

June 23, 2022

The Honorable Jared W. Perdue Secretary, Florida Department of Transportation 605 Suwannee St. Tallahassee, FL 32399

RE: Response to the Request for Information on the Florida Electric Vehicle Infrastructure Deployment Plan

Dear Secretary Perdue:

On behalf of a coalition of businesses, associations, and individuals that share the common goal of efficiently and effectively developing a charging network for electric vehicles ("EVs") across the United States, the Charge Ahead Partnership ("CAP") respectfully submits the following comments in response to the Florida Department of Transportation's ("the Department") request for information as you develop your Electric Vehicle Infrastructure Deployment Plan ("the Plan"). CAP looks forward to working with Florida policymakers to create a robust marketplace for EV charging so that Florida's system of charging locations is positioned to meet drivers' expectations of quality service, safety, and affordable, competitive pricing. CAP aims to empower the consumer and ensure that they have the confidence to transition to EVs knowing that they will be able to conveniently "recharge" no matter where they go in the country.

The number of EVs on U.S. roads is projected to reach 18.7 million in 2030, up from 1 million at the end of 2018. Yet consumers remain concerned about where they can refuel. It is against this backdrop that state policymakers should look for solutions to expand the EV charging network as rapidly as possible. CAP believes the most expeditious, efficient, and economical way to achieve these environmental advancements in transportation energy technology is through a competitive, market-based approach that removes barriers to installing EV charging stations, establishes fair electricity resale rates for retail charging businesses, and meets the needs of today's – and tomorrow's – drivers. This not only will alleviate the "range anxiety" that is keeping many Americans from purchasing EVs, but it will also facilitate a long-term competitive marketplace, which will ultimately serve customers better than any grant program. The Infrastructure Investment and Jobs Act ("IIJA") – which allocates \$5 billion to the National Electric Vehicle Infrastructure Formula Program ("NEVI") and \$2.5 billion to the discretionary Charging and Fueling Infrastructure Program – is a once-in-a-generation opportunity to kickstart a nascent market. However, the Plan must ensure that the distribution of these funds is done in a way that ignites private investment in EV charging infrastructure for decades to come rather than simply distributing money to stranded assets.

In order to make consumers comfortable with purchasing EVs, a statewide network of EV fast chargers must be available to provide drivers with the refueling customer experience that they expect. Without it, consumers will hesitate to make the transition. Moreover, an idle charger in a desolate parking lot will do nothing to alleviate range anxiety. In fact, it will have the opposite effect. Consumers should expect to be both comfortable and safe during their charging experience. The sooner a marketplace exists to provide this positive experience, the sooner more consumers will be comfortable buying EVs.

Included below is CAP's response to the questions posed by the RFI. Our response includes our perspective on EV charging policies that would encourage private investment in Florida. We encourage you to consider these policies as you develop the Plan. Doing so will position Florida to create a competitive and consumer-centric approach to building a robust EV charging network across the state. We appreciate your consideration of this matter and look forward to working with you.

I. General Considerations for Building an EV Charging Network

As previously stated, CAP is a coalition of businesses, associations, and individuals that share the common goal of efficiently and effectively developing a charging network for electric vehicles across the United States. With over 120,000 established fueling locations across the nation, existing fuel retailers can replicate today's petroleum refueling experience for EV drivers. Additionally, retailers more broadly are best equipped to own and operate EV charging stations, utilizing their nationwide network of convenient locations to provide the refueling experience that consumers expect. These locations provide a safe location for a myriad of secondary services and amenities, such as food, beverages, and restrooms. This is an important consideration for the Plan because the IIJA prioritizes such amenities when determining the location of EV refueling sites financed with NEVI funding.¹

A. Ratepayer Subsidization of Charging Stations

One of the key challenges to building out Florida's statewide charging network is the fact that regulated electric utilities are increasingly seeking to underwrite their investments in owning and operating Direct Current Fast Chargers ("DCFC") by raising their customer's monthly electricity bills. Allowing power companies to charge all of their customers more money to own and operate chargers, regardless of whether the customer drives an EV, operates like a regressive tax. In some states, the costs of both the physical infrastructure and the electricity used to refuel EVs are added into the rate base upon which the utility collects a guaranteed rate of return and essentially operates as a state-sanctioned, utility-distributed subsidy for EV drivers.

Ratepayer subsidized investment is not subject to market risk, which gives utilities an advantage over any private company seeking to enter the market. This is important for free market considerations but also for the NEVI funds. While the funds cover a bulk of the costs associated with the installation, ownership, and operation of chargers, it requires matching funds as well. We believe that the private market is willing and able to put capital at risk to invest in EV fast charging stations; however, the overwhelming anti-competitive prospect of contending with a regulated electric utility that can pass the costs of EV chargers on to its customers — such as public electric utilities — make the financial realities difficult to rationalize for businesses. To that end, by creating a pro-business, pro-private investment Plan for the NEVI funds, Florida ensures that electric utility customers are not on the hook for any additional costs associated with EV charging. Simply put, citizens should not be paying for services that the private sector is willing to cover. To do otherwise would place an unnecessary burden on those least able to afford it.

B. Demand Charges

¹ Infrastructure Investment and Jobs Act, Section 11401, November 15, 2021. https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.pdf

EV fast chargers have unique power needs, with high power capacity needed for charging but relatively low amounts of energy consumed per charge. This high demand over short periods of time subjects EV fast chargers to costly fees known as "demand charges." These fees were created with manufacturing and industrial customers in mind as the infrastructure required to supply these firms with such high levels of electricity ultimately required additional back-end investments by the electric utility. Unfortunately, EV fast charging stations are also being saddled with these additional costs. The major difference is that while a factory can recover these costs due to its high utilization rates and demand-side controls (i.e., being able to control when energy is being used), publicly available DCFC stations cannot recover such costs in an economically feasible way, particularly in the current nascent stage of the EV market when there are relatively low utilization rates of public electric vehicle fast chargers.

To further compound the issue, station operators are not aware of what the additional costs will be until the end of the billing cycle – meaning it is impossible for the station operator to appropriately pass along any costs associated with that charge to the end-user as is done in nearly every other wholesale-to-retail transaction. In fact, the Rocky Mountain Institute determined that for some stations, demand charges can make up as much as 90 percent of the total cost of public fast charging. This hinders the expansion of an EV fast charging network and limits competition when utilities do not impose the same costs on their own EV charging services provided directly to the public.

Policymakers must create a rate/tariff structure that strikes an even balance between the customer, the retailer, and the utility without undercutting DCFC economics.

Additionally, demand charges add an extra layer of financial inequity for consumers living in rental homes, apartments, or in any situation that prohibits them from being able to connect a charger to their place of residence. Most states – either through legislation or regulatory action – require utilities to offer affordable residential charging rates for residential customers via either a flat residential fee (which does not contain a demand charge) or a time-of-use tariff which incentivizes the user to charge during off-peak hours, such as overnight. This results in significantly lower recharging costs for drivers charging at home. Meanwhile, those communities which do not have at-home charging options must pay the more expensive demand charge rate at a public charger.²

Per the IIJA, Congress has tasked states and utilities to find ways to mitigate the negative economic externalities created by demand charges.³ States and utilities must consider the establishment of new rates that:

- 1. Promote affordable and equitable EV charging options;
- 2. Facilitate deployment of faster charging technology that improves the customer experience;
- 3. Accelerate third-party investment in EV charging infrastructure; and
- 4. Appropriately recover marginal costs.

² According to Rocky Mountain Institute research, this can make up as much as 90 percent of the total cost of public charging – an additional tariff that only public chargers must pay. See RMI's EVgo Fleet and Tariff Analysis (2019) https://rmi.org/wp-content/uploads/2017/04/eLab EVgo Fleet and Tariff Analysis 2017.pdf

³ Infrastructure Investment and Jobs Act, Section 40431, November 15, 2021. https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.pdf

CAP encourages Florida to implement an alternative rate structure in its guidance on EV charging infrastructure deployment.

It is important to note that CAP understands the financial realities that utilities face in order to upgrade host-site infrastructure to accommodate charging hardware – particularly DCFC infrastructure. However, regressive demand charges that were never created with EV charging in mind are not a sustainable solution to address this issue. Several states have already looked at alternatives to demand charges for EV charging.⁴ Additionally, some states have created temporary "holidays" from demand charge fees while others have completely carved EV charging out of demand charges.⁵ We believe that the elimination of demand charges would alleviate the economic restrictions that are holding back private investment and would allow fuel retailers to invest in EV fast chargers with the reassurance that they will be able to earn a return over time.

To mitigate these high up-front costs that have prevented private entities from entering the market while simultaneously ensuring that utilities are "made whole" for the necessary – and costly – back-end infrastructure improvements DCFC infrastructure requires, CAP continues to support "Make-Ready" models that allow the utility to recover costs associated with grid upgrades up to the point of installing, owning, operating, and maintaining the actual charger itself. CAP believes any state program applying for funds should concentrate on this "Make-Ready" model.

II. Considerations for Site Location

As the private refueling market currently operates, CAP strongly believes retailers are best suited to identify and fill gaps in the market – particularly along high-travel corridors, such as highways and interstates. According to the NEVI program guidance, charging stations must be located at least every 50 miles along EV Alternative Fuel Corridors, which supports our assertion that retailers with existing real estate and operations are well positioned to host many of these charging sites.

With millions of Americans visiting refueling locations every day, retailers are poised to rapidly replicate the current fueling experience – both in terms of location convenience and the provision of secondary services such as food and beverages, restrooms, and security – for EV refueling. In particular, refueling stations are already located in prime locations for travelers to stop—and they offer many of the secondary amenities to which customers have become accustomed.⁶ Entities willing to risk private capital have a much greater incentive to maintain facilities and attract consumers to utilize their services versus other entities (such as government entities or regulated businesses with guaranteed rates of return) who simply do not have to recover costs from customers to ensure a return on investment. Surrounding EV chargers with secondary services will make the chargers more appealing for consumers to use, particularly as it may take up to one hour to recharge an EV completely with a DCFC charger compared to the two to

⁴ Jeff St. John, Getting the Rates Right for a Public EV Charging Build-Out, Green Tech Media, February 16, 2021. https://www.greentechmedia.com/articles/read/getting-the-rates-right-for-a-public-electric-vehicle-charging-buildout

⁵ Rocky Mountain Institute, ACEEE National Convening on Utilities and Electric Vehicles, November 14, 2018. https://www.aceee.org/sites/default/files/pdf/conferences/ev/nelder.pdf

⁶ IIJA prioritizes alternative fueling corridor grant recipients that partner with private businesses offering amenities such as food and restrooms.

three minutes it takes to refuel with liquid fuel.⁷ Consumer comfort will ensure a positive experience for customers and lead to higher use of EV chargers. Additionally, a competitive marketplace for recharging spurs competition and hedges against the risk of stranded assets.

Notably, the IIJA did not incorporate provisions that would allow governments to unfairly compete with the private sector by installing EV charging stations at interstate rest areas. This assurance protects the investments private businesses have made (or are considering making) in EV charging infrastructure along interstates. Interstate rest areas do not provide the secondary amenities and security retailers provide to customers, which will inevitably mean those chargers would not be utilized and would risk becoming a stranded asset. In fact, many publicly available chargers not offered by businesses, such as convenience or grocery stores, are in isolated, poorly-lit locations. Given the lengthy timeframe to recharge an EV completely using DCFC chargers, it is imperative that public safety be at the forefront of public policy decisions. To this end, retailers offer a safe place to recharge along with secondary services customers can utilize during the charging period.

While many of the refueling and charging stations will naturally gravitate toward major travel routes – just as traditional gasoline refueling stations have – Florida should not set any additional funding or grant program parameters nor guidelines based on the distance from a particular transportation corridor or distance from another EV charger outside of what is already required by the NEVI program guidelines. For instance, there may be a need for large groupings of chargers along the I-95 corridor. More remote locations (for instance, Wyoming Route 191) may have different requirements. The government should not discriminate between rural locations or high-traffic transportation corridors. There should be an equal playing field for all applicants to compete on regardless of their location.

III. Partnerships, Business Models, and Leveraging Stakeholder Core Competencies

Building out an EV fast charging network and upgrading the national electric grid to accommodate this new technology is a daunting task that will require collaboration among utilities and retailers as well as many other stakeholders. In this sense, each stakeholder group should focus on core strengths, with electric utilities preparing the grid for the coming fuel transition and retailers providing the refueling customer experience that drivers expect. The Plan should support this partnership structure as it is the most efficient, cost-effective, and timely method to encourage consumers to adopt EVs.

Government incentives should leverage businesses that are willing to utilize their own capital to invest in EV charging. Public policy should avoid a system that gives an unfair economic advantage to a particular industry or entity. Government should not be in the business of picking winners and losers – particularly in a burgeoning market in which private industry is eager to invest.

As stated previously, the most efficient, cost-effective path to a nationwide network of EV charging stations is for retailers and power companies to work in partnership, with each focused on their specific areas of expertise. Public policy that incentivizes this partnership structure will encourage consumers to adopt EVs more quickly and meet climate change goals. CAP supports policies allowing utilities to receive funding to strengthen the grid and power infrastructure. We believe, however, that retailers and other private businesses that compete on price and services are in a better position to own and operate charging stations.

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⁷ U.S. Department of Transportation, Electric Vehicle Charging Speeds, February 2, 2022. https://www.transportation.gov/rural/ev/toolkit/ev-basics/charging-speeds

IV. Strategies for Low Utilization

Off-corridor and rural communities – particularly those in areas with little EV saturation – may find themselves at a disadvantage in any attempts to attract investment in EV charging infrastructure. However, just as gas stations can be found in every community across America, EV charging stations are likely to be similarly ubiquitous. If policymakers send the necessary signals to retailers, such as travel centers and grocery stores located in rural locations, these businesses will invest in EV charging infrastructure to meet the demand of their customers as they do with any other legal product their customers wish to purchase.

Businesses are acutely aware of customer demand and have spent decades researching trends to determine the optimum locations to serve clients. As a result, retailers and other businesses are sited in convenient locations to provide their customers with the products they need. CAP believes EV charging will benefit from similar analyses by the private sector. Therefore, CAP encourages Florida to allow the private sector to do what they do best – determine the most convenient, affordable, and effective way to compete for and serve customers.

Private sector investment and increased competition in the EV charging business could also benefit disadvantaged communities. As previously stated, power companies have been charging all of their customers more money to own and operate chargers, regardless of whether the customer drives an EV. This operates like a regressive tax — particularly to those living in lower-income and fixed-income communities. Allowing utilities to rate base the cost of EV chargers and the electricity needed to power them could unfairly discriminate against lower-income and fixed-income communities who are both more sensitive to price fluctuations in their utility bills and are rarely EV drivers.

There are more equitable and effective ways of growing the EV fast charging network. Regulated utilities should not be placing the burden of providing fuel to EV drivers on the backs of hard-working, low- and middle-income individuals, many of whom do not own a vehicle, much less an EV. Fuel retailers are willing to foot the bill if a competitive EV charging market exists. Accordingly, we must ensure that all communities – regardless of location or socio-economic status – are included in the development of an EV fast charging network, just as there are refueling stations in every community regardless of geography or income.

V. Other Considerations

As stated above, retailers and other private businesses are prepared to provide EV charging services to EV drivers. However, without the appropriate policy signals, businesses cannot compete with regulated power companies. To create a nationwide fast charging network, all EV charging providers must be able to compete on an even playing field. There must be a viable pathway to profitability and the ability to compete on price for any fuel alternative to gain meaningful market share—meaning more drivers of EVs on American roads. This will allow competition to drive down prices and increase the quality of services provided to customers.

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Thank you for your consideration of CAP's comments. We look forward to working with you on this important issue.

Sincerely,

Jay Smith

Executive Director

Charge Ahead Partnership

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