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Southern Alliance for Clean Energy

November 23, 2020

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

Re: Docket No. 20200170-EI; Petition for approval of optional electric vehicle public charging pilot tariffs, by Florida Power & Light Company

Dear Chairman Clark, Commissioners. Brown, Fay, Graham, and Polmann:

Southern Alliance for Clean Energy ("SACE") respectfully offers the following comments to the Commission to help inform it as it considers Florida Power and Light Company's ("FPL") petition to approve its public electric vehicle public charging pilot tariff ("Pilot"). SACE is a regional membership organization that promotes responsible energy choices to ensure clean, safe, and healthy communities throughout the Southeast. SACE advocates for a lower cost, lower risk clean energy future. Ramping up the electrification of transportation is a critical component of realizing that future.

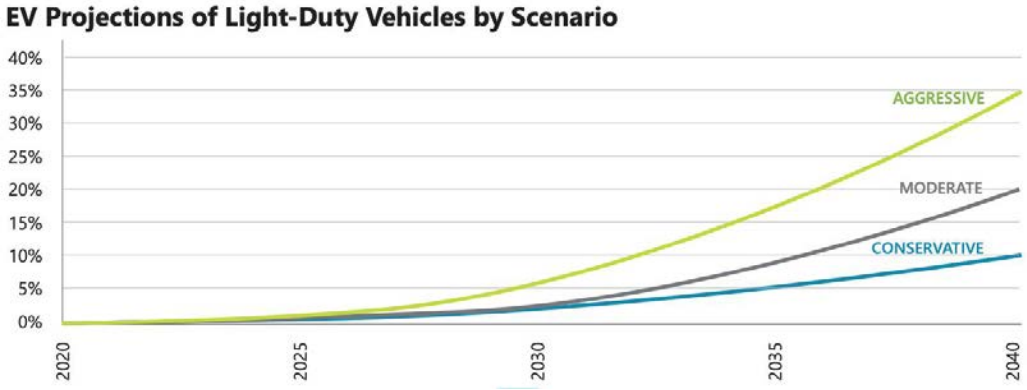
SACE joins the charging station companies, automakers, associations, and industry stakeholders in supporting FPL's Pilot filing as a reasonable and necessary means to accelerate transportation electrification and deliver related values and benefits to ratepayers. SACE also recommends considering the addition of an Evaluation, Verification, and Measurement process to maximize values and benefits further.

Overarching Comments

The shift to electric transportation remains nascent, and there remains much to be learned. Simultaneously, automakers have pledged at least $64 billion towards transportation electrification in the US. Global EV market forecasts are becoming more aligned, pointing to widespread passenger EV adoption by 2030:

- Bloomberg New Energy forecasts 28% of new passenger car sales globally will be EVs
- Deloitte forecasts 32% of new passenger car sales
- IEA forecasts 30% of all new light, medium, and heavy-duty vehicle sales

In the Florida Department of Transportation's (FDOT) *EV Infrastructure Master Plan Status Report, December 1, 2020*, FDOT's passenger EV forecasts for Florida offer a range of scenarios resulting in 10% to 35% market penetration by 2040.[1]



Additionally, the medium and heavy-duty sectors are ramping up with electric transit and school buses entering the market, electric delivery vehicles securing large fleet contracts, and freight trucks expected on showroom floors in the coming year.

As the EV market rapidly expands, the subsequent electricity demand will likely create utility service opportunities and challenges and impact near-term costs and revenues. SACE believes that utilities should, therefore, invest time and resources now to understand how EV driving consumers and fleets behave, what rate structures best serve the market and ratepayers, and how to avoid potential EV grid liabilities while maximizing potential grid benefits.

Thus, SACE supports FPL's stated intent to leverage the proposed pilot tariffs to further its objective to "examine electric vehicle (EV) use, adoption, infrastructure, potential new rate structures, power quality, and customer experience ahead of mass adoption to ensure future electric vehicle investments enhance service for electric customers who select EVs."

This Pilot seeks to understand how to mitigate demand charge impacts on charging station business models and what a fair, fast charging rate is for consumers, charging infrastructure companies, utilities, and ratepayers. These are critical questions to address as Florida embarks on the EV infrastructure master planning process.

Furthermore, SACE agrees that "vehicle electrification represents an important part of Florida's energy future and offers numerous benefits to our customers and the public at large" The potential consumer and public benefits are meaningful and widespread:

- lower transportation costs for EV owners and fleets;[2]

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[1] https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/planning/fto/evmp-status-111120.pdf?sfvrsn=ac348cf4_4

[2] https://advocacy.consumerreports.org/wp-content/uploads/2020/10/EV-TCO-Overall-Fact-Sheet-FINAL-3.pdf

- downward pressure on electric utility rates for all ratepayers;[3]
- increased energy security achieved by reducing reliance on imported gasoline and diesel;[4]
- elimination of ground-level NOX and PM2.5 tailpipe emissions that undermine public health;[5]
- reduced carbon emissions that contribute to climate change.[6]

The values of these potential benefits create the imperative for utilities and regulators to understand how the regulatory process can help scale EV adoption.

Electric Vehicle Charging Infrastructure Riders for General Service Demand and General Service Large Demand

Charging infrastructure companies play a critical role in EV market expansion and operate in a high-risk business environment. Consumers' perception that there are not enough charging stations deployed to serve their mobility needs is widely cited as one of the top barriers to EV adoption. This is particularly the case with fast charging stations that support intercity and interstate travel. Fast charging stations, those capable of delivering 50kW or above, are costly to purchase and install. Charging infrastructure companies' ability to recoup sunk costs is undermined by demand charge rate structures that were not designed with electric vehicle charging in mind.

If approved, FPL's proposed rider will be the first-of-its-kind attempt to address this market barrier in the Southeast. Testing the commonly accepted theory that minimizing demand charge impacts on fast-charging stations will result in increased deployment of fast charging by the private sector is essential. If successful in spurring private sector investment, this Pilot will benefit EV drivers in FPL territories by ensuring adequate charging station deployment and will benefit ratepayers by leveraging private-sector charging station investment to grow the EV market and support downward pressure on rates.

Thus, SACE supports FPL's assertion that "commercial demand rates in standard electric utility tariffs pose a distinct challenge to the economics of third party public fast-charge stations," and that "at low levels of utilization, the electricity bills incurred at these stations result in an uneconomic effective cost per kWh, as high demand charges are spread over a relatively low volume of energy sales."

SACE relies on charging infrastructure companies to comment on whether the 75-hour denominator is an effective volumetric rate on demand and energy charges, and whether the resulting $0.20 per kWh maximum demand charge rate for fast chargers underperforming stations de-risks deployment enough to result in the sought-after private sector investment.

Utility-Owned Public Charging for Electric Vehicles Pilot Tariff

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[3] https://www.synapse-energy.com/sites/default/files/EV-Impacts-June-2019-18-122.pdf

[4]https://2uj256fs8px404p3p2l7nvkd-wpengine.netdna-ssl.com/wp-content/uploads/2020/05/Get-America-Moving-Again.pdf

[5] https://www.lung.org/clean-air/electric-vehicle-report

[6] https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions

Electricity rates at utility-owned fast-charging stations should be consistent throughout a territory, just like all other electricity rates. This creates market certainty for consumers. Additionally, the rate at utility-owned fast-charging stations should be set to achieve two goals:

1. Shift some of the capital cost recoveries from general ratepayers to the EV drivers directly benefiting from the investment;
2. Support private sector charging station profitability by not undercutting the market rates for fast charging.

Thus, SACE supports FPL's pilot tariff goal "to study the ability of these revenues to recover costs specific to EV charging infrastructure, with the longer-term goal of developing a cost-based framework that does not impact the general body of ratepayers."

SACE relies on charging infrastructure companies to comment on whether the proposed $0.30 volumetric Pilot Rate for certain FPL owned public charging with an output power of 50kW or greater provides market certainty that further de-risks private sector investment or puts downward pressure on market rates that negatively impact private sector profitability.

Additional Consideration

Evaluation, measurement, and verification (EM&V) is essential to ensuring Pilot learnings are captured, and that ratepayer investments maximize long-term value and benefits for all. Sharing EM&V findings with regulators and industry stakeholders through a formal and transparent process further supports effective industry-wide growth and development.

FPL seeks to address known market barriers by implementing reasonable and necessary though untested rate-design solutions. The Pilot represents the first large-scale attempt by a Florida utility to implement innovative rate design to support market expansion. As FPL implements the proposed demand charge limiter and EV fast-charging rate, tracking and reporting how the market and customers respond will inform other utilities and industry stakeholders seeking effective rate design strategies to support market growth.

Thus, SACE encourages FPL to consider committing to Pilot transparency by sharing relevant data and learnings with regulators and industry stakeholders that emerge from rigorous and ongoing EM&V.

Sincerely,

Stan Cross

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