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**-VIA ELECTRONIC FILING-**

Adam Teitzman
Commission Clerk
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 Mr. Teitzman:

Please find attached Florida Power & Light Company's responses to Staff's First Data Request (Nos. 1-15).

If there are any questions regarding this filing, please contact me at (561) 304-5662.

Sincerely,

/s/ *William P. Cox*
William P. Cox
Fla. Bar No. 0093531

cc: Shaw Stiller, Senior Attorney
Holly Forrest, Public Utility Analyst I
Tripp Coston, Economic Supervisor

QUESTION:
Paragraph 39 of the petition refers to the annual costs associated with these pilot tariffs. Please describe and quantify each annual cost.

RESPONSE:
Paragraph 39 refers to the annual costs associated with lost revenue that results from the GSD-EV1 and GSLD-EV1 tariffs' reductions to demand charges for existing public fast charge stations. Based on 2019 data, FPL estimates the annual impact of this lost revenue to be approximately $157,000. This number was estimated by modeling the effects of the 75-hour demand limiter on 41 fast charge stations in FPL service territory with dedicated meters, using these stations' usage patterns from 2019 as a proxy. Calculated results from stations with less than twelve months of operations in 2019 were annualized by prorating the revenue reduction by the number of billing days.

QUESTION:
Please explain the process FPL will use to determine and evaluate the number and locations of these charging stations.

RESPONSE:
The FPL EVolution pilot will install fast charging in high-traffic areas, at bus depots and at strategically located sites along highway corridors and evacuation routes (See page 8, paragraph 17 of *FPL's Petition for Approval of Optional Electric Vehicle Public Charging Pilot Tariffs*). FPL is currently focused on building out an initial 15-20 fast-charge sites, sited to provide drivers an opportunity to plug-in every ~50 miles along major corridors, and give EV drivers more range confidence. FPL is partnering with leading organizations, located in close proximity to the highway and local amenities, that can dedicate 4-6 parking spaces to serve as site hosts.

As stated in Tariff Sheet No. 8.936, the Pilot Rate for Utility-Owned Public Charging for Electric Vehicles (UEV) is only available "at certain FPL ("the Company") owned public EV fast charging stations ("the stations") with output power of 50kW or greater." Determination of which charging stations will utilize the proposed UEV Tariff will be made on a site by site basis; FPL will work with the site host to determine if the UEV tariff is appropriate for the site based on site host preference and the FPL Evolution pilot and UEV pilot tariff objectives. If the UEV tariff is not used, the site host would be the customer of record.

QUESTION:
Please explain the process FPL will use to assess and choose potential hosts for the charging stations under this tariff.

RESPONSE:
Please see FPL's response to Staff's First Data Request No. 2.

QUESTION:
Paragraph 19 of the petition states that the rate of $0.30 per kWh will allow FPL to sell public charging services to electric vehicle drivers. Please explain what "services" are included in the $0.30 per Kwh in addition to the cost of the electricity, if any.

RESPONSE:
In addition to the electricity itself, FPL's public charging services include access to the charging equipment.

QUESTION:
Please discuss any impact on the general body of ratepayers of the proposed $0.30 per kWh rate to the extent it is not a cost-based rate.

RESPONSE:
Revenue collected under the proposed UEV tariff will offset a portion of the revenue requirements related to the broader FPL Evolution pilot. A goal of the pilot is 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. However, given the nascent stage of vehicle electrification and uncertainty regarding both utilization rates and cost of service for EV charging infrastructure, this ability is unknown at this time.

QUESTION:
Will the charging stations under this tariff be compatible with all current vehicle models? Please explain.

RESPONSE:
FPL's EVolution charging stations under the UEV tariff will be compatible (with or without an adapter) with the vast majority of battery electric vehicles (BEVs) in the market. The stations will be equipped with connectors compliant with both the SAE Combo (also known as the Combined Charging System or CCS) and CHAdeMo connection standards. These connectors are compatible with vehicles sold by the majority of BEV manufacturers, including Audi, BMW, Fiat, Chrysler, Ford, General Motors, Honda, Hyundai, Jaguar, Kia, Mercedes-Benz, Mitsubishi, Nissan, Porsche, Toyota, Volkswagen and upcoming BEV manufacturer Rivian. Tesla vehicles, which utilize their own proprietary connection standard, will be able to connect to FPL charging stations provided the Tesla driver has the requisite adapter. Combined, these three connection standards represent approximately 97% (~81% Tesla, ~16% other automakers) of BEV registrations in Florida, as of December 2019. One exception is the Daimler-Benz Smart Fortwo, a two-seater, miniature car which only accepts level 1 or level 2 charging, and represents approximately 3% of BEV's registered in Florida.

QUESTION:
The tariff states that an "idling fee" will apply at certain stations. Please explain the reasons why this charge would not be applicable to all stations under this tariff.

RESPONSE:
Idling fees are designed to incentivize customers to remove their vehicles from the fast charger's parking space after charging is complete so that the equipment can be made available for other customers. Sites that do not have higher utilization would not need or benefit from idling fees. In addition, to balance the goal of ensuring equipment is available for use with that of creating a positive customer experience, FPL has drafted the tariff in a manner that gives the company the flexibility to experiment with setting idling fees lower than $0.40 per minute or removing them entirely in order to determine the appropriate level needed to elicit the intended result without being overly punitive.

QUESTION:
Please explain how FPL will process and handle customer service issues related to the charging stations under this tariff.

RESPONSE:
A dedicated EV customer support phone number is available to assist station users with customer service-related issues 24 hours a day. This number is displayed on-site at the station and will also be accessible in the FPL Mobile App. The phone number connects the station user to a member of the FPL customer service team trained to address and help resolve customer service issues related to FPL's EV chargers.

QUESTION:
Does FPL intend to have any company-owned charging stations in its territory that fall outside the proposed tariff? Please explain.

RESPONSE:
Yes. As detailed on page 8, paragraph 17, of FPL's Petition for Approval of Optional Electric Vehicle Public Charging Pilot Tariffs, the FPL EVolution pilot will install more than 1,000 charging ports, including level 2 workplace and fleet charging at public and/or private workplaces, destination charging at well-attended locations, residential charging at customers' homes, and DC fast charging in high-traffic areas, at bus depots and strategically located sites along highway corridors and evacuation routes. As stated in Tariff Sheet No. 8.936, the Pilot Rate for Utility-Owned Public Charging for Electric Vehicles (UEV) is only available "at **certain** FPL ("the Company") owned public EV **fast charging stations** ("the stations") with output power of 50kW or greater" [*emphasis added*]. Detail on how FPL will determine which fast charging stations will be included in the proposed tariff can be found in FPL's Response to Staff's First Data Request No. 2.

In addition, FPL launched a workplace charging program for employees in 2015 and has approximately 180 workplace charging ports installed at company locations throughout Florida.

QUESTION:
Will the company provide any payment options outside of FPL's mobile application for one-time use or non-FPL customers? Please explain.

RESPONSE:
No, at this time FPL does not plan to offer payment options other than through the mobile application. The app will be available both for one-time use and for use by non-FPL customers.

QUESTION:
Please explain the methodology used by FPL to set the 75 hours per month denominator for calculating the "demand limiter."

RESPONSE:
The proposed tariffs cap the demand billed to Direct Current Fast Charging (DCFC) customers at energy sales divided by 75 hours. This 75-hour denominator was chosen to target an effective volumetric rate on demand and energy charges (excluding customer charge, taxes, and franchise fees) of approximately 20 cents per kWh, based on current rates.[1] Charging stations with a load factor less than ~10% (75 hours / 730 hours in a month = 10.27%) will benefit from this ~20-cent cap. Those with a load factor greater than ~10% will pay standard GSD-1/GSLD-1 commercial rates, which will equate to less than the ~20-cent cap.

FPL selected 75 hours for this rate design with the objective of finding balance between two competing priorities. On one hand, the goal is to provide rate relief that will facilitate and encourage the development of EV fast charge infrastructure. FPL believes this is in the public interest and will put downward pressure on electricity rates to all customers by encouraging the adoption of electric vehicles in the state of Florida. The proposed tariff addresses this goal by targeting a 20-cent per kWh cap, which is below the estimated market price of fast charge services (~30 cents per kWh) and leaves some margin to contribute toward the fast charge station's other costs –thereby creating more favorable economics for DCFC stations.

On the other hand, FPL wants to minimize the potential for the proposed tariffs to shift costs to other customers. FPL's existing commercial demand rates are designed to appropriately recover demand-related costs, creating an incentive for customers to manage their peak load. Therefore, the proposed EV tariffs are designed to move DCFC customers back to established commercial rates as station utilization improves and the economic incentive is no longer as necessary. The 75-hour limiting factor sets this point at a load factor of 10% which has been demonstrated to be achievable by some existing DCFC customers. Beyond this point, the structure maintains some incentive for DCFC operators to optimize their equipment and operations to lessen their peak demand in order to further reduce their electricity cost per kWh – thereby mitigating potential impacts to the grid.

[1] As included in Florida Power & Light Company's Petition for Approval of Optional Electric Vehicle Public Charging Pilot Tariffs, page 15, footnote 26: "Based on GSD-1 rates effective June 2020, the cost of demand per kWh equates to [($9.98/kW base demand +$1.22/kW capacity and conservation) × (energy / 75 hours)] / energy = $0.15 / kWh. Added to $0.0222 /kWh base energy and $0.024 fuel and environmental = $0.20 energy and demand per kWh. Based on GSLD-1 rates, the cost of demand per kWh equates to [($12.19/kW base demand + $1.38/kW capacity and conservation) × (energy / 75 hours)] / energy = $0.18 / kWh. Added to $0.0175 /kWh base energy and $0.024 fuel and environmental = $0.22 energy and demand per kWh."

QUESTION:
Please explain why FPL chose to apply the demand limiter to stations with a load factor lower than 10 percent (as opposed to, for example, a station with a load factor lower than 15 percent).

RESPONSE:
The breakeven load factor of approximately 10% is a mathematical function of the 75-hour demand limiter denominator (75 hours divided by 730 hours per month equals 10.27%). Please see FPL's response to Staff's First Data Request No. 11.

QUESTION:
Please discuss any impact on the general body of ratepayers of the proposed demand limiter, to the extent stations with a load factor lower than 10 percent do not pay their full cost of service.

RESPONSE:
For an estimate of the potential lost revenue resulting from the proposed demand limiter, please refer to FPL's response to Staff's First Data Request No. 1.

As discussed in the Petition, to the extent that the proposed tariffs incentivize external parties to expand development of EV fast charge infrastructure, the incremental revenue from the new stations will contribute toward the recovery of fixed costs, mitigating any impact to other customers. Further, expanded fast charge infrastructure has the potential to encourage more Floridians to purchase EVs, resulting in additional revenues from residential and work-place charging that will help to offset the impact. While the magnitude of these potential upsides is difficult to predict, FPL believes that the proposed pilot tariffs are reasonable and will ultimately benefit all FPL customers.

QUESTION:
The proposed tariffs state that the term of service for this rider is "no less than one year." Please explain how the company will address a customer who is not able to comply with this requirement.

RESPONSE:
Qualifying customers may elect to enroll in the applicable GSD-1EV or GSLD-1EV tariff at any time during the 5-year pilot period. In order to optimize evaluation of FPL's proposed pilot rates, FPL is requesting customers to remain enrolled in the tariff for a minimum of one year. However, customers that no longer want to participate in the optional pilot rate program may submit a request to opt out of the program, provided they include justification as to why their termination ended prior to the one-year period. These justification(s) will be referenced as part of the pilot's learnings.

QUESTION:
For customers with multiple charging stations in a central location, will FPL require a single meter for all units or require a meter for each charging unit? Please explain.

RESPONSE:
FPL's standard approach for multiple charging stations for a particular customer at a given location is to furnish a single meter for all units at that customer's location. There is no need to meter at the individual charger level, unless requested by the customer or chargers are grouped and fed from their own unique electrical source based on load.