. Eliminate the Two-Year Payback Screen

Florida utilities apply a two-year payback screen to eliminate efficiency measures with a financial payback of two years or less on the assumption that customers will adopt such measures on their

¹² Code of Virginia § 56-576. Definitions., law.lis.virginia.gov/vacode/title56/chapter23/section56-576/. Also described on page 14 of "SACE Comments to the Florida Public Service Commission."

www.psc.state.fl.us/library/filings/2019/04810-2019/04810-2019.pdf.

¹³ 2018. "ACEEE Comments to the Arizona Corporation Commission." aceee.org/sites/default/files/comments-acc-rim.pdf; 2019.

own. This payback screen blocks low-cost, easy to implement energy efficiency measures and discourages low-income participation and investment in energy efficiency. One analysis found that eliminating the screen for Gulf, TECO, and FPL would at least double the cost-effective energy savings potential for these utilities.¹⁴

Moreover, Nexant's energy efficiency market potential study already accounts for free-ridership, so this payback screen is redundant and actually removes only *non-free rider* savings potential.¹⁵

ACEEE recommends that the Commission eliminate the two-year payback screen.

We appreciate the opportunity to provide comments to the Commission on these issues.

Sincerely,

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¹⁴ "SACE Comments to the Florida Public Service Commission." www.psc.state.fl.us/library/filings/2019/04810-2019/04810-2019.pdf.

¹⁵ "SACE Comments to the Florida Public Service Commission." www.psc.state.fl.us/library/filings/2019/04810-2019/04810-2019.pdf (page 22).