

October 2nd, 2020

Ben Crawford Adria Harper Florida Public Service Commission Office of Commission Clerk 2540 Shumard Oak Boulevard Tallahassee, FL 32399-1300

#### RE: REQUEST FOR COMMENT FOR EV WORKSHOP - SB 7018 - UNDOCKETED

To the Office of the Commission Clerk:

EVgo thanks the Florida Public Service Commission (PSC) for its work in accelerating the transition to zero emission transportation in Florida and for the opportunity to submit the following comments in response to the PSC's questions related to the development of Florida's Electric Vehicle (EV) Master Plan pursuant to SB 7018.

EVgo operates America's largest network of public electric vehicle (EV) fast charging, with more than 800 DC fast charging (DCFC) locations across 34 states nationwide, including 35 sites across Florida. Currently, more than 115 million Americans live within a 15-minute drive of an EVgo fast charger. In early 2019, EVgo was proud to announce that it was the first North American charging network to be powered by 100% renewable. Most recently, EVgo announced a new partnership with General Motors, whereby EVgo will triple its DCFC network across 40 metropolitan areas over the coming years by building more than 2700 fast chargers across the country. EVgo also works with other automakers, such as Nissan, to expand charging infrastructure in important EV markets. 2

EVgo is a competitive supplier of EV charging infrastructure and applauds the Public Service Commission for bringing forth a wide range of policy considerations for issues that have to date posed challenges to the expansion of EV charging infrastructure deployment in the state. As the PSC receives comments from various stakeholders, EVgo notes that fast charging infrastructure is critical to reaching the state's increasing population of EV drivers and is especially crucial to enable electrification for drivers without reliable access to charging at home or in the workplace, including residents of multi-unit dwellings and EV drivers who take part in the gig economy, all of whom rely on public charging for the majority of their charging needs. To achieve gains in EV adoption in order to help Florida achieve a more resilient transportation sector, rate reform, an increased focus on urban use cases for public charging, and complementary make-ready investments are all necessary parts of the solution set.

# **The EV Master Plan**

EVgo is pleased to see the EV Master Plan bring together a multi-agency effort to plan and prepare for the quickly growing number of battery electric vehicles (BEVs) adopted in the state. According to the Auto Alliance, Florida already had 28,535 full BEVs in the state as of late 2019.<sup>3</sup> This number should continue to increase greatly, with Bloomberg New Energy Finance (BNEF) estimating 26 million EVs adopted across the U.S. by 2030. Along with a

<sup>&</sup>lt;sup>1</sup> https://www.evgo.com/about/news/general-motors-and-evgo-aim-to-accelerate-widespread-ev-adoption-by-adding-fast-chargers-nationwide/.

<sup>&</sup>lt;sup>2</sup> https://www.evgo.com/about/news/nissan-and-evgo-expand-charging-network-with-200-new-ev-fast-chargers/.

https://autoalliance.org/energy-environment/advanced-technology-vehicle-sales-dashboard/

significant increase in electrified fleets and increasing model availability, these numbers could potentially be even higher.

EVgo appreciates the PSC's focus on its jurisdictional oversight over the role of the state's utilities in enabling charging infrastructure and recommending utility actions to advance electrified transportation, including rate reform, infrastructure programs, and important steps such as publishing capacity maps for EV load planning and how to ensure equity in service. Utilities are important partners in the development of EV charging, and thoughtful program design is key to catalyzing investments in a way that complements existing and planned investments by third party providers such as EVgo.

EVgo also notes its full support for increasing clean transportation options in low and moderate-income communities. Delivering on these goals can be accelerated by leveraging Volkswagen Settlement Appendix D funding to enable third party deployments of charging in and around cities across the Sunshine State. As many long range EVs come off lease and increase availability on the secondary market, not only will the number of affordable EVs expand, but used EVs will offer a wider range of EV models to a wider range of car buyers across income levels. Moreover, mechanisms to scale EV rebate programs focused on low to moderate income consumers, as well as private-public partnerships to promote charging infrastructure in communities most impacted by air pollution, will ensure equitable access to clean transportation. Options that include "last mile" ride sharing, electric taxis, and public charging that support multi family and community charging hubs in dense, urban areas with a high population of residents of multi-unit dwellings are actionable now. Dense, urban and suburban populations of all income levels can support competitive DCFC investment. DCFCs do not need to be located in affluent or middle-class neighborhoods in order to be viable and attract private capital; population density is an important factor in siting DCFC; income is not. EVgo has a long track record of building in and around multi-unit dwellings and will continue to work to support these programs in these communities.

#### **Recommendations to the Public Service Commission**

In order to assist in the tactical planning of the EV Master Plan, EVgo respectfully submits the following comments to support the successful development of charging infrastructure across the state that can support existing and prospective electric vehicle drivers.

1. Reforming utility rate structures is critical to ensuring that EV fueling costs are competitive with internal combustion engines for both light duty and medium-heavy duty applications.

The importance of proper rate design cannot be overstated. EVgo offers the perspective for public fast charging where EVgo is the direct customer of the utilities: demand charges are presently the largest operating cost barrier to deployment.<sup>5</sup> This holds true for some utility territories in Florida where EVgo operates its fast charging network. For example, in Florida Light and Power (FP&L)

<sup>&</sup>lt;sup>4</sup> A recent report from the California Energy Commission found no correlation between DCFC distribution across the state and income. For more information, see CA PUC Docket Number 20-TRAN-02 SB 1000 Electric Vehicle Charging Infrastructure Deployment Assessment. Presentation on 6/4/2020, at pp. 16-22. Available at: <a href="https://efiling.energy.ca.gov/GetDocument.aspx?tn=233310&DocumentContentId=65800">https://efiling.energy.ca.gov/GetDocument.aspx?tn=233310&DocumentContentId=65800</a>.

<sup>&</sup>lt;sup>5</sup> Best Practices for Electric Vehicle Market Transformation, EVgo, (2019) <a href="https://www.evgo.com/wp-content/uploads/2020/05/EVgo">https://www.evgo.com/wp-content/uploads/2020/05/EVgo</a> Whitepaper UtilityBestPractices Oct2019.pdf

territory, demand charges currently make up approximately 90% of the total annual electricity costs, which is why EVgo is supporting FP&L's tariff reform docket.<sup>6 7</sup>

EVgo is active in rate design discussions across the country where it has been demonstrated it is entirely possible to design an electric rate so as to enable buildout in early years of EV adoption without cross-subsidization or a persistent subsidy. Thus far, more than 14 states have adopted EV rates across the country, not counting technology-neutral rates. One specific example includes Pacific Gas & Electric's commercial EV rate, which went into effect in early 2020.8 Technology-neutral low load factor rates that favor volumetric charges are another approach some utilities have taken. Madison Gas and Electric in Wisconsin and Virginia's Dominion GS-2 tariff are two such examples, where any commercial client (including charging infrastructure owners and operators, can take service under the utilities' respective non-demand tariff as long as their load factor is below a certain threshold. 9 10 The table below provides a summary of different rate reforms adopted by several utilities to support transportation electrification efforts.

Utility	Exemplar Rates
Southern California Edison, CA	TOU – EV – 8  - All volumetric TOU rates for first 5 years, with demand charges phased back in years 6-10  - TOU volumetric energy charges increased to recover costs
Eversource, CT	EV Rate Rider Pilot (EVRRP)  - Demand charges of the applicable commercial rates are converted to an equivalent \$/kWh charge for all kWh utilized by the DCFC customer during each billing period
SDG&E, CA	TOU – M (Interim Rate)  - While the EV rate is finalized, sites can temporarily switch onto this rate with a \$2.50/kW demand charge and the 40 kW demand cap waived
Dominion, VA	GS – 2 (Non-Demand) - Low usage sites (<200 kWh per kW) qualify for this non-demand general service rate
Madison Gas & Electric, WI	Low Load Factor Provision  - Commercial customers on rate schedules Cg-4, Cg-2, or Cg-2A; annual electric load factor <15%. On-Peak Demand Reduction of 50%
DTE Energy, MI	GS – D3  - The 1000 kW demand cap for this non-demand general service rate is waived for DCFCs through June 1, 2024

Item 1. Exemplary EV-friendly rates – Commercial EV and technology-neutral low load factor rates, as adopted.

While commercial EV rates or technology-neutral low load factor rates will help to encourage private sector investments in public charging, demand charges are also a cost barrier for the electrification of buses, trucks, and other medium-heavy duty applications, which has significant implications as Florida

<sup>7</sup> Florida Public Service Commission, Docket No. 20200170 https://www.floridapsc.com/ClerkOffice/DocketDetail?docket=20200170

https://www.mge.com/customer-service/for-businesses/electric-rates/low-load-factor-provision#:~:text=Low%20Load%20Factor%20Provision,factor%20less%20than%2015%20percent

<sup>&</sup>lt;sup>6</sup> Internal EVgo Data

<sup>&</sup>lt;sup>8</sup> PG&E Application for Approval of Pacific Gas and Electric Company's Commercial Electric Vehicle Rate. California Public Utilities Commission, Docket No. 18-11-003.

<sup>&</sup>lt;sup>9</sup> Madison Gas & Electric, Low Load Factor Provision available to commercial customers on rate schedules Cg-4, Cg-2, or Cg-2A with an annual electric load factor less than 15 percent.

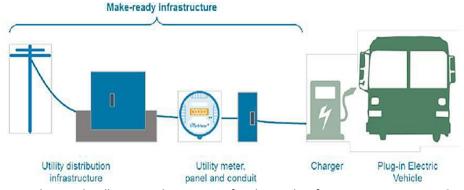
<sup>&</sup>lt;sup>10</sup> Virginia Electric and Power Company, Schedule GS-2: Intermediate General Service. Filed 05-20-19

explores issues related to environmental justice, public transportation, and pollution from trucks. For example, in Denver, RTD purchases electric buses only to find their fueling costs increased by 60% under previously existing rate structures. <sup>11</sup> As a result, fleets and public charging companies alike were important stakeholders in the development of Xcel Colorado's new commercial EV rate<sup>12</sup>, which went into effect in early 2020.

# 2. "Make-ready" investments from utilities can effectively, and equitably, enable electrification.

EVgo appreciates the Commission's interest in a competitively neutral policy as it relates to the role of the utility in the marketplace. A diverse group of private actors are active in EV charging, and at this early stage in the adoption curve, the role of the utility can be complementary if thoughtfully deployed. One area where consensus exists on this topic is on make-ready. Utilities investing in the conduit and other electrical infrastructure leading up to the charger is a logical role and a "win-win." The utility gets to focus on its core competency, enable more load for it to serve, reduce capital costs for third party charging companies, and increase private investment. Utility "make ready" programs bring rate-based distribution upgrades and branch line extensions into the utility scope, while leaving dispenser ownership, marketing, customer service, and network operation in the hands of experienced private operators. The result leverages utilities' strengths in infrastructure buildout with the scale, learning and efficiencies that private developers have built over thousands of installs and hundreds of thousands of satisfied customers.

Make-ready also avoids potential issues with ownership such as the monopoly entity's ability to set its public pricing at rates too low for the private market to compete, which may hinder competition, or through overbuild, to effectively "consume" the usage that, in early years, electric vehicle service providers rely upon to evaluate the business case of a potential EVSE investment. Make-ready infrastructure programs maximize private sector investments by significantly improving economics to cover behind-the-meter investments. This helps keep costs low for ratepayers while catalyzing private sector investment and considering competitive market concerns.



Item 2. This graphic illustrates the concept of make-ready infrastructure. Source: PG&E

<sup>&</sup>lt;sup>11</sup> Denver, RTD purchases electric buses only to find their fueling costs increased by 60%.

<sup>&</sup>lt;sup>12</sup> Public Utilities Commission of Colorado Proceeding No. 19AL-0290E. In the matter of advice letter No. 1798-Electric filed by Public Service Company of Colorado to Revise its PUC No. 8-Electric Tariff to Implement Rate Changes Effective on Thirty Days Notice.

Across the country, commissions have approved proposals for make-ready infrastructure. In New York, the Public Service Commission approved a \$700M state-wide make-ready program for all investor-owned utilities to help bolster the development of charging infrastructure across the state; under the New York order, investor-owned utilities are not permitted to own and operate charging in any market segment.<sup>13</sup> In California, PG&E' has a \$22.4M make-ready program for DCFC, which also includes rebates for charging infrastructure in disadvantaged communities. <sup>14</sup> Just this summer, the California Public Utilities Commission approved Southern California Edison's Charge Ready 2 Program, which includes make-ready funding for 205 DCFC ports, as well as equipment rebates for certain customer segments.<sup>15</sup> Similarly, just last week, the New Jersey Board of Public Utilities ("BPU") endorsed the "shared responsibility" model, whereby the utilities' role would primarily be to make investments in "make-ready" infrastructure to support the deployment of publicly-accessible EV infrastructure by competitive market electric vehicle service providers. Per the BPU, "Non-utility entities, including site owners, property management companies, and EVSE Infrastructure Companies, would be responsible for installing, owning and/or operating, and marketing EVSE using private capital."<sup>16</sup>

3. A successful transition to an electrified transportation sector requires a multi-stakeholder, multipronged effort that will call upon a wide variety of stakeholders to develop and implement strategies to develop the charging infrastructure network.

State energy offices have created significant market development opportunity and charging infrastructure deployment through various programs, that include but are not limited to funding from the Volkswagen Settlement and state appropriated dollars. EVgo has partnered with Virginia Department of Environment Quality, Pennsylvania Department of Environmental Protection, Colorado Energy Office, California Energy Commission, and so many more to lead the way in installing public fast charging to enable EV adoption. EVgo commends Florida for leveraging public programs to facilitate these public-private partnerships in a way that creates a robust EV charging ecosystem.

Coupled with private-public partnerships with state agencies, utilities have an important role to play both in make-ready programs, as well as EV-friendly or low load factor tariffs that may complement state agencies' VW programs. Therefore, EVgo submits that it is critical to provide an unencumbered opportunity for the private sector third-party ownership model take the lead in the development of the state-wide network supported by and in close collaboration with electric distribution utilities.

https://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442457607.

https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M346/K230/346230115.PDF.

<sup>&</sup>lt;sup>13</sup> Order Establishing Electric Vehicle Infrastructure Make-Ready Program and Other Programs; July 16, 2020. CASE 18-E-0138 - Proceeding on Motion of the Commission Regarding Electric Vehicle Supply Equipment and Infrastructure.

<sup>&</sup>lt;sup>14</sup> California Public Utilities Commission, Decision 18-05-040, p. 62

<sup>&</sup>lt;sup>15</sup> California Public Utilities Commission, Decision 20-08-045, p. 22,

<sup>&</sup>lt;sup>16</sup> New Jersey Board of Public Utilities Docket No. QO20050357, p. 18, https://www.nj.gov/bpu/pdf/boardorders/2020/20200923/.pdf.

### 4. DC Fast Charging is important for reaching residents of multi-unit dwellings in urban populations.

As the EV Master Plan is developed, EVgo finds it increasingly important to note that DCFC serves a wide variety of drivers' needs. In the earliest stages of EV infrastructure deployment, DCFC was viewed largely as a solution to assuage the range anxieties of single-family homeowners, especially on trips between cities or across the country. As a result, much historic DCFC deployment had been focused on high-traffic transit corridors, along interstates and major highways. However, DCFC serves more than just a corridor use case, and should be approached as such in terms of investment, including in the use of Volkswagen settlement programming.

In fact, DCFC plays a critical role in dense urban and suburban areas where not every home has a driveway, attached garage, or in many cases, any dedicated parking at all. According to the International Council on Clean Transportation (ICCT), apartment-dwelling EV drivers, living in multiunit dwellings (MUDs) rely on public charging for 50-80% of their charging<sup>17</sup> as they would typically not have access to dedicated parking or home charging. For many of these EV drivers, a public DCFC is used much in the same way that drivers use a gas station but with the advantage of being able to plug in and walk away to eat lunch or run an errand. Dense, urban and suburban populations of all income levels can support competitive DCFC investment. EVgo encourages the EV Master Plan to consider this important use case as well so that EV drivers across all demographics may have access to EVs.

## Conclusion

In closing, EVgo once again the PSC team for their work on the EV Master Plan and pushing Florida's zero-emission future ahead. EVgo continues to offer itself as a resource to the state to advance a new era of clean transportation in Florida. Please do not hesitate to reach out to EVgo as a resource moving forward.

Sincerely,

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<sup>&</sup>lt;sup>17</sup> Attachment SR-5, International Council on Clean Transportation, *Quantifying the Electric Vehicle Charging Infrastructure Gap Across U.S. Markets* (January 2019), p. 9,