

December 16, 2022

Ms. Linda C. Bridwell, P.E.
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, KY 40601

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PUBLIC SERVICE
COMMISSION



RE: *Electronic Investigation of Amendments to the Public Utility Regulatory Policies Act of 1978 and Electrification of Transportation – Case Number 2022-00369*

Dear Ms. Bridwell:

Pursuant to the Public Service Commission’s (Commission) Order dated November 7, 2022, EVgo Services, LLC (EVgo) submits this letter for the Commission’s consideration regarding the amendments to Section 111(d) of the Public Utility Regulatory Policies Act of 1978 (PURPA) included in the Infrastructure Investment and Jobs Act (IIJA). EVgo commends the Commission for initiating this investigation and appreciates the opportunity to provide our perspective as a private sector owner-operator of EV charging with a decade of experience operating charging infrastructure across the country.

EVgo is a leader in charging solutions, building and operating the infrastructure and tools needed to expedite the mass adoption of electric vehicles for individual drivers, rideshare and commercial fleets, as well as businesses. As one of the nation’s largest public fast charging networks, EVgo’s owned and operated charging network features over 850 fast charging locations – currently serving over 60 metropolitan areas across more than 30 states – and continues to add more Direct Current Fast Charging (DCFC) locations through EVgo eXtend™, its white label service offering. EVgo is accelerating transportation electrification through partnerships with automakers, fleet and rideshare operators, retail hosts such as grocery stores, shopping centers, and gas stations, policy leaders, and other organizations.

As the Commission has acknowledged, the PURPA amendments included in the IIJA contemplate the role of the utility in promoting transportation electrification through electric rate design and other measures. There is a need for greater public charging deployment,¹ and strong utility programs and policies geared towards incentivizing third-party providers to participate in the market can help enable that growth. Holistic frameworks that address EV rates and infrastructure have increasingly been approved by utility regulators across the country to bolster market deployment of charging stations. EVgo therefore recommends that the Commission consider national best practices that complement private market investments, including: 1) EV rate designs; 2) Investments in the grid infrastructure necessary to enable the installation of charging stations, (typically referred to as “make-ready”); and 3) Investments in resources and personnel dedicated to supporting EV deployments to reduce timelines and soft costs associated with utility interconnection processes.

At a high level, to accelerate charger deployment while minimizing the impact on utility ratepayers, EVgo suggests that the Commission consider a “shared responsibility” model that leverages different entities’ strengths in the EV infrastructure ecosystem by focusing on EV rates, make-ready programs, and utility process improvements. However, any proceeding must recognize the unique and distinct needs of different EV charging segments including residential, commercial, workplace, fleets, and public DCFC. Each segment involves different use cases, dwell times, customer expectations, and equity concerns. The Commission should recognize these different segments when considering potential transportation electrification measures. Public DCFC for example, serves a variety of EV driver needs, building range confidence for trips between cities or across the country and playing an important role in dense, urban, and suburban areas where not every home has dedicated parking. In fact,

¹ KYTC’s EV Infrastructure Deployment Plan projects EV sales in KY to reach 18% in 2030, 30% in 2035, and 60% in 2045. See EV Infrastructure Deployment Plan, dated July 2022, p. 33.
<https://transportation.ky.gov/Planning/Air%20Quality%20Documents/KY%20EV%20Infrastructure%20Deployment%20Plan.pdf>.² International Council on Clean Transportation, Quantifying the Electric Vehicle Charging Infrastructure Gap Across U. S. Markets (January 2019) at 9, available at https://theicct.org/sites/default/files/publications/US_charging_Gap_20190124.pdf.

according to the International Council in Clean Transportation, EV drivers living in multifamily housing rely on public chargers for 50-80% of their charging.²

I. The Commission should encourage utilities to bring forth commercial EV rates that will encourage third-party investment in EV charging infrastructure across Kentucky.

Effective commercial rate design is critical to enabling transportation electrification, whether for public charging applications such as DCFC or for fleets, including trucks, school buses, and other forms of electric public transportation. The availability of alternatives to traditional commercial rate designs is essential if transportation electrification is to scale. In particular, public DCFC infrastructure has unique load profile and load factors that are distinct from other commercial customers. However, the demand charge component of traditional commercial rates can present a significant barrier to third-party investment of charging infrastructure and leads to a disproportionately high effective dollar per kilowatt-hour (kWh) costs, which impact the overall economics of DCFCs. The availability of commercial EV rates that account for the unique loads of fast charging stations is therefore an important factor for siting new charging stations and is essential for achieving transportation electrification at scale.

A variety of rates have been approved to mitigate the outsized effect of demand charges, including rates specific to commercial EV charging as well as technology-neutral low load factor rates. EVgo has compiled best practices in rate design from across the country, which are provided as an attachment to this letter. Specifically, EVgo offers the following rate design principles to help the Commission promote transportation electrification through third-party investment:

1. Enable customer choice by making rates optional;
2. Minimize demand charges and instead utilize time-varying volumetric rates;
3. Expand applicability of existing rates designed for industry-specific load shapes;
4. Apply rates to new and existing customers;
5. Consider different rates for different EV charging use cases;
6. Provide certainty with long-duration rates (e.g., 10 years); and
7. Limit the use of subscription charges.

II. Utility make-ready programs are a helpful tool to drive forward third-party investment in EV charging.

In addition to EV rate design, utility make-ready programs can accelerate the adoption of EVs by reducing the upfront costs to deploying charging infrastructure. With this approach, the utility would invest in the wiring and backbone infrastructure up to the but not including the charger, while an electric vehicle service provider (EVSP) would primarily be responsible for installing, owning, operating, and maintaining the station. Utility regulators continue to approve programs incentivizing third-party participation in the EV charging market, in states including but not limited to Colorado,³ New Mexico,⁴ Michigan,⁵ and many others.⁶

² International Council on Clean Transportation, Quantifying the Electric Vehicle Charging Infrastructure Gap Across U. S. Markets (January 2019) at 9, available at https://theicct.org/sites/default/files/publications/US_charging_Gap_20190124.pdf.

³ Colorado Public Utilities Commission, Proceeding No. 20A-0204E, Commission Decision Granting Application with Modifications (January 11, 2021).

⁴ New Mexico Public Regulation Commission, Case No. 20-00237-UT, Final Order Adopting Recommended Decision, at 3-4 (November 12, 2021).

⁵ See DTE Charging Forward, available at <https://www.newlook.dteenergy.com/wps/wcm/connect/dteweb/home/service-request/business/electric/electric-vehicles/pev-biz-charge-frwd>.

⁶ Additional examples include but are not limited to: California (Pacific Gas & Electric) https://www.pge.com/en_US/large-business/solar-and-vehicles/clean-vehicles/ev-charge-network/ev-fastcharge.page; Connecticut (Eversource and United Illuminating) Public Utilities Regulatory Authority Docket No. 17-12-03RE04, Investigation into Distribution System Planning of the Electric Distribution Companies – Zero Emission Vehicles, Decision, dated July 2021; Illinois (Ameren) <https://www.ameren.com//media/rates/files/illinois/aiel21rdevcp.ashx>; New Jersey (Atlantic City Electric, Public Service Electric & Gas Company, Jersey Central Power & Light) Board of Public Utilities Docket No. QO20050357, Order Adopting the Minimum Filing Requirements for Light-Duty, Publicly Accessible Electric Vehicle Charging, dated September 2020; New York (Central Hudson, Con Ed, National Grid, New York State Electric & Gas, Rochester Gas & Electric, Orange & Rockland Utilities) <https://jointutilitiesofny.org/ev/make-ready>; Rhode Island (National Grid) <https://www.nationalgridus.com/RI-Business/Energy-Saving->

III. Utilities can incorporate national best practices to speed charging deployments in their service territories.

Finally, EVgo offers other charging ecosystem best practices that utilities may undertake to enable public charging deployment for the Commission's consideration. Through the Connect the Watts^{TM7} initiative, EVgo has identified five areas to focus utility efforts to support EV charger project deployment,⁸ including: 1) easement process streamlining, 2) utility equipment inventory maintenance, 3) design and construction staffing, 4) study phase streamlining, and 5) utility design approvals streamlining.⁹ Contemplation of these topics would be a welcome in this proceeding. Additionally, EVgo is seeing a national shortage when it comes to grid equipment, including transformer availability, and inventory management, along with proper attention to workforce development opportunities in utility new service and engineering are two topic areas that may be proactively addressed.

EVgo appreciates the opportunity to participate in this process and share its input with the Commission and other stakeholders to aid in the promotion of greater electrification of the transportation sector in Kentucky. Please don't hesitate to be a resource if EVgo can provide any assistance.

Sincerely,

Carine Dumit

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Director, Market Development and Public Policy
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Programs/Electric-Vehicle-Charging-Station-Program; Massachusetts (National Grid) <https://www.nationalgridus.com/MA-Business/Energy-Saving-Programs/ElectricVehicle-Charging-Station-Program>, and (Eversource) <https://www.eversource.com/content/ema-c/residential/savemoney-energy/clean-energy-options/electric-vehicles/charging-stations>.

⁷ See <https://www.evgo.com/connect-the-watts/>.

⁸ See Best Practices for Charging Infrastructure Program Design: Utilities, https://siteassets.evgo.com/f/78437/x/597fa39fa0/connect-the-watts_utility-best-practices.pdf.

⁹ On November 10, 2022, the California Public Utilities Commission issued a Draft Resolution establishing clear deadlines for utilities to complete the steps within their control needed to energize EV charging infrastructure. These steps include site pre-assessments and engineering studies. The utilities must also post on their websites the service energization steps that are within the control of the utility, the customer, and the authorities having jurisdiction. Additionally, utilities must collect data on service requests that exceed the Commission deadlines to inform future energization process improvements and hold a workshop in 2023 to develop a new energization timeline standard based on empirical data. See Resolution E-5427, California Public Utilities Commission, issued November 10, 2022.

Overview

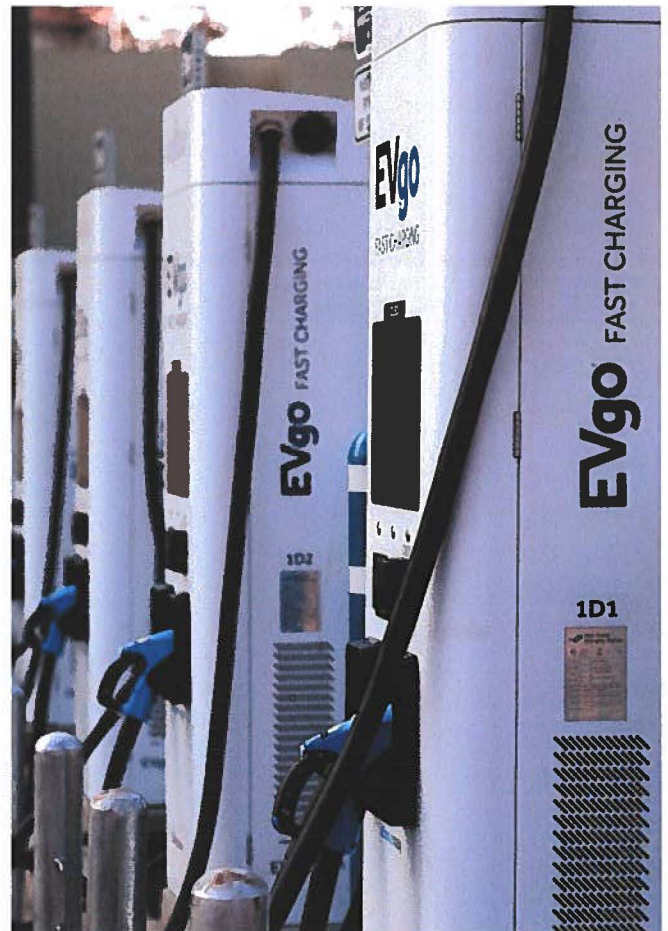
Effective commercial rate design is critical to enabling transportation electrification, whether for public charging applications such as direct current fast charging (DCFC) or for fleets, including trucks, school buses, and other forms of electric public transportation. The availability of alternatives to traditional commercial rate designs is essential if transportation electrification is to scale.

One important application of commercial rates is in the DCFC space, where electricity costs can be up to 50% of all operating costs. DCFC infrastructure is critical to reach the increasing population of EV drivers and is especially crucial to enable electrification for drivers without access to charging at their residence or workplace such as multifamily residents and renters; drivers utilizing key transit corridors; and light duty vehicle fleets, including car sharing and ride sharing applications. Ensuring that commercial rates support EV charging is a logical step for regulators and utilities to take to incentivize third party investments in transportation electrification.

Around the country, regulators have recognized this challenge and have approved a variety of rates specific to commercial EV charging, as well as technology-neutral low load factor rates. These rate designs mitigate the outsized effect of demand charges on DCFC and help accelerate the deployment of EV charging infrastructure and EV adoption.

Rate Design Principles

- ✓ Enable customer choice by making rates optional
- ✓ Minimize demand charges and instead utilize time-varying volumetric rates
- ✓ Expand applicability of existing rates designed for industry-specific load shapes
- ✓ Apply rates to new and existing customers
- ✓ Consider different rates for different EV charging use cases
- ✓ Provide certainty with long duration rates (e.g. 10 years)
- ✓ Limit the use of subscription charges



Rate Design Options

1	Demand reduction scale based on load factor	Offer a demand reduction that adapts to a customer's load factor. As the load factor increases, the demand charge discount decreases.	EXAMPLE National Grid (MA)* <u>Rates G-2 and G-3</u> <small>*Proposed, but not yet approved (D.P.U 21-91)</small>
2	Demand reduction scale based on time	Use a demand reduction scale that decreases the demand discount each year for 7-10 years, starting from the date of interconnection.	EXAMPLE Pacific Power (OR) <u>Schedule 45</u>
3	Temporary demand charge discount	Offer a discount or multi-year suspension of demand charges followed by a 3-5 year "ramp" back into a more conventional rate.	EXAMPLE Southern California Edison (CA) <u>TOU-EV-8</u>
4	Demand limiter	Employ a demand limiter, which is a ceiling set on the amount of demand for which a customer pays.	EXAMPLE Arizona Public Service (AZ) <u>Rate Rider DCFC</u>
5	Convert demand charge into volumetric rate	Adjust volumetric rates to recover costs that are typically recovered through demand charges.	EXAMPLE Eversource (CT) <u>EV Rate Rider Pilot (EVRRP)</u>
6	Time-varying volumetric rate	Design a weighted time-of-use (TOU) rate that captures all DCFC cost causation without penalizing low loads during early stages of adoption or in non-urban regions.	EXAMPLE Rocky Mountain Power (UT) <u>Schedule 6A</u>
7	Technology-neutral low-load factor rate	Expand use of an existing low-load factor rate or develop a new technology-neutral rate that mitigates demand charge for low-load factor customers, such as EV charging providers.	EXAMPLE Dominion Energy (VA) <u>Schedule GS-2</u>