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**Electric
Utility**

MEMORANDUM

To Utilities Advisory Board

Subject Response to Email Inquiry Regarding EV Staff Report

Date March 24, 2024

1. How many kw per hour is typically consumed in charging an EV? Wondering how much it costs a customer per hour at \$0.35?

Energy consumption during Electric Vehicle (EV) charging is a function of the vehicle battery capacity and the charger type. Most two-port City sites have a Level 2 unit capable of supplying up to 7.2 kW per port. Depending on the type of vehicle and battery capacity, an hour of charging could use up to 7.2 kWh of energy which would cost \$2.52 at the rate of \$0.35/kWh.

2. Providing the total charge per hour including consumption, connection, and charges past 3 hours would be helpful. Maybe show a table of the charges for 1 to 5 hours.

Time Connected (Hour)	1	2	3	4	5
Energy Charge (\$/kWh)	\$0.35	\$0.35	\$0.35	\$0.35	\$0.35
Station Use Fee (\$)	\$-	\$-	\$-	\$10.00	\$20.00
Energy Use (kWh) @ 7.2 kW per Hour	\$2.52	\$5.04	\$7.56	\$10.08	\$12.60
Total (\$)	\$2.52	\$5.04	\$7.56	\$20.08	\$32.60

Note that vehicles connected may not require charging for the entire period and longer periods generally have more idle time resulting in a lower energy charge.

3. The current presentation provides parameters for the charges but not a firm pricing structure from staff. Please provide your recommended pricing. I do not want to guide the AUB through a pricing exercise. The AUB needs to focus on your recommendation.

Staff recommends implementing a two-part solution consisting of:

- 1) A rate design for charging consisting of a Consumption Charge of \$0.35 per kWh; and a Connection Fee of \$10.00 per hour after 3 hours; and
- 2) Parking signage and enforcement.

4. It would be good to provide examples of how other cities or counties are charging.

Charging fees are a function of EV Charger ownership. Privately-owned units are not limited in the rate they can charge users. Public-utility-owned units, like those in Winter

Park, must establish rates based on cost of service principles. This is how the proposed rate was developed. Examples of other rates follow.

Robinson Recharge Mobility Hub

The EV Chargers installed at the Orlando Utilities Commission (OUC) Robinson Recharge Mobility Hub are privately owned. OUC sells power to the owner under its Commercial Tariff. Currently the rate is \$0.35/kWh. After 10 minutes of non-charging, a per-minute Idle Fee of \$1.00 per minute is incurred.

Florida Power and Light

On December 21, 2020, the Florida Public Service Commission approved Florida Power and Light's (FPL's) petition for EV Public Charging Pilot Tariffs (ORDER NO. PSC-2020-0512-TRF-EI DOCKET NO. 20200170-EI). FPL's rate was specifically designed to mitigate the impact of demand charges on EV fast charging fees. In this filing the following rate data was cited:

- \$0.30/kWh FPL rate
- \$0.35 per kWh – average fast charging prices in Florida offered by other providers, such as Tesla, EVgo, and Electrify America
- \$0.28 per kWh— Telsa charging rate

City of Dunedin

The five-year pilot program between the City of Dunedin and Duke Energy offering free charging ended December 31, 2023. As of January 1, 2024, EV users are charged a \$1.50 connection fee, a \$0.20 per kWh fee, and a 5% network transaction fee.

City of Greenacres

The City of Greenacres has teamed up with Florida Power & Light on a research initiative called FPL Evolution through which it is offering free EV charging stations at City Hall and its Community Center.

City of Celebration

Celebration, through a Duke Energy program called Park & Plug, has installed one Level 3 and four Level 2 chargers. Duke Energy provided the equipment, installation, warranty and network connection services free of charge through 2022. The average rate is less than \$0.15 per kWh plus a small transaction fee through the Greenlots app.

City of Jacksonville Beach

In 2017 Jacksonville beach installed its first public EV Charging Station. The maximum session fee is \$5.95 which includes a \$0.20/kWh fee. The vendor, EVgo, pays the City \$3.00 per session.

Florida

According to Axios Tampa Bay, it costs an average of \$0.45/kWh on average to charge an EV at a public station in Florida as of January 2024.

<https://www.axios.com/local/tampa-bay/2024/03/13/ev-charging-florida-cost-to-charge-tesla>