



Matthew R. Bernier
ASSOCIATE GENERAL COUNSEL

October 2, 2020

VIA ELECTRONIC FILING

Adam J. Teitzman, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: *Duke Energy Florida, LLC's Response to Staff's Request for Comment
for EV Workshop/SB 7018; Undocketed*

Dear Mr. Teitzman:

Enclosed to be filed in Undocketed Matters on behalf of Duke Energy Florida, LLC ("DEF") is DEF's Response to Staff's Request for Comment for EV Workshop/SB 7018.

Thank you for your assistance in this matter. Please feel free to call me at (850) 521-1428 should you have any questions concerning this filing.

Sincerely,

/s/ Matthew R. Bernier

Matthew R. Bernier

MRB/cmK
Enclosure

cc: Mireille Fall-Fry
Adria E. Harper

**Duke Energy Florida, LLC's Response to
Staff's Request for Comment for EV Workshop/SB 7018**

Undocketed

I. Projecting the increase in the use of electric vehicles in this state over the next 20 years and determining how to ensure an adequate supply of reliable electric vehicle charging stations to support and encourage this growth in a manner supporting a competitive market with ample consumer choice.

- A. Please provide a ten-year and twenty-year projection for increased EV use in Florida, including your data source for such projections.
- B. Provide an estimate of the number of charging stations that will be needed to meet the demand presented by these ten and twenty-year projections

Response:

- A. Duke Energy Florida (DEF) has not historically created an EV adoption forecast for the entire state of Florida but rather one focused on DEF service territory provided as part of the Ten Year Site Plan (TYSP). DEF's current 10- and 20-year EV adoption forecasts for DEF territory are shown below. DEF relied upon data supplied by the Electric Power Research Institute (EPRI) in providing this forecast.

Electric Vehicles in Operation - Forecast	DEF
2020	13,071
2021	17,473
2022	23,235
2023	31,809
2024	43,235
2025	57,796
2026	73,955
2027	91,689
2028	111,252
2029	132,778
2030	156,694
2031	182,824
2032	210,974
2033	241,290
2034	273,850
2035	308,472
2036	344,802
2037	383,150
2038	423,308
2039	465,093
2040	508,436

- B. DEF has not historically created a forecast of EV charging infrastructure needed to serve the EV adoption forecast. In support of this proceeding, DEF used the EVI Pro-Lite tool to estimate the level of EV charging infrastructure needed to support the EV adoption forecast within DEF territory.

Year	Workplace L2	Public L2	Public DC Fast Charge
2030	6,451	4,956	1,236
2040	20,390	13,707	3,425

II. Strategies to develop the supply of charging stations, including, but not limited to, methods of building partnerships with local governments, other state and federal entities, electric utilities, the business community, and the public in support of electric vehicle charging stations.

- A. Provide comment on strategies to develop the supply of charging stations, including methods of building partnerships between charging station installers, governmental entities, electric utilities, the business community, and the public.
- B. Provide examples of strategies adopted or being considered in other states that could be implemented in Florida.

Response:

- A. As shown by DEF’s Park and Plug Pilot Program, utilities can play a central role in developing the supply of EV charging stations within the state. Since 2018, DEF has installed over 500 charging stations throughout its service territory across Workplace, Public Level 2, Multi-Unit Dwelling, and Public DC Fast Charge segments. Park & Plug has demonstrated the ability of a utility to cost-effectively install EV charging infrastructure that is made available to all customers on a non-discriminatory basis to support EV adoption.

At this early stage of the market, it is important to ensure that EV charging infrastructure is not only installed but also operated and maintained in good working order so that charging units do not become stranded assets. There are many examples across the country of charging infrastructure funded by grants and other, similar programs that have fallen into disrepair or otherwise become obsolete. As long-term owner-operators of power infrastructure, utilities are well-suited to ensure that charging infrastructure is well-maintained and accessible throughout the full life of the assets.

It is also important to ensure that EV charging infrastructure access is expanded in rural areas, lower income areas, and along highway corridors and hurricane evacuation routes where the economic complexities of EV infrastructure operation can become even more challenging, resulting in such areas being underserved by other private third parties. Utilities are particularly well suited to addressing these segments as providers with a duty to serve. Due to the fact that increasing EV adoption can benefit all utility customers by increasing electric system utilization and putting downward pressure on

rates, utilities can view EV charging infrastructure on a system-wide basis rather than a narrow asset-level ROI basis.

- B. There are many examples of utility EV charging programs which are successfully expanding access to EV charging infrastructure and supporting EV adoption growth within those service territories. In addition to utility programs, there are also other state-level programs emphasizing expansion of Fast Charging access to support EV adoption. Some examples are as follows:

Georgia – Georgia Power Community Charging Program

New York – NYPA EVolve NY network

Kansas – KCP&L Clean Charge Network

Maryland – Commission Order 88997 approving four IOU EV charging programs

Washington – Avista EV Charging Infrastructure Pilot

Virginia – VW Settlement funding dedicated to statewide DCFC expansion

III. Identifying the type of regulatory structure necessary for the delivery of electricity to electric vehicles and charging station infrastructure, including competitively neutral policies and the participation of public utilities in the marketplace.

- A. Provide comment on the regulatory structure necessary for delivery of electricity to EV charging station infrastructure.
- B. Provide comment on what constitutes competitively neutral policies in the electric vehicle charging marketplace.
- C. Provide comment on the participation of public utilities in the electric vehicle charging marketplace.
- D. Provide examples of regulatory structures adopted, or being considered, in other states regarding electricity supply to EV charging station infrastructure, including examples of competitively neutral policies and the participation of public utilities in the marketplace, that could be implemented in Florida.

Response:

- A. Current regulatory structures governing the delivery of electricity to EV infrastructure are not a barrier to the expansion of EV charging infrastructure in FL. Florida statute 366.94 allows for resale of electricity through EV charging station; therefore, independent third parties are legally permitted to install and operate EV charging infrastructure for public use. Existing DEF residential and commercial rate schedules provide significant cost savings compared to gasoline across most applications. DEF offers residential and commercial rate schedules with time varying rates, which can provide additional savings to customers who are able to constrain charging to off-peak periods.
- B. In light of the strong economic and customer benefits from EV adoption, the highest priority in the near term should be supporting incremental EV growth in Florida. The

EV charging market is at such an early state that a foundational level of infrastructure must be installed and operated by long-term owner-operators to ensure a robust competitive market develops in the future. The current state of the market is a result of the challenging economics of costly EV charger installation and low financial returns from operation due to low levels of EV adoption. In order to grow the market, consumers must have confidence in widespread availability of charging infrastructure, particularly fast charging along highway corridors and evacuation routes. A foundational network of charging infrastructure can alleviate consumer concerns, and it should be built out in a way that avoids creating stranded assets.

- C. Utilities can provide foundational infrastructure that “seeds” the marketplace for further infrastructure development and that helps to alleviate consumer concerns around the availability of EV charging infrastructure, which has been documented as a top barrier to EV adoption. In order to align financial incentives for utilities with a policy priority of increased EV adoption, it is reasonable to treat EV infrastructure in a similar manner to other electrical infrastructure deployed by utilities. Utilities should have the opportunity to file for recovery of investments in limited deployments of EV infrastructure found to be used and useful and providing service to the public at just and reasonable rates. Such deployments will allow all customers to drive electric by providing charging infrastructure in areas where it may not be deployed by private entities. In addition to public infrastructure, utilities are also a natural channel to provide incentives to residential customers in exchange for managing home charging load. As shown in “Plug-In Electric Vehicle Cost-Benefit Analysis: Florida (1/17/2019)” by MJ Bradley & Associates (<https://www.mjbradley.com/reports/plug-electric-vehicle-cost-benefit-analysis-florida>), managing charging load can create incremental benefits above baseline charging behavior. By considering home charging along with public charging, utilities can craft comprehensive portfolio programs which not only drive adoption of EVs among Florida customers but also ensure that incremental charging load creates net system benefits for all customers.
- D. Many state regulatory commissions have approved or are considering comprehensive utility EV programs which include utility ownership of charging infrastructure and recovery of costs associated with EV charging programs. Some examples are as follows:
- Georgia: Docket 4256 – Order approving expansion of Georgia Power’s EV charging infrastructure efforts, including \$6M over three years for utility-owned Community Chargers, among other components.
 - Maryland – Commission Order 88997 approving a comprehensive portfolio of IOU EV charging programs including Residential, Non-Residential, and Public sub-portfolios; the Public sub-portfolio including utility ownership of 850 charging stations.
 - Kansas – KCP&L – Approved recovery for Clean Charge Network investment; \$5.6M of utility-owned public infrastructure across 200+ Level 2 and DC Fast Charge installations.

- Colorado – Public Service Company of Colorado – 2021-2023 Transportation Electrification Plan including \$102M of investment across Residential, Multi-Unit Dwelling, Commercial, Advisory Services, and Research segments.
- Washington – WA UTC Docket UE-160799: Policy and interpretive statement concerning Commission regulation of electric vehicle charging services, concluding: “The Commission adopts this policy statement supporting transformation of the electric vehicle market through utility provision of regulated EV charging services.”
- New Mexico – Southwestern Public Service Company – 2021-2023 Transportation Electrification Plan including \$3.2M of investment across Residential, Public Fast Charging, and Advisory Services segments.