



November 20, 2020

Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Re: Docket No. 20200000-OT, REQUEST FOR COMMENT FOR EV WORKSHOP/SB 7018

Dear Chairman Clark, Commissioners Brown, Graham, Fay, and Polmann:

The Natural Resources Defense Council (“NRDC”) thanks the Commission for the opportunity to provide comments on the development of an electric vehicle (“EV”) Master Plan for Florida. NRDC is a non-profit organization dedicated to protecting public health and the environment. On behalf of its 1.3 million members and activists nationwide, NRDC has been deeply involved in state and federal forums to reduce emissions from both the transportation and electric sectors.

The transportation sector is the single largest source of greenhouse gas (“GHG”) emissions in the country—these emissions not only contribute to poor air quality, but vehicles also emit pollutants such as NO_x that are harmful to human health. Supporting efforts to electrify the transportation sector—including electric vehicles (“EV”)—is an important strategy to reduce these emissions, as EVs emit zero tailpipe emissions.

EVs are already very popular in Florida—in fact the Sunshine state has one of the largest EV markets in the country.¹ And this trend is continuing—Florida has seen EV registrations increase by an average of 11,000 vehicles per year in the past four years, and now has over 60,000 EVs on the road.² However, despite the relatively high penetration of EVs in the state, Florida utility investments in EV charging infrastructure thus far have represented less than 1% of all utility investments nationwide.³

The size of the transportation sector in Florida represents vast opportunities for electrification and associated benefits, but also proves to be a large challenge. In order to optimize the monetary, health, and climate advantages of vehicle electrification, the transition to EVs must be a collaborative effort between utilities, state agencies, and the private sector. Our comments highlight some policy and utility considerations that the PSC and state need to consider to support and advance this growing market.

¹ Florida Highway Safety and Motor Vehicles, “Vehicle and Vessel Reports and Statistics,” August 2020. [Online]. Available: <https://www.flhsmv.gov/resources/driver-and-vehicle-reports/vehicle-and-vesselreports-and-statistics/>.

² C. Smith and K. Latham, Atlas Public Policy, Transportation Electrification in Florida (October 2020) at 3, available at: <https://cleanenergy.org/wp-content/uploads/Transportation-Electrification-in-Florida.pdf>

³ Id.

EVs provide Benefits for All Floridians

All Floridians, even those who don't drive EVs, can benefit from transportation electrification. Investments in EVs, including those by utilities, have been shown to put downward pressure on electricity rates for all customers. In a recent analysis, Synapse Energy Economics concluded, "from 2012 through 2018, in the two utility service territories with the most EVs in the United States, EVs have increased utility revenues more than they have increased utility costs, leading to downward pressure on electric rates for EV-owners and non-EV-owners alike."⁴ This is especially true when charging is shifted to off-peak hours when there is extra load on the grid. The Synapse report estimated that EV drivers contributed \$806 million more than the costs associated with serving the vehicles in the two service territories analyzed.⁵ Further, MJBradley forecasted benefits specific to Florida under an aggressive EV adoption scenario. They found that net benefits associated with greater EV use in the state could be upwards of \$106.2 billion by 2050. \$21.7 billion of that sum would go directly to utility customers (including those who don't drive EVs) in the form of reduced electricity bills. The remaining \$84.5 billion would go to Florida drivers through reduced annual vehicle operating costs.⁶

The growth of the EV sector can also boost Florida's economy by moving away from gasoline demand and toward in-state electricity generation.⁷ Renewable energy procurement is on the rise in Florida, which means there's potential to support new electricity demand with clean energy sources. What's more, all Floridians will benefit from air quality improvements associated with an increasing number of cars electrified in the state.

Clean Vehicles for All

EVs are not exclusively for affluent buyers. The cost of new EVs are rapidly approaching parity to their gasoline counterparts. M.J. Bradley forecasts that by 2021 there will be at least five EV models available for under \$30,000 *before* federal or state incentives.^{8,9} There's also an increasing market for used EVs, which are sold for a fraction of the new vehicle sticker price. Drivers can now purchase a used EV at a cost comparable to a used gasoline vehicle. For

⁴ Frost et al., Synapse Energy Economics, Electric Vehicles are Driving Electric Rates Down, at 1 (June 2020), available at: https://www.synapse-energy.com/sites/default/files/EV_Impacts_June_2020_18-122.pdf

⁵ *Id.*

⁶ MJ Bradley and Associates, Plug-in Electric Vehicle Cost-Benefit Analysis: Florida, at iii (January 2019), available at <https://www.mjbradley.com/sites/default/files/FLPEVCBAnalysis07jan19.pdf>

⁷ Florida Department of Agriculture and Consumer Services, Florida Energy and Climate Plan, (2019), available at: <https://www.fdacs.gov/ezs3download/download/89011/2560887/Media/Files/EnergyFiles/Florida%20Energy%20and%20Climate%20Plan.pdf>.

⁸ In January 2020, the average transaction price for a new full-size car was \$36,437. *See*, <https://www.prnewswire.com/news-releases/average-new-vehicle-prices-up-3-5-year-over-year-in-january-2020-on-sales-mix-according-to-kelley-blue-book-301007102.html>

⁹ D. Lowell and A. Huntington, MJ Bradley and Associates, Electric Vehicle Market Status: Manufacturer Commitments to Future Electric Mobility in the U.S. and Worldwide (May 2019) at 3, available at: <https://www.mjbradley.com/sites/default/files/ElectricVehicleMarketStatus05072019.pdf>.

example, according to Carvana.com—an online used vehicle website—a used 2015 Nissan Leaf costs approximately \$10,590—the same price as a 2015 Nissan Versa.

EVs also provide owners with significant cost savings on fueling and maintenance. When evaluating the largest burdens on low-income residents' monthly bills, it's important to consider the large sums spent on gasoline in the status quo. The average household spends \$2,000-\$3,000 annually on gasoline,¹⁰ and drivers who transition to EVs will see significant reductions in fueling costs.

Expanding the EV Market

The Florida Energy and Climate Plan acknowledges that “Florida’s transportation is expensive and emissions-heavy,” pointing out that carbon dioxide emissions from petroleum represent 49.9% of GHG emissions in the state.¹¹ Put simply, Florida needs urgent and creative transportation solutions, and widespread vehicle electrification is a perfect fit. Florida can send a market signal showing its commitment to EVs by signing onto the Zero Emission Vehicle (“ZEV”) MOU and adopting the section 177 ZEV regulations of the Clean Air Act.¹² Becoming a ZEV state will establish ambitious and actionable goals for Florida to reduce GHG emissions and harmful pollution churned out by the transportation sector.

Becoming a ZEV state will also increase customers vehicle choices in Florida and keep vehicle sales within the state. Currently, there are 47 models of EVs available in Florida, compared to the and 58 models available in other ZEV states.¹³ As new EV models are sent to ZEV states first, for Florida to have the most available options for its citizens, it is important to consider ZEV adoption.

Role of Utilities

Utilities are well-suited to play a central role in EV infrastructure buildout due to their knowledge and experience around distribution systems, their frequent and trusted relationships with customers, and understanding of how EV charging may affect the electric grid. They are uniquely positioned to help manage charging to reduce stresses on the grid and smoothly new EV. By utilities encouraging shifting charging to off-peak hours and managing load, all customers can see lower rates.

Therefore, it is vital that Commission is flexible and open-minded about creative options for utility involvement. Florida’s utilities should follow the lead of other utilities around the country whose time, expertise, and capital have provided crucial support of charging infrastructure buildout alongside the private sector’s efforts. New York’s Public Service Commission, for example, approved a \$701 million make-ready infrastructure program, involving the state’s six investor owned utilities.¹⁴

¹⁰ Max Baumhefner, Go Electric to Avoid the Holiday Gas Price Roller Coaster, NRDC, 2018.

¹¹ Florida Department of Agriculture and Consumer Services, Florida Energy and Climate Plan, (2019), available at: <https://www.fdacs.gov/ezs3download/download/89011/2560887/Media/Files/EnergyFiles/Florida%20Energy%20and%20Climate%20Plan.pdf>.

¹² <https://ww2.arb.ca.gov/our-work/programs/zero-emission-vehicle-program>

¹³ Atlas EV Hub Automakers dashboard, available at <https://www.atlasevhub.com/materials/automakers-dashboard/>

¹⁴ <https://www.nrdc.org/experts/kathy-harris/new-york-all-evs>

Another principal barrier to EV ownership is “range anxiety.” Developing a network of public DC fast chargers is an important step in reducing range anxiety and supporting a larger number of EVs on the road. To address this, Governor DeSantis has committed \$8.6M to build out a charging network in Florida.¹⁵ However, DC fast chargers are generally accompanied by high demand charges and EV load. The resulting rates are often so high as to be discouraging to customers. For the same reason, demand charges can even stifle the competitive market’s ability to build out infrastructure because private developers cannot justify investments in infrastructure in locations that may not be highly utilized in the near term.

In order to ensure that EVs are properly integrated onto the grid, and to send proper price signals to customers, it is essential that conversations around rate design happen in the near-term and in step with charging station buildout. Synapse Energy Economics recently released a report on best practices for C&I EV rate reform, which recommends that:

- Rates should promote efficient use of fixed system resources, which will reduce rates for all utility customers;
- Rates should be easy to understand and predictable;
- Rates should be designed with end users in mind;
- Time-varying volumetric rates are generally preferable to demand charges;
- Non-coincident peak demand charges should generally be avoided;
- It may be appropriate to set rates to recover marginal costs rather than embedded costs; and
- Programs that rely on price signals inherent in rate design to deliver grid and user benefits should ensure users actually see those price signals.¹⁶

Supporting, Not Stifling, The Competitive Market

Utility involvement will not be a barrier to competition in the EV charging market. The EV charging sector in Florida “has room to grow” according to a report from Atlas Public Policy, which points out that the highly populated state has only five percent of the nation’s charging ports.¹⁷ At this nascent stage, it makes sense to leverage utility capital and expertise to expand the public charging station network, thus encouraging more EV purchases and opening a larger competitive market. Utility investments to support charging infrastructure will set a modest foundation on which the private sector can build. There are numerous gaps in charging infrastructure, which have not been met by the private sector. In particular, rural and low-income areas, as well as multi-unit dwellings, have been excluded. Utility support will not be an anti-competitive force, as the competitive market has thus far not achieved the level of market penetration needed to support the growing number of EVs on the road. Florida will need investments from both the private and public sector to meet the needs of its rapidly growing EV population. And, in the long run, utility supported charging stations will make up only a very small percentage of the infrastructure that will be required to support the EV sector.

¹⁵ <https://news.wjct.org/post/gov-desantis-announces-86m-new-florida-electric-vehicle-charging-stations>

¹⁶ M. Whited, J. Frost, Synapse Energy Economics, Best Practices for Commercial and Industrial EV Rates (July 2020).

¹⁷ C. Smith and K. Latham, Atlas Public Policy, Transportation Electrification in Florida (October 2020) at 2, available at: <https://cleanenergy.org/wp-content/uploads/Transportation-Electrification-in-Florida.pdf>

We look forward to continued discussions on the policies and programs that Florida should consider to advance transportation electrification in the state.

Sincerely,

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