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January 28, 2022

-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 2021 Public Electric Vehicle (EV) Optional Pilot Tariffs Report and EVolution Pilot Program Summary.

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

Attachment

cc: Shaw Stiller, Senior Attorney



2021
Public Electric Vehicle (EV) Optional Pilot Tariffs Report
and EVOlUTION Pilot Program Summary
Jan. 28, 2022



Contents

| | |
|---|---|
| I. Background | 3 |
| II. Rate Schedule UEV..... | 3 |
| III. Rate Schedules GSD-1EV and GSLD-1EV..... | 5 |
| IV. FPL EVolution | 7 |

I. Background

Pursuant to Order No. PSC-2020-0512-TRF-EI (“Order 0512”) issued Dec. 21, 2020, Florida Power & Light Company (“FPL” or “the Company”) provides this annual report on the implementation of the Company’s 5-year Optional Electric Vehicle (“EV”) Public Charging Pilot Tariffs, which became effective January 1, 2021. The tariffs are as follows:

- Utility-Owned Public Charging for Electric Vehicles (Rate Schedule UEV); and
- Electric Vehicle Charging Infrastructure Riders to General Service Demand and General Service Large Demand (Rate Schedules GSD-1EV and GSLD-1EV).

In addition to the information required by Order 0512, this report also contains information regarding FPL EVolution, an EV charging infrastructure pilot the Company began implementing in 2019. FPL committed to make this information available to the Florida Public Service Commission in Docket No. 20210015-EI.

II. Rate Schedule UEV

As of Dec. 31, 2021, four FPL EVolution fast charging sites are operating under the UEV rate schedule. The first two sites began operating under the UEV rate schedule in May 2021, the third site in October 2021, and the fourth site in November 2021.

Costs, Revenues, and Energy Sales

Attachment 1 provides specific information regarding capital and operating costs, revenue requirements, and revenues collected. As reflected on Attachment 1, the 2021 UEV revenue requirements is \$0 due to the recognition of income tax credits associated with the EV locations that entered commercial operation during the year.

Updated Market Rates

Under FPL’s UEV tariff, participating customers pay \$0.30/kWh plus applicable utility taxes and fees.¹ Because utility taxes and fees vary by location, the effective after-tax rate in 2021 under the UEV tariff ranged from \$0.32/kWh - \$0.36/kWh, averaging \$0.34/kWh.

As FPL indicated in Docket No. 20200170-EI, pricing structures vary by provider. In Florida, Tesla and Electrify America advertise pricing based on \$ per kWh, while EVgo advertises pricing per minute.

¹ Includes gross receipts tax, sales tax, local option tax, municipal utility tax and franchise fees were applicable.

Tesla

Tesla's pricing as per the Department of Energy's Alternative Fuel Station Locator is \$0.28/kWh,² however, actual pricing varies by station within the state ranging from approximately \$0.19/kWh to \$0.38/kWh. Specific pricing by station is shared with Tesla drivers via the vehicle's onboard infotainment system. Some stations charge users a flat \$ per kWh rate while other stations charge time-of-use (TOU) pricing upwards of \$0.38/kWh for charging time between 10 am-8 pm ET and \$0.19/kWh for all other hours. Idle fees of up to \$1.00 per minute may apply.

Electrify America

Electrify America advertises guest and pass member pricing of \$0.43/kWh. A Pass+ Member option is available at \$0.31/kWh plus a \$4 monthly fee. Station users are subject to idle fees of \$0.40 per min after a 10-minute grace period.³

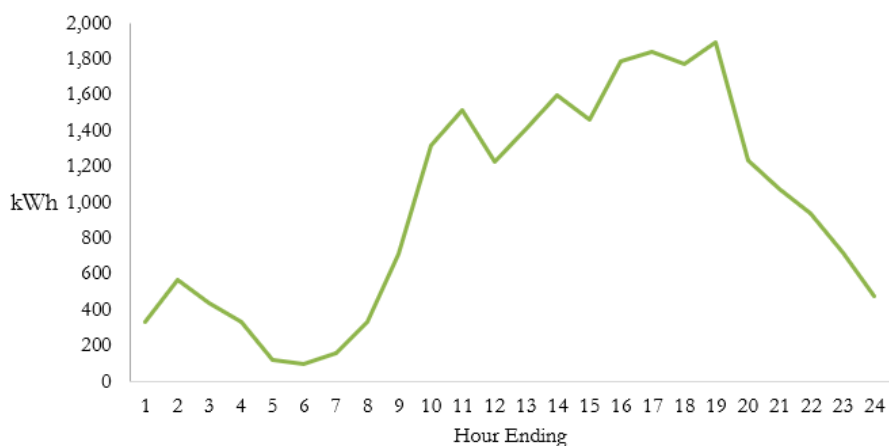
EVgo

EVgo advertises three per-minute pricing schemes in Florida.⁴ The "Pay as You Go" program offers an ad hoc charging rate of \$0.35 per minute with no upfront costs. The "EVgo Member" program offers a rate of \$0.31 per minute with a monthly upfront prepaid charge of \$4.99 credited towards charging use in the month. Lastly, the "EVgo Plus" rate of \$0.28 per minute includes a monthly subscription payment of \$6.99 not applied as a credit towards charging.

Charging Times

Chart 1 illustrates total hourly load for the four FPL EVolution fast charging locations that operated under the UEV tariff in 2021. Public fast charging utilization varies throughout the day, with the greatest utilization occurring between the hours of 9 am and 9 pm ET.

Chart 1: 24-Hour UEV Load Shape



² U.S. Department of Energy Alternative Fuel Station Locator. Filtered by State: Florida, Fuel: Electric, Charger Type: DC Fast, Access: Public, Status: Available https://afdc.energy.gov/stations/#/analyze?region=US-FL&country=US&fuel=ELEC&ev_levels=dc_fast

³ Electrify America Fast Charging Pricing, Florida. <https://www.electrifyamerica.com/pricing/>

⁴ EVgo Fast Charging Pricing, Florida. <https://www.evgo.com/pricing/>

III. Rate Schedules GSD-1EV and GSLD-1EV

As of Dec. 31, 2021, there are 45 active customer accounts taking service under FPL’s GSD-1EV rate schedule and one customer account taking service under the GSLD-1EV rate schedule.

Number of Fast Charging Stations Taking Service Under the Tariffs

FPL’s customer account enrollments in the pilot tariffs have increased from 29 to 46 active accounts. Table 1 provides the number of enrolled customer accounts by month through December 31, 2021.

Table 1: Enrolled Customer Accounts by Month

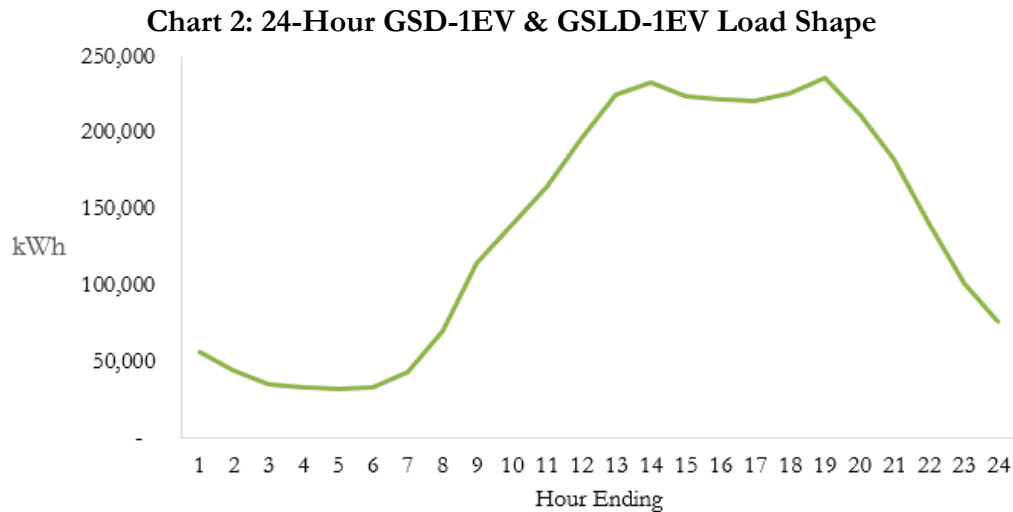
| Rate Schedule | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| GSD-1EV | 29 | 31 | 34 | 36 | 40 | 40 | 41 | 43 | 43 | 45 | 45 | 45 |
| GSLD-1EV | | | | | | | | | | | | 1 |
| Total | 29 | 31 | 34 | 36 | 40 | 40 | 41 | 43 | 43 | 45 | 45 | 46 |

Number of Fast Charging Stations that Received the Benefit of Mitigated Demand Charges

There are 87 fast charging station customer accounts identified in our service territory that qualify to enroll in the rate schedules. Of which, all 46 stations enrolled in GSD-1EV and GSLD-1EV received the benefit of the demand limiter. The remaining stations are not taking service from GSD-1EV or GSLD-1EV and would not receive a benefit.

Charging Times

Chart 2 illustrates total hourly load for the 46 fast charging locations that operated under the GSD-1EV and GSLD-1EV rate schedules. Similar to Chart 1 in Section I, the load shape from the stations taking service under the GSD-1EV and GSLD-1EV rate schedules illustrate that public fast charging utilization varies throughout the day, with the greatest utilization occurring between the hours of 9 am and 9 pm ET.



Annual Revenue Loss Resulting from the Reduction in Demand-Related Revenues

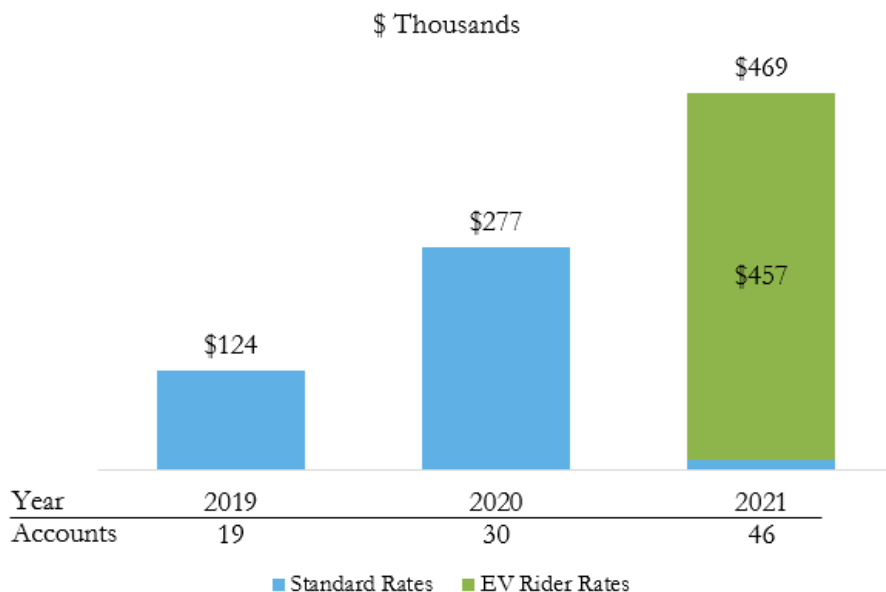
Table 2 summarizes energy sales, revenue billed, and demand limiter offset⁵ by rate schedule as of December 31, 2021.

Table 2: Energy Sales, Revenue and Revenue Offset by Rate Schedule

| Rate Schedule | Energy Sales (MWh) | Base Revenue Billed | Clause Revenue Billed | Total Revenue Billed | Demand Limiter Offset |
|---------------|--------------------|---------------------|-----------------------|----------------------|-----------------------|
| GSD-1EV | 2,883.7 | \$454,075 | \$134,386 | \$588,461 | \$424,039 |
| GSLD-1EV | 13.4 | \$2,495 | \$666 | \$3,161 | \$8,872 |
| Total | 2,897.1 | \$456,570 | \$135,052 | \$591,622 | \$432,911 |

Despite the demand limiter offset, 2021 base revenue exceeded 2020 base revenue for customer accounts enrolled in the EV rider rates by approximately \$192,000. Chart 3 provides a comparison of base revenue from 2019 to 2021 based on customer accounts enrolled in the GSD-1EV and GSLD-1EV rate schedules.

Chart 3: Annual Base Revenue 2019 – 2021



⁵ Demand limiter offset represents additional revenue that would have been collected, had the charging locations been billed under GSD-1 and GSLD-1, instead of GSD-1EV and GSLD-1EV, respectively; assuming that the charging locations were still constructed and operated the same.

IV. FPL EVolution

FPL began implementation of the EVolution program in 2019 with the goal to install more than 1,000 charging ports throughout the company’s service area. The primary objective of this pilot program is to gather data and learnings ahead of mass EV adoption to ensure future EV charging investments enhance service and reduce costs. The FPL EVolution pilot focuses on three key areas: 1) infrastructure build-out impacts of EV adoption rates; 2) rate structures and demand models; and 3) grid impacts of fast-charging.

The following information is not required by Order 0512. However, FPL committed to make this information available to the Florida Public Service Commission in Docket No. 20210015-EI.⁶ To that end, the Company offers the following summary of the EVolution program that includes information related to the charging stations under FPL’s UEV and GSD-1EV rate schedules discussion above.

- a. Count of installed ports and site locations: As of Dec. 31, 2021, FPL EVolution has installed 599 ports across 153 site locations and is in the process of completing an additional 538 ports at 98 site locations in 2022.
- b. Installed capital and O&M costs: Installed costs for sites operational in 2019-2021 totaled \$11.5 million in capital and \$0.9 million in O&M.
- c. Average cost per port: Table 3 shows the number of installed and planned ports and the average cost per port by charger segment.

Table 3: FPL EVolution Installed and Planned Ports by Charger Type and Segment⁷

| Charger Type | Charger Segment | Ports / Sites | | | Average Port per Site | Average Cost per Installed Port* |
|--------------|--------------------------|------------------|-----------------|--------------------|-----------------------|----------------------------------|
| | | Installed | In Progress | Total | | |
| Level 2 | Workplace | 318 / 50 | 340 / 53 | 658 / 103 | 6 | \$5,500 |
| | Destination | 154 / 40 | 132 / 27 | 286 / 67 | 4 | |
| | Residential ⁸ | 45 / 45 | 3 / 3 | 48 / 48 | 1 | \$1,550 |
| Fast Charge | Public | 80 / 16 | 63 / 15 | 143 / 31 | 5 | \$102,000 |
| Total | | 597 / 151 | 538 / 98 | 1,135 / 249 | N/A | N/A |

*Actual costs vary by location and technology. Includes costs for siting, interconnection, installation, and hardware.

- d. Number of charging sessions: More than 70,000 charging sessions have been provided through FPL EVolution.

⁶ Refer to FPL’s response to Southern Alliance for Clean Energy’s First Set of Interrogatories, No. 32 in Docket No. 20210015-EI.

⁷ Excludes EVolution fleet deployments to occur in 2022.

⁸ During the second half of 2021, FPL partnered with 45 residential customers to begin execution of a technology evaluation pilot to help evaluate and troubleshoot technology. Given the nature of the residential pilot, the limited data is not indicative of normal energy consumption or charging behavior and this data is excluded from the system utilization information provided in this section of the report.

e. Charging sessions by segment as a percent of pilot total: See Table 4.

Table 4: Charging Sessions by Segment

| Charger Type | Charger Segment | 2020 | % of 2020 Total | 2021 | % of 2021 Total |
|--------------|-----------------|---------------|-----------------|---------------|-----------------|
| Level 2 | Workplace | 6,962 | 67.9% | 25,162 | 41.9% |
| | Destination | 2,455 | 23.9% | 22,314 | 37.2% |
| Fast Charge | Public | 843 | 8.2% | 12,515 | 20.9% |
| Total | | 10,260 | 100.0% | 59,991 | 100.0% |

f. Total energy: FPL EVolution has dispensed 1,149 MWh since launching in 2019.

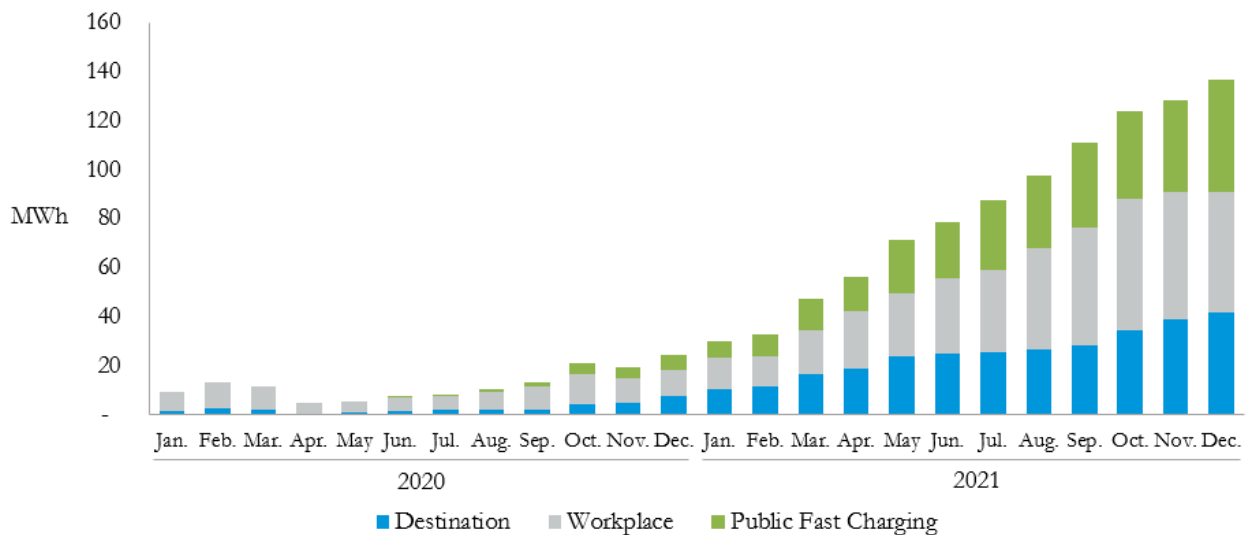
g. Energy (kWh) dispensed by segment as a percent of pilot total: See Table 5.

Table 5: Energy (MWh) Dispensed by Segment as a % of Total

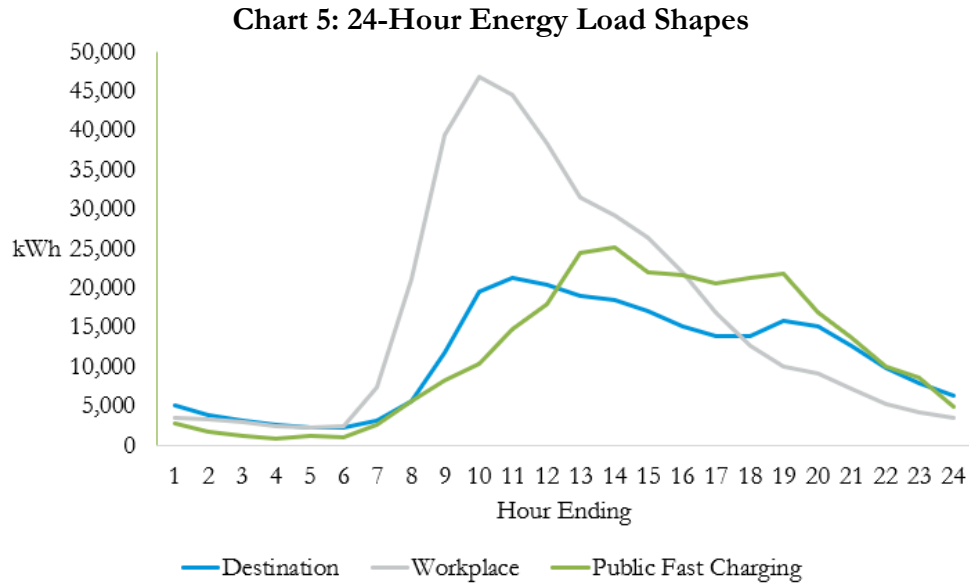
| Charger Type | Charger Segment | 2020 | % of 2020 Total | 2021 | % of 2021 Total |
|--------------|-----------------|--------------|-----------------|----------------|-----------------|
| Level 2 | Workplace | 99.5 | 67.5% | 400.8 | 40.0% |
| | Destination | 30.2 | 20.5% | 301.4 | 30.1% |
| Fast Charge | Public | 17.7 | 12.0% | 299.0 | 29.9% |
| Total | | 147.4 | 100.0% | 1,001.2 | 100.0% |

h. Monthly total energy (kWh) system utilization over time (2019-2021): See chart 4.

Chart 4: Energy System Utilization Over Time

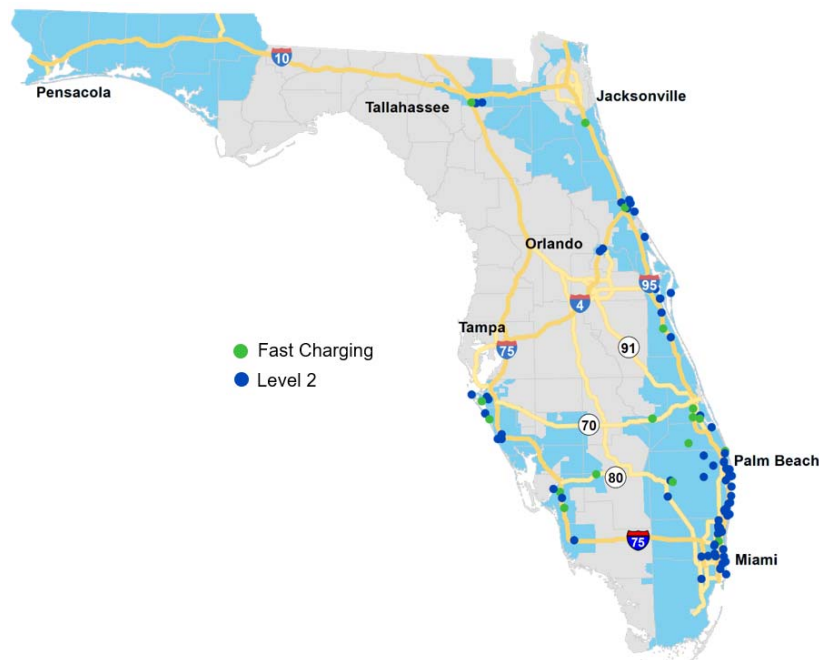


- i. 24-hour energy (kWh) load shapes: Chart 5 illustrates total hourly load by segment in 2021. The chart shows that workplace charging peaks in the morning and then trends downward, while level 2 destination charging occurs throughout the day from 9 a.m. – 9 p.m. ET, and public fast charging usage trends upward in the early afternoon with usage continuing through the evening.



- j. Map of installed locations: Figure 1 shows the location of all FPL EVolution installations, including those taking service under the UEV tariff described in Section II and those taking service under GSD-1EV in Section II of this report, as of Dec. 31, 2021.

Figure 1: Map of Installed FPL EVolution Locations as of Dec. 31, 2021



- k. Number of unique connected drivers: FPL EVolution has provided charging sessions to approximately 2,000 connected drivers since launching in 2019.
- l. Session length: Session length for level 2 chargers averaged 2 hours and 14 minutes of active charge time, and session length at fast chargers averaged 34 minutes.
- m. Energy (kWh) dispensed per session: The average kWh dispensed in 2021 at a fast charging session was 23.9 but increased to 26.0 kWh per session in December 2021. The average kWh dispensed in 2021 at a level 2 charging session was 14.8 but increased slightly to 15.0 kWh per session in December 2021.
- n. Revenue generated from sessions: Please see Section II. Rate Schedule UEV Attachment 1 of this report.
- o. Metered data (where applicable): Please see Chart 5: 24-Hour Energy Load Shapes of this report.
- p. Number of fast charging stations taking service under UEV: Please see Section II of this report.
- q. Number of fast charging stations taking service under GSD-1EV or GSLD-1EV: Please see Section III of this report. Of the 45 customers taking service under GSD-1EV, twelve are FPL EVolution public fast charging station site host customers.

| ANNUAL REPORT ⁽¹⁾ | |
|---|--|
| UTILITY OWNED FAST CHARGING STATIONS - UEV PILOT TARIFF | |
| FOR THE PERIOD: JANUARY THROUGH DECEMBER 2021 | |
| (\$000) | |
| | Actual 2021 |
| 1 Energy Sales (kWh) | 25,645 |
| 2 Capital Expenditures ⁽²⁾ | \$1,808 |
| 3 | |
| 4 <u>Charging Station Revenue Requirements</u> | |
| 5 <u>Operating Costs</u> | |
| 6 Depreciation Expense | \$27 |
| 7 Operating and Maintenance Expenses | \$13 |
| 8 Property Taxes | \$5 |
| 9 Total Operating Costs | <u>\$44</u> |
| 10 | |
| 11 <u>Capital Costs</u> | |
| 12 Rate Base ⁽³⁾ | \$794 |
| 13 Pre Tax Rate of Return ⁽⁴⁾ | 7.94% |
| 14 Return on Rate Base | Line 12 x Line 13 <u>\$63</u> |
| 15 | |
| 16 Charging Station Revenue Requirements | Line 9 + Line 14 <u>\$107</u> |
| 17 | |
| 18 Income Tax Credits ⁽⁵⁾ | <u>(\$118)</u> |
| 19 | |
| 20 Net Charging Station Revenue Requirements | Line 16 + Line 18 <u>(\$11)</u> |
| 21 | |
| 22 <u>Revenue Requirements for Electricity Sold from Charging Stations</u> | |
| 23 Base Revenue Requirements ⁽⁶⁾ | \$8 |
| 24 Clause Revenue Requirements ⁽⁷⁾ | <u>\$3</u> |
| 25 Total Rev Req for Electricity Sold from Charging Stations | Line 23 + Line 24 <u>\$11</u> |
| 26 | |
| 27 Total Revenue Requirements | Line 20 + Line 25 <u>\$0</u> |
| 28 | |
| 29 Revenues Collected | \$8 |
| 30 | |
| 31 Net (Revenues)/Costs for 2021 | Line 27 - Line 29 <u><u>(\$8)</u></u> |

Notes:

- (1) Represents reporting requirements for FPL's utility owned fast charging stations placed in-service through 2021 under the UEV Tariff as required by Order No. PSC-2020-0512-TRF-EI, Docket No. 20200170-EI.
- (2) Represents total capital expenditures for all utility fast charging stations placed in-service through 2021 under the UEV tariff rate.
- (3) Represents the 2021 13-month average of net plant in service of utility-fast charging stations under the UEV tariff rate.
- (4) Based on FPL's 2021 Forecasted ESR using a ROE of 10.55% as approved in Docket No. 160021-EI, Order No. PSC-16-0560-AS-EI.
- (5) Includes income tax credits allowed for 30% of the cost of any qualified alternative fuel vehicle refueling property in the year of installation (limit \$30,000 per location).
- (6) Based on 2021 rate class GSD(T)-1 revenue requirements from FPL's 2021 Cost of Service model. The UEV portion was allocated using load statistics calculated from EV charger interval data.
- (7) Based on FPSC approved 2021 clause factors (GSD-1) and actual kWh sold to customers from charging stations reflected on Line 1.