

Southern Alliance for Clean Energy Comments on 2020 Ten Year Site Plans

Contents

I. Reliance on Gas: Costly, Risky, and Unfriendly to Climate	2
A. Florida Electric Emissions Flatline under Current TYSP	2
B. Continued Gas is Costly and Risky	5
II. Vast Energy Efficiency Potential in Florida.....	6
III. Expanded Solar Development is Available.....	10
IV. Utility Future Planning should be Robust and Transparent.....	13
V. All Source Procurement.....	15
VI. Reserve Margin Sharing	16
VII. Conclusion	18

Southern Alliance for Clean Energy (SACE) is a regional non-profit clean energy organization that advocates for moving the Southeast, including Florida to a lower cost, lower risk clean energy future. SACE appreciates the opportunity to provide these comments to assist the Commission in its evaluation the 2020 Ten Year Site Plans (TYSP) filed by the state’s largest utilities.¹ The resource decisions that flow from the proposed plans will have both environmental, health, and financial cost and risk implications for Florida customers. The SACE comments are intended to assist the Commission in evaluating the plans and additionally provide recommendations on policy changes that can promote lower cost, lower risk, and cleaner resource planning outcomes for the state’s customers.

¹ R. 25-22.071, FAC. (“All electric utilities in the State of Florida with existing generating capacity of 250 megawatt (mW) or greater shall prepare a ten-year site plan....”). In 2020, the utilities included are Florida Power and Light and Gulf Power Company, Duke Energy Florida, Florida Municipal

Florida’s reliance on gas raises serious economic and climate concerns. These TYSPs propose to either continue or expand utilities’ reliance on gas, and thus continue to send billions of Floridan dollars outside the state every year. Florida utilities could lower customer bills and invest those dollars in the local economy through investments in clean energy resources like energy efficiency, solar, and storage. These investments would also move Florida toward the emission reductions needed to address the climate crisis, reduce environmental risks associated with gas infrastructure, and reduce the risk that utilities will need to increase rates in the future when gas assets become stranded assets and when utilities have to comply with a future climate policy regime.

SACE provides information below to assist the Commission in analyzing the TYSPs, and on policies that can be adopted through Commission practice, rule adoption, or statutory change that include: 1) climate, cost, and risk dangers of continued reliance on gas; 2) embracing the vast potential for energy savings through utility-sponsored energy efficiency programs; 3) current and opportunities for expanded solar development in Florida; 4) improvements to the utility planning process to make it more robust and transparent; 5) all-source procurement as a tool to lower electricity costs through competition; and 6) and the potential for reserve margin sharing across Florida to help improve reliability and save customer dollars. These recommendations are based on best practices and more than a decade of direct experience as formal participant in more than a dozen IRP proceedings across the Southeast.

I. Reliance on Gas: Costly, Risky, and Unfriendly to Climate

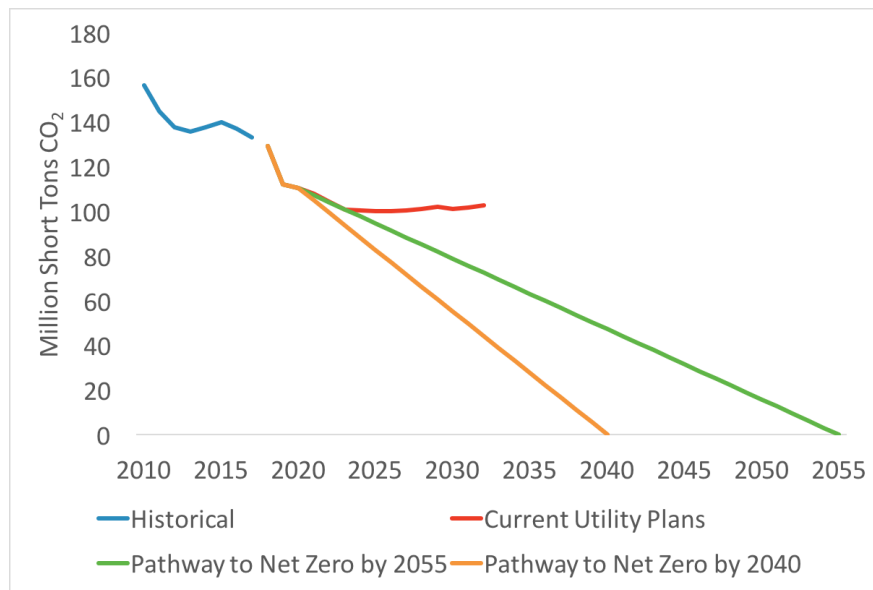
Florida utilities have decreased emissions in recent years by moving away from coal. However, with an expansion of Florida’s already heavy reliance on gas the state’s CO₂ emissions will remain flat for the next decade. Florida utilities have presented plans to continue or expand reliance on gas in these TYSPs without showing that these new and existing gas plants are a prudent way for utilities to spend ratepayer dollars when the utilities haven’t invested energy efficiency to lower customer bills and the costs of solar and storage continue to decline. In addition to our concern that continuing reliance on gas will increase costs to customers, it also opens up risks that may or may not have been fully considered when utilities developed these TYSP, including risks stemming from a future climate policy regime.

A. Florida Electric Emissions Flatline under Current TYSP

SACE found that, based on historical emissions and current utility plans, Florida is not on a pathway to reach net zero carbon emissions during the 2040-2050

timeframe. This goal is based on IPCC findings that indicate the electric power sector can help avoid the worst impacts of the climate crisis by reaching net zero global greenhouse gas emissions during that time. This goal exists among not only the scientific community, but also among investor groups. In 2019, a group of investors and pension funds sent a letter to the top 20 largest publicly-traded electric generators in the United States asking for detailed plans to achieve carbon-free electricity by 2050 at the latest. Several peer utility systems in the Southeast, such as Duke Energy and Southern Company, have adopted this goal.

Figure 1. Florida Utilities not on track to Net Zero by 2040-2055



Source: Southern Alliance for Clean Energy analysis of Ten Year Site Plans (TYSP) from 2019 and 2020

Currently, Florida utilities have an average CO₂ emissions rate of about 1,000 lbs / MWh. This is higher than the average for vertically-integrated utilities in the Southeast, though there is considerable variation among Florida utilities. Three Florida utilities were among those with the highest CO₂ emission rates in the Southeast in 2018: Tampa Electric, Gulf Power, and Duke Energy Florida. FPL, in contrast, had one of the lowest emission rates in the Southeast. Florida’s emissions were relatively high during the last decade but are expected to converge with the regional average during the 2020s. Recent emissions reductions have come from fuel switching from coal to gas, but the state is unlikely to see significant reductions in the future with an increasing reliance on gas. Beyond 2024, the carbon emission rate of the Florida power sector is essentially flat.

Gas generation makes up an outsized portion of the resource mix in Florida, making it difficult to reach an average emissions rate lower than that of an average gas plant. In Florida, the average gas plant emits approximately 861 lbs per MWh. Even with additional solar capacity coming online in the future, the state emission rate is expected to be approximately 750 lbs / MWh in 2035. Thus, the state of Florida has likely already reached the point of diminishing returns on CO₂ reductions from switching to gas.

Also notable is that a significant portion of historical emissions reductions have been facilitated by out of state activity. For example, our analysis takes into account that contracts with Plant Daniel have recently transferred ownership to Mississippi. That may not be modeled in typical results that then would not reflect the drop in emission from reduced out-of-state coal usage.

Further reductions in CO₂ emissions cannot occur without two things happening: the retirement of existing fossil (gas and coal) plants and replacing those plants with zero emission resources like energy efficiency and solar. These TYSP currently reflect the retirement of approximately 1,600 MW of coal and 1,800 MW of gas. However, these plans indicate that there will still be coal used by 2030 and the amount of gas capacity on the system will actually increase.

Gas capacity increases in two ways: building new power plants and upgrading existing power plants. More than half of the new gas capacity are combined cycle (CC) units planned to come online or be upgraded between 2020 and 2025. These types of plants run at capacity factors from 60-80%, and thus will be responsible for a large amount of emissions. The new CC units are Putnam that Seminole is bringing online in 2022, Broward County that is bringing online in its territory in 2022, and a unit at the Big Bend site that TECO is bringing online in 2023. These three new CC plants are expected to emit over 6 million tons of CO₂ per year that they operate.² Since the new CC plants have book lives of 30 years or more, that means that all three will emit over 223 million tons of CO₂ if they are each run for their entire book life. If these are built, and if the ultimate policy regime that emerges to address the climate crisis follows the current science that tells us we need to get to zero annual emissions by 2040-2055, these plants will become stranded assets that ratepayers will continue to pay for without reaping any benefits.

Upgrades to CC plants contribute to CO₂ emissions from the sector as well. For example the upgrades to CC plants planned by NextEra in both the FPL and Gulf territories are responsible for approximately a 2% overall increase in the CO₂

² CO₂ emissions calculated assuming the capacity factors, heat rates, and book lives listed in each TYSP's schedule 9.

emissions from NextEra utilities over the 2020-2030 timeframe. Additionally, when a utility invests to upgrade a plant it commits to continuing to operate that plant for an extended period of time to recoup that investment. Since upgrade projects do not have to be included in the schedule 9 sections of TYSP we do not know the potential financial impact of these upgrades.

New Combustion Turbine (CT) and Internal Combustion (IC) plants have an impact on CO₂ emissions despite their lower capacity factors. For example, if NextEra deployed energy efficiency, solar, and storage instead of the planned four CT units in its TYSP for Gulf it could reduce NextEra's overall emissions by approximately 1%.

B. Continued Gas is Costly and Risky

Energy efficiency is the lowest cost way to lower customer electric bills. As described in the section on energy efficiency below, Florida utilities are leaving customer savings on the table by failing to invest in this cost-effective resource.

Even with cost-effective energy efficiency employed, generation resources are still needed to meet load growth and replace retiring generation. Despite solar investments throughout most of these TYSPs, as indicated in the section on solar below, there is still room for Florida utilities to replace proposed and existing gas generation with solar and storage. NextEra stated in its own recent investor presentation that "solar is expected to be the cheapest source of electric generation other than wind after investment tax credit steps down."³ And since the state does not have much in the way of on-shore wind resources, it is clear that Florida utilities can and should incorporate more of this low-cost, clean energy source into future plans.

Since Florida does not have its own gas resource, all of the gas to generate most of the state's electricity must be imported. In recent years about 1/4 to 1/5 of all revenue collected by utilities from electric customers has been spent on gas. Under these TYSPs that trend is expected to continue, to the tune of utilities sending \$4-6 billion of Floridan's money out-of-state.

Continued investment in gas infrastructure not only has the potential to cost more than investments in equivalent clean energy resources, it opens Floridians up to future risks that could increase their electricity costs. There is likely to be some sort of climate policy between today and 2030. An electric generation portfolio that is

³ NextEra Energy June 2020 Investor Presentation, <http://www.investor.nexteraenergy.com/~media/Files/N/NEE-IR/news-and-events/events-and-presentations/2020/6-2-2020/June%202020%20Investor%20Presentation%20vF.pdf>.

heavily dependent on gas will not be able to perform under a climate policy regime in the same way it is performing now in the absence of climate policy. Florida utilities are proposing new gas power plants with the assumption that these plants will be able to run for at least 30 years. In all likelihood, Florida utilities will not be able to use these plants as much (lower capacity factors) or as long (less than book life), and Florida electric customers will have paid for infrastructure that is no longer providing value. This is the issue of stranded asset risk associated with these investments in new gas plants. It is unclear from the TYSPs whether Florida utilities have considered this risk when developing these portfolios. Since so many propose an expansion of reliance on gas in the future, it is likely that the utilities have not fully considered the risk of gas plants becoming stranded assets in the future when developing these plans.

These are not the only risks associated with an expanded reliance on gas for generation. There are financial risks associated with the volatility of gas prices, which would be driven up by any number of factors including the regulation of gas fracking. There are environmental risks associated with the plants themselves but also the pipelines that snake through Florida's communities. These pipelines could have dangerous leaks in the future or become the targets of terrorist activity, putting Floridan lives at risk.

Combining the facts that Florida's reliance on gas has negative impacts on climate and customer costs, and presents a riskier future, it is clear that Florida utilities should focus on replacing gas with clean energy resources and abandon plans for new gas infrastructure in the future. These risks and costs should be carefully and transparently considered when Florida utilities develop TYSPs.

II. Vast Energy Efficiency Potential in Florida

Florida has vast potential for energy efficiency above and beyond the historical goals that have been set, including those set in the most recent Florida Energy Efficiency and Conservation Act (FEECA)⁴ goal setting process. The goals set ultimately serve as demand side management inputs to the utilities' integrated resource plan (IRP) process that forms the basis of the individual utility TYSP. In fact, data show the state of Florida falls well below the regional average in energy savings and trails far behind the nation as a whole.⁵

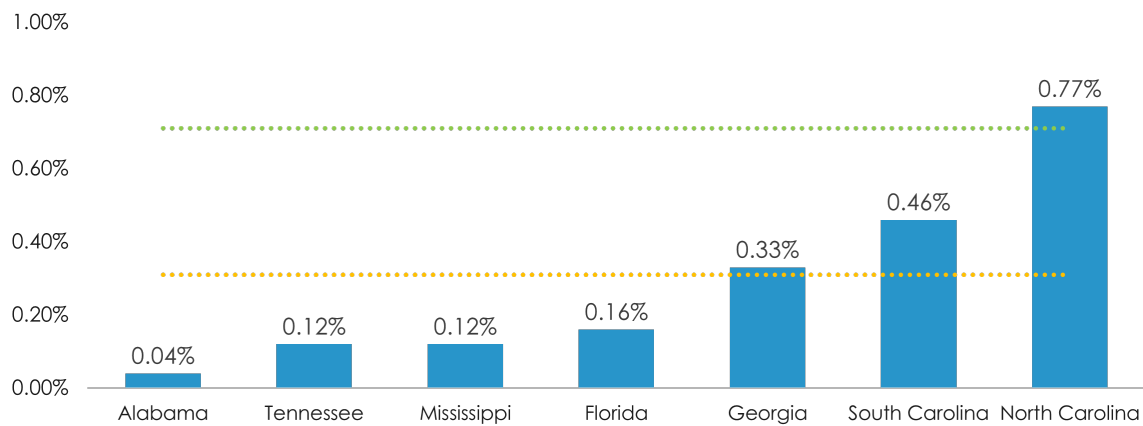
⁴ Sections 366.8-83, 403.591, Fla. Stat.

⁵ Florida's 2018 energy savings as a percent of prior year retail sales was 0.16%, the Southeast average was 0.31%, and the national average was 0.71%. Southern Alliance for Clean Energy, *Energy Efficiency in the Southeast*: 2019.

Energy efficiency is well known as the least-cost energy resource. But, Florida’s use of certain measure screening practices has led to anemic energy saving performance by the state’s utilities relative to peer utilities. Florida is actually the only state to use these measure screening methods, which diverge substantially from industry standard practice and (predictably) eliminate nearly all of the most common and cost-effective efficiency measures.

These outdated and restrictive screening practices not only undermine energy efficiency as a tool to help customers cut energy waste and save money on bills, it places these resource at a competitive disadvantage relative to other resource choices in the utility’s IRP process. As a result, instead of investing in more robust low-cost energy efficiency programs, Florida customers are being substantially overcharged for use of more expensive power supplied by fossil fuel generation.

Figure 2. 2018 Energy Savings as a % of Prior Year Retail Sales



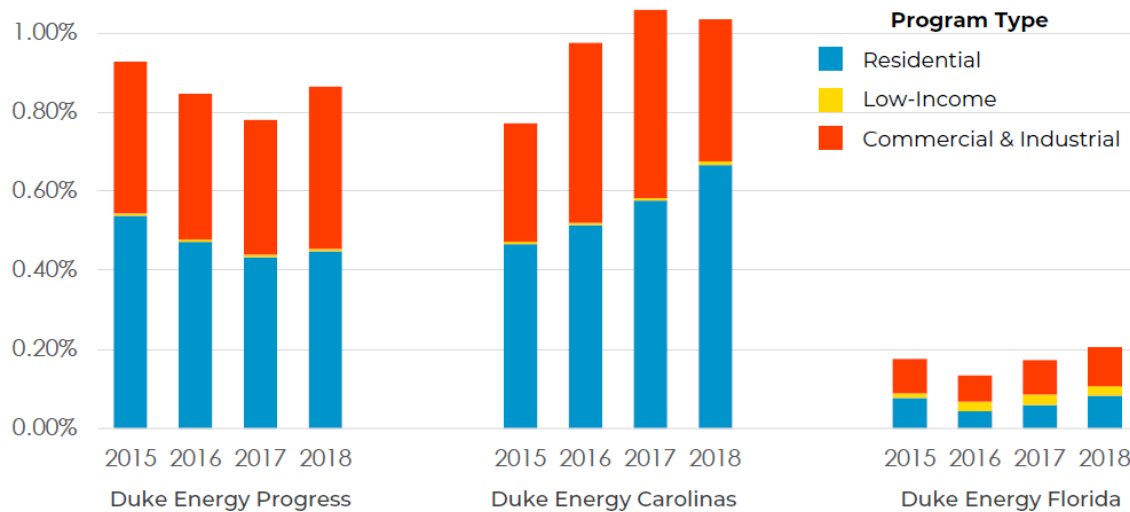
Source: Southern Alliance for Clean Energy, Energy Efficiency in the Southeast: 2019 Annual Report.

For decades, Florida’s utilities have sought to minimize energy efficiency through regulatory processes for decades by using the Rate Impact Measure (RIM) test. The RIM test is not a measure of utility system benefit, but rather a test focused on lost revenue, therefore it creates a significant blind spot for decision making. The test penalizes efficiency by treating energy savings as a cost to the utility rather than counting it as a benefit to customers. RIM was never intended for use in comparing efficiency measures against supply resources and cannot be effectively used for that purpose. By contrast, other test, such as the Total Resource Cost Test and Utility Cost Test were designed for such purposes and are better suited for resource planning analysis.

Beyond cost effectiveness, energy efficiency resource optimization must utilize a reasonable projection of market demand for efficiency products. Unfortunately, Florida is also the only state in the country to use an arbitrary 2-year payback screen as a proxy for free ridership, rather than the empirically based evaluation, measurement, and verification (EM&V) methods that are standard industry practice.

By using the RIM test and 2-year screen, numerous utilities proposed goals of zero or near zero in the 2019 FEECA conservation goal setting process. While the Commission ultimately rejected these proposals, the currently authorized goals are still the product of RIM test and 2-year screening results from the previous FEECA goal-setting cycle. As a direct result, **nearly all of the most cost effective and impactful efficiency measures have been eliminated** from consideration prior to development of the TYSPs. Now is the time, before the next FEECA goal setting proceeding, for the Commission to reform decades old practices that restrict the Commission’s ability to capture meaningful energy savings.

Figure 3. Energy Savings as a % of Prior Year Retail Sales for Duke Energy Utilities



Source: Southern Alliance for Clean Energy, *Energy Efficiency in the Southeast: 2019 Annual Report*.

While far from the lowest performing Florida utility, a comparison between Duke Energy Florida and its sister companies in the Carolinas illustrate the effect of Florida’s use of the RIM test and 2-year screen, as seen in Figure 3. In accordance with local policy, Duke in the Carolinas uses the Total Resource Cost Test and the Utility Cost Test along with well documented EM&V (rather than Florida’s 2-year screen) to validate its savings performance and account for free ridership. In the

Carolinas there are also policies whereby Duke is compensated with performance incentives for delivering meaningful levels of energy savings to its customers. The Florida Commission has the statutory authority to implement a similar utility performance incentive policy, but thus far has not exercised its authority to do so.

Florida Power & Light saw even lower energy savings in 2018 than DEF. At 0.08% of energy saved, FP&L’s annual efficiency savings level is a mere quarter of the Southeast regional average (despite the fact that it’s the largest single utility in the region) and less than one eighth of the 0.71% national average.

Figure 4. Florida Power & Light Savings Metrics Compared to Regional Peers

UTILITY	% SAVINGS	2018 MWh SAVED (Home Equivalent)	CUSTOMER BASE
ENTERGY ARKANSAS	1.22%	18,399	693,203
DUKE ENERGY CAROLINAS	1.03%	60,062	2,215,198
DUKE ENERGY PROGRESS	0.89%	26,734	1,399,860
GEORGIA POWER	0.48%	30,680	2,204,911
REGIONAL AVERAGE	0.31%	--	--
FLORIDA POWER & LIGHT	0.08%	6,057	4,391,832

Source: Southern Alliance for Clean Energy, Energy Efficiency in the Southeast: 2019 Annual Report.

Best practice in utility resource planning allows energy efficiency and the full range of demand side management resources to compete head-to-head with supply resources on a consistent and integrated basis. For both energy (kWh) and capacity (MW), this means selecting energy efficiency, demand response, and distributed energy resources (DER) that are less expensive than existing power plants or utility proposed supply resources. To optimize energy efficiency as a resource within an overall utility resource portfolio, it must be treated as a selectable resource unimpeded by arbitrary restrictions during resource optimization modeling, rather than simply subtracted from load projections.

Energy efficiency should also be a key part of utility resource planning in Florida. Regardless of FEECA goals, utilities should be able to utilize the cost-effectiveness of this resource to meet its resource needs and thus offset the need to build generation resources. There are numerous examples of utilities across the country modeling energy efficiency as a resource in the IRP process. Doing the same in Florida has the

potential for vast energy and financial savings, reducing emissions, creating local jobs, and improving health.

III. Expanded Solar Development is Available

According to these TYSP Florida utilities are planning future solar additions at a level that mean Florida will soon have the most total solar capacity installed compared to other Southeast states. However, according to utility plans across the region, other states will remain ahead of Florida in terms of solar watts per customer. SACE uses the watts per customer metric to be able to compare the amount of solar across utilities and states of different sizes.

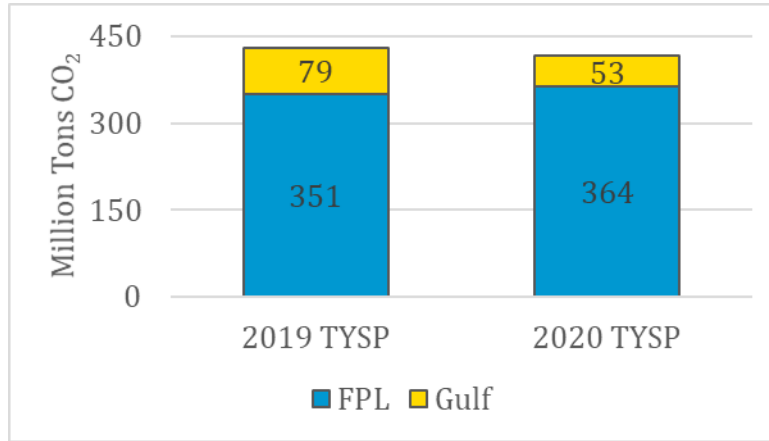
Florida utilities' TYSPs represent a primary input to the proprietary database SACE maintains. Our Solar in the Southeast annual report emphasizes a near-term, four-year rolling time horizon.

NextEra plans to fully integrate Gulf Power with FPL after 2022. The two utilities filed a joint TYSP this year. After receiving approval from the Florida PSC in March, FPL has begun developing SolarTogether, the largest shared-solar program in the country (1,490 MW over the next two years). The SolarTogether shared-solar program is projected to eliminate one fossil gas combustion turbine that had been planned for 2022-2023 and also results in the deferral of a combined-cycle fossil gas unit from 2028 to 2029.⁶ After that, however, the joint TYSP reflects shifting the solar focus from FPL territory to Gulf. The TYSP reflects no additional solar build-out for FPL 2022-2024 while Gulf Power expands 1,341 MW during that timeframe.

This significantly decreases the cumulative CO₂ emissions expected from Gulf Power over the 2020-2030 timeframe, but it also results in an increase in cumulative emissions from FPL so that the overall impact on cumulative emissions of the two NextEra utilities is small (3% reduction compared to the 2019 Ten Year Site Plans).

⁶ FPL, Rebuttal Testimony of Juan Enjamio, Docket No 20190061, September 23, 2019, p. 7.

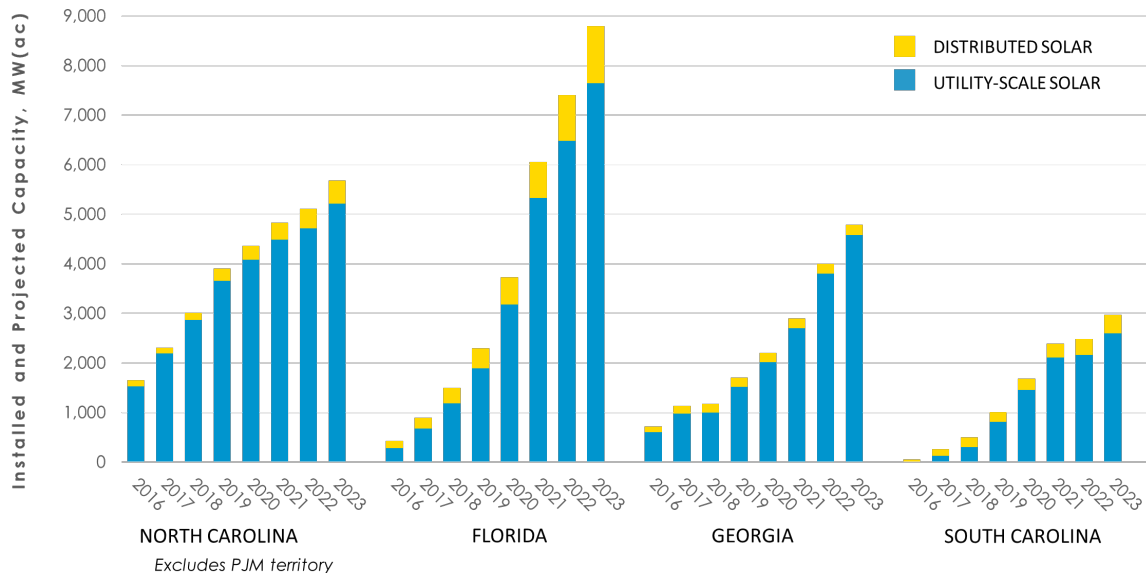
Figure 5. Cumulative CO₂ 2020-2030 by NextEra Utility and Ten Year Site Plan



Source: Southern Alliance for Clean Energy analysis of Ten Year Site Plans (TYSP) from 2019 and 2020

SACE’s compilation of utility plans, including the 2020 TYSPs, illustrate the state of Florida as a whole will surpass all other Southeast states by 2021 in total MW of solar installed. The results below represent forecast growth in both utility-scale solar as well as distributed solar (which includes net metered solar installations).

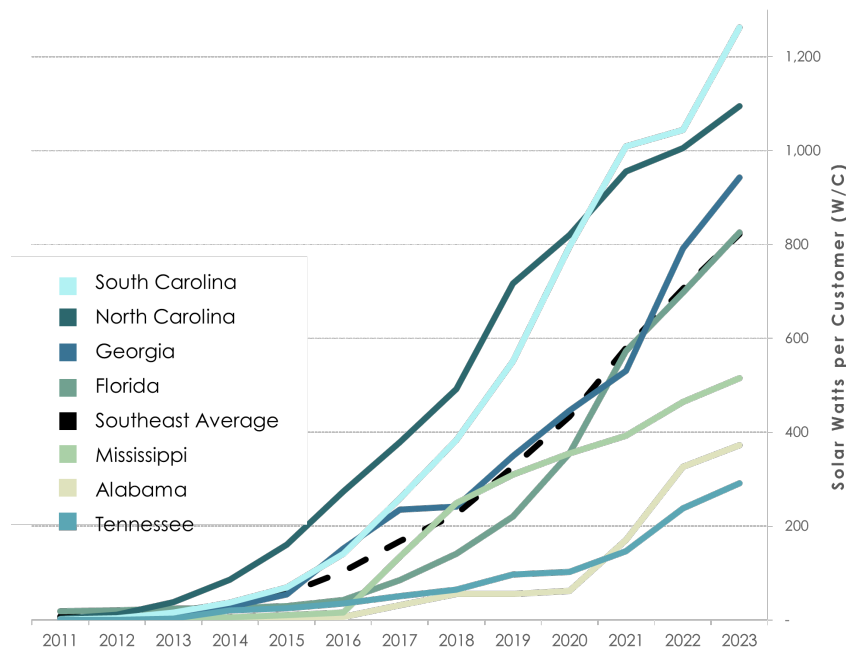
Figure 6. Historical and Planned Solar for Select Southeast States



Source: Southern Alliance for Clean Energy, *Solar in the Southeast Annual Report, June 23, 2020.*

However, since the state is more populous, it is expected to be at the regional average in terms of solar watts per customer in 2023. This indicates both the opportunity for additional solar ambition by Florida utilities and a need to embrace that ambition if Florida intends to become one of the Southeast region leaders in solar penetration.

Figure 7. Historical and Future Solar Watts per Customer from Utility Plans



Source: Southern Alliance for Clean Energy, *Solar in the Southeast Annual Report, June 23, 2020.*

While the state as a whole is expected to see growth in solar, some individual utilities are doing more while others are lagging behind. Gulf Power, Tampa Electric, and Orlando are all planning significant increases in solar, to the point where they are expected to have over 1 kW per customer in 2023.

Utilities that will still be lagging behind others in the state and region in 2023 include Lakeland and Seminole. These three have also announced solar expansions for the next four years. Lakeland expects to add at least 50 MW of solar (along with battery storage) as it retires the C.D. McIntosh coal plant. (This was announced after the 2020 TYSP submission.) Seminole Electric replaced a smaller 2022 solar

contract (40 MW) with a larger one (298 MW) for 2023. Relative to the number of customers each of these utilities serve, the three remain well below the state and regional average for solar ambition through 2023.

Gulf Power, Orlando, and even Seminole are expected to have eight times the solar watts per customer in 2023 that they had in 2019. Duke Energy Florida reflects a lower than average solar ambition for 2023 based on current plans but has recently petitioned the Florida PSC for approval of a 750 MW Clean Energy Connections shared-solar program that will accelerate its deployment of solar and increase the four-year forecast solar ratio.

Figure 8. Historical and Planned Solar Watts per Customer for Select Florida Utilities

UTILITY	2019	2023
GULF POWER	297	2,748
TAMPA ELECTRIC	428	1,827
ORLANDO (OUC)	141	1,345
GAINESVILLE (GRU)	292	883
STATE AVERAGE	220	826
SOUTHEAST AVERAGE	325	819
JACKSONVILLE (JEA)	112	738
DUKE ENERGY FLORIDA	155	722
FLORIDA POWER & LIGHT	265	672
TALLAHASSEE	363	579
LAKELAND	139	565
SEMINOLE	34	301
POWERSOUTH	31	85

Source: Southern Alliance for Clean Energy, Solar in the Southeast Annual Report, June 23, 2020.

IV. Utility Future Planning should be Robust and Transparent

The Commission is charged with analyzing the plans and classifying them as “suitable” or “unsuitable” and may suggest alternatives to the plans.⁷ In its analysis,

⁷ § 186.801(2), Fla. Stat.

the Commission must consider a number of criteria, including the impact of the TYSP projections on fuel diversity, the environmental impacts of proposed power plants, and possible alternatives to the proposed plans.⁸

Yet, notably absent from the TYSPs are the alternatives to the proposed plans. The evaluation of possible supply-side and demand-side alternatives is a critical part of a utility's internal integrated resource plan IRP process. While the IRP process is generally described in the plans, much of the data, assumptions and scenarios used by the utility in its IRP are not visible to stakeholders and the public. It is not clear what alternatives plans, if any, the utilities have considered in developing the TYSPs.

The lack of alternative plans information creates a regulatory "blind spot" for the Commission in evaluating a utility's TYSP, and in taking a comprehensive look at future resource decisions. Stakeholders are likewise limited in their access to long term planning scenarios and alternatives analysis. Parties can obtain information on the utilities internal IRP process through intervention and discovery in resource planning dockets, such as the conservation goal-setting docket or a need determination docket. Yet, this delayed access to the utility's resource planning process is less than optimal. A party's challenge to a resource decision often places the burden on the party to recreate the utilities internal analysis in order to challenge it – after the resource decision has largely been made by the utility, and awaiting approval by the Commission.

Moreover, the current Florida resource planning process has gaps that allow utility resource decisions to effectively evade review. For instance, the utilities TYSPs project over 1,000 MW of refueled fossil fuel steam generation and over 5,000 MW of new fossil generation over the next ten years with no review for need. While the prudence of these fossil fuel generation decisions may ultimately comprise part of a larger base rate increase case, the issue can get lost given the myriad of issues considered in a rate case proceeding. There can be a dearth of evidence produced regarding the prudence of those investments – especially when the cases are resolved through settlement which considers whether the stipulation as a whole is in the public interest.⁹ Clearly, there are opportunities to make the current planning process more efficient, transparent and comprehensive.

A successful IRP process must be more transparent and include meaningful stakeholder participation in the approval of the IRP. A more robust IRP process with stakeholder and public participation can result in new ideas on how to address

⁸ *Id.*

⁹ *See eg.*, Florida Public Service Commission, Order No. PSC-16-0560-AS-EI (December 15, 2016).

future demand either through generation or demand side management; provide a sense of what customers value, such as cleaner energy; and rankings of priorities, such as environment, equity, cost and reliability. The Commission should adopt rules to incorporate elements of IRP best practices.¹⁰ Where it cannot do so by rule adoption, the Commission can advocate for statutory changes that provide for these best practices.

V. All Source Procurement

All-source procurement means that whenever a utility believes it is time to acquire new generation resources, it conducts a unified resource acquisition process. In that process, the requirements for capacity or generation resources are neutral with respect to the full range of potential resources or combination of resources available in the market.¹¹

There is currently no required request for proposal (RFP) process for procuring generation resources below 75 MW of steam generation or solar capacity,¹² the threshold for review under the Power Plant Siting Act,¹³ - which includes a determination of need for the additional resource.¹⁴ For a new electrical power plant of 75 MW or greater, the utility initiates regulatory oversight when the unit is identified as the utility’s next planned generating unit in a TYSP. Identification of the next planned generating unit is important for a number of reasons, including the practice of basing the avoided capacity rate in standard offer contracts on the next unit.

The only requirement for a Florida utility to consider alternatives to the next planned generating unit is the PSC’s rule requiring a RFP process for projects 75 MW or greater. According to that rule, “[t]he use of a Request for Proposals (RFP) process is an appropriate means to ensure that a public utility’s selection of a proposed generation addition is the most cost-effective alternative available.”¹⁵ However, by benchmarking alternatives against the “price and non-price attributes

¹⁰ Rachel Wilson, Bruce Biewald, *Best Practices in Electric Utility Integrated Resource Planning*. Regulatory Assistance Project, June 2013.

¹¹ John D. Wilson, et. al, *Making the Most of the Power Plant Market: Best Practices for All Source Electric Generation Procurement*, Energy Innovation and Southern Alliance for Clean Energy, April 2020.

¹² There is the standard offer contract for renewable energy of 80 MW or less pursuant to the utility’s PURPA obligation, but the structure of the contracts is not optimal for meaningful development. See SACE solar comments [citation to SACE FL PSC solar comments 2015]

¹³ See also Section 403.503(14), Fla. Stat.

¹⁴ Section 403.519, Fla. Stat.

¹⁵ R. 25-22.082, F.A.C

of its next planned generating unit,”¹⁶ the RFP rule effectively excludes any requirement for the utility to consider alternative configurations of technology(ies) that might be more cost-effective in the long-term.

Florida’s history of utilities selecting themselves as the winner of every RFP suggests that meaningful competition can be discouraged by an ineffective procurement process. All-source procurement helps eliminate potential biases towards over-procurement, self-generation, and specific fuel-type generation. . As indicated in *Making the Most of the Power Plant Market: Best Practices for All Source Electric Generation Procurement*¹⁷ “there is a widespread perception that the Florida RFP evaluation process does not generally offer an opportunity for meaningful competition.” It is a responsibility of regulators to proactively address structural bias and prevent improper self-dealing by utilities.

In establishing these *Best Practices*, the authors carefully considered the case studies evaluated in the paper, and in particular the approach employed by Xcel Colorado, to derive the following five recommendations.

Regulators should:

1. Use the resource planning process to determine the technology-neutral procurement need.
2. Require utilities to conduct a competitive, all-source procurement process, with robust bid evaluation.
3. Conduct advance review and approval of procurement assumptions and terms.
4. Renew procedures to ensure that utility ownership of generation is not at odds with competitive bidding.
5. Revisit rules for fairness, objectivity, and efficiency.

Xcel Colorado’s ERP (Electric Resource Plan) process shows when allowed to compete, renewable energy resources displaced natural gas in head-to-head matchups. The end result is cleaner utility portfolios and savings for customers.

VI. Reserve Margin Sharing

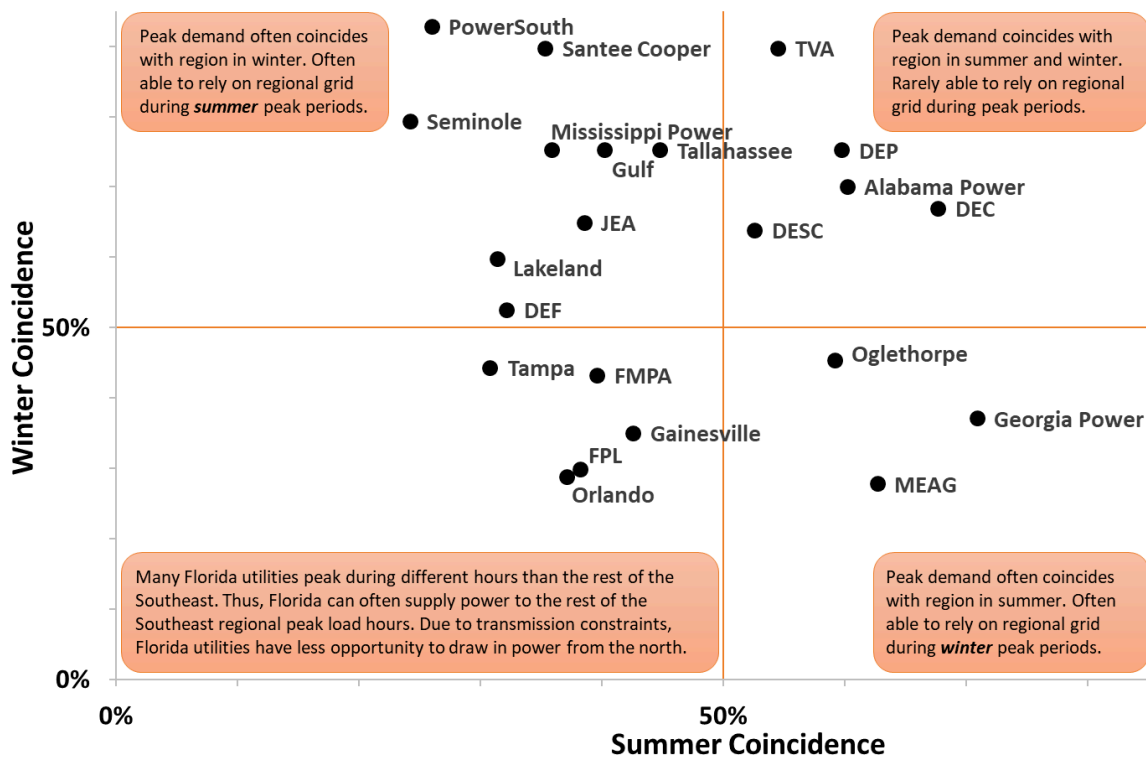
¹⁶ Id.

¹⁷ John D. Wilson, et. al, *Making the Most of the Power Plant Market: Best Practices for All Source Electric Generation Procurement*, Energy Innovation and Southern Alliance for Clean Energy, April 2020.

SACE analysis of twenty years of utility load data across the Southeast shows that while utilities across the region often peak on the same day as similar neighboring utilities, there are several time periods where utility peaks are not coincident, opening up the possibility for utilities to share resources to meet peak loads.¹⁸ If utilities can rely on neighbors to help meet reserve margin targets, it reduces the need for utilities to build redundant resources and thus reduces costs that are ultimately borne by customers.

SACE's analysis of coincident peaks included utilities from across the Southeast, but resulted in particularly interesting findings for Florida utilities. Five Florida utilities often peak at different times than the rest of the region in both winter and summer seasons: FPL, Orlando, Gainesville, FMPA, and Tampa Electric.

Figure 9. Hourly Coincidence Rate of Southeastern Utilities with the Regional Peak, 1998-2016



¹⁸ See full analysis in SACE's Seasonal Electric Demand in the Southeastern United States report here: <https://cleanenergy.org/wp-content/uploads/Seasonal-Electric-Demand-in-SE-SACE-Final.pdf>.

Source: Southern Alliance for Clean Energy, Seasonal Electric Demand in the Southeastern United States, June 2020.

Southeast-wide summer peak events are often characterized by high peak demand in Alabama, Tennessee, Georgia, and the Carolinas but milder demand in peninsular Florida. During these peak times, Florida utilities are in a strong position to market surplus power to peaking utilities in the region. While it is true that transmission constraints limit the amount of power peninsular utilities can import during peak events, when the rest of the Southeast is peaking this transmission infrastructure is likely under-utilized and Florida utilities could supply excess power. Since these events are most likely to occur in summer, they could be another driver for Florida utilities to further invest in solar. However, the current Ten Year Site Plans do not indicate that Florida utilities are considering this option.

VII. Conclusion

Florida’s reliance on natural gas is not only a concern from a climate perspective, but an economic perspective as well. Florida imports its gas from outside the state, sending billions of dollars outside the state every year. Expansion of gas infrastructure, including upgrading existing power plants, exposes Florida utilities to serious risk of future stranded assets. With investments in energy efficiency and solar, Florida utilities could simultaneously lower customer bills and boost a local energy economy that would drive jobs and economic development all across the state.

It is reasonable to expect some sort of climate policy regime to emerge over the next decade. It is important that the Commission, stakeholders, and ratepayers understand how Florida utilities’ plans for the future would perform under a potential future climate policy. Would such a policy result in higher electric bills for customers or are utility plans robust enough to meet that challenge without raising rates? Considering how off-track current plans are from where the science tells us we need to be to address the climate crisis, these plans are not in the best interest of Floridians.

The state and its customers can benefit from a more robust, transparent and participatory IRP process. Florida utilities could save customers money, improve health in the state, and reduce emissions if resources requirements for capacity or generation resources are neutral with respect to the full range of potential resources or combination of resources available in the market. The state should continue to encourage ramping up of solar development that is eliminating or deferring future fossil plants, and reform outdated FEECA practices that restrict energy savings so that the Commission can tap into the enormous potential for

energy efficiency – while also helping the state reduce its emission profile. Sharing of reserve margins can bring added cost savings to Florida families and businesses. We encourage the Commission to pursue these policies because they would result in more clean energy resources, fewer new fossil infrastructure investments, and improvements to customer rates, bills, and health.