Date: October 2, 2020

To: Commission Clerk, Florida Public Service Commission

From: Berdell Knowles, JEA

Re: JEA'S RESPONSE TO FPSC's REQUEST FOR COMMENT FOR EV WORKSHOP/SB 7018 -

**UNDOCKETED** 

## Projecting use of electric vehicles for the next 20 years:

A. Please provide a ten-year and twenty-year projection for increased EV use in Florida, including your data source for such projections.

Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2040
Number of PEVs	1,801	2,155	2,509	2,862	3,216	3,570	3,924	4,278	4,632	4,986	5,339	10,722

B. Provide an estimate of the number of charging stations that will be needed to meet the demand presented by these ten and twenty-year projections.

Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2040	
Number of Public PEV Charging Stations	91	105	120	135	150	166	182	199	217	235	254	485	2

## Strategies to develop charging stations:

- A. Provide comment on strategies to develop the supply of charging stations, including methods of building partnerships between charging station installers, governmental entities, electric utilities, the business community, and the public.
  - There are some key universal components that can facilitate an effective build out of a statewide charging network, these could include the following:
    - Consistent, streamlined and progressive permitting throughout the state
      - Standardized local electrical inspection process for approving EV charging stations,
      - Consider standardizing statewide charger specifications to be "open access" for Level 1, 2 and DC Fast Charging.
      - Facilitate access to charger locations by requiring developers to integrate with various mapping smartphone Apps.
      - Require signage to be uniform and consistent.
      - Consider progressive permit planning requirements for parking areas (e.g. public lots, multifamily, office, etc.) to encourage rational EV adoption (e.g., 5% of parking spaces must be prewired for charging).

<sup>1,2</sup> JEA 2019 10-year Integrated Resource Plan with supplemental 2040 EV forecast

- Requiring dual purpose use of commercial charging stations,
- Enact enforcement penalties for parking ICE vehicles in an EV space,
- Consider an Advanced Building Code Adoption toolkit that includes EV infrastructure requirements for new construction,

#### Figure 12: Six Ways to Streamline EV Permitting

Electric Vehicle (EV) charging permitting regulations and processes vary widely across jurisdictions, which can increase development, times, litigation risks, and costs. But, utilities, regulators and developers can help streamline that process



### **Embrace Statewide** Standards

Get everyone on the same page. Standards reduce ambiguity and increase planning opportunities.



# Spot Challenges Early

- Collaborate to identify potential challenges before they are costly mistakes
- Review design, future considerations, benefits, and potential requirements like ADA and snow removal



## Simplify the Process

- Create checklists, toolkits and online resources.
- These tools guide and set expectations for design and permitting.



## **Smart Site Selection**

- AHJs should engage with local utilities to pick the best locations for connectivity.
- Smart siting mitigates the risk of delay and cost increases



## **Utility Leadership**

- Educate authorities having jurisdiction (AHJs) on EV charging technology, safety, and benefits.
- Advocate for consistent land use compliance, permitting processes, and building codes at the regional and state levels.



### **Understand Overlaps**

- Consider federal, state, and that overlay local permitting,
- Make permitting expectations easy to understand.

Source: Black & Veatch, 2020.

- Leverage Florida Utility and other statewide organizations (i.e. FMEA, FCG, TPO, etc.) to create cohesive, integrated and similar make-ready programs for all utilities to streamline charging developers' complexity.
  - Likewise facilitate best practices sharing and adoption within the utility coordinating body (e.g. allow CAIC to consider broader revenue impact (societal benefits)). For example, encourage pricing for low use sites, corridor and infrastructure planning to dissuade range anxiety.
  - Build on FMEA's findings contained in their Interim Report Emergency Evacuation of Florida Electric Vehicles for the Florida Electric Vehicle Roadmap empower a State Agency to monitor and manage progress on the Florida Electric Vehicle Roadmap.
- Consider allowing for funding for DOT to provide or coordinate portable charging units during times of emergency or infrastructure support.
- The State of Florida should work with other states for EV corridor planning.
- State Government should lead by example by requiring State Agencies to work to transition electric fleets with targets, support state master purchasing and coordinated planning.
- Encourage utilities' incorporation of EV infrastructure planning in their integrated resource plans.

- Including EV equity ideas EV Equity Study to baseline, define and map communities (including rural), EV registrations and EV accessibility (including language barriers), HDV and MDV emission impacts, and criteria by which to evaluate and prioritize programming and outreach.
- Consider initiatives the state could undertake which could encourage Dealer EV sales
  performance and progressive behavior to ensure EV's are displayed on showrooms and
  charged for test drives.
- Sponsor a statewide educational program to reduce consumer EV misunderstandings.
   This could include instill belief that charging is easy and available, promote EVs as a lifestyle that fits Floridians, highlight environmental benefits of EVs and connect them to clean energy, push people to websites for detailed information.
- Partner with community-based organizations and stakeholders to assist in working with communities to prioritize their needs for electric transportation in both urban and suburban areas.
- B. Provide examples of strategies adopted or being considered in other states that could be implemented in Florida.

The strategies listed above where taken from various existing state programs. Additional strategies to accelerate EV growth and adoption could include:

- EV HOV lanes that would accelerate EV interest and growth.
- Consider regional or east coast standardized symbol to mark public charging stations along major highways. Standards for local street signs to indicate charging-station locations, parking signs, and pavement markings are also specified (California and several NW states).
- North Carolina's NCZEV Master Plan has a series of strategies that could be used in Florida such as making vehicle registration data on-line and improve its accuracy.
- Continue to support existing Fast Charging Corridor efforts and collaborate directly on planning and rollout of fast charging networks with industry partners.
- Consider workplace-charging programs or pilot programs at large employers, such as government and businesses (<u>US DOE Workplace Charging Challenge</u>).
- Establish a regional collaboration that is mutually beneficial to residents and businesses
  in participating states to promote a seamless cross-state driving experience, increase
  public awareness of EVs, and facilitate the sharing of best practices for policy
  development and program implementation.
- Adopt EV—ready building codes (North Carolina). It is estimated that the wiring and appropriate safety equipment can be approximately 65% less expensive than installing these features to the same specifications after full construction.

Type of regulatory structure necessary for the delivery of electricity to electric vehicles and charging station infrastructure, including competitively neutral policies and the participation of public utilities in the marketplace.

- A. Provide comment on the regulatory structure necessary for delivery of electricity to EV charging station infrastructure.
  - Allow utilities to recover make ready investments where standalone economics may not support a direct economic business case, public chargers that reduce range anxiety and low-income areas of their service territory that may not readily justify the infrastructure expense.
  - Encourage Utilities to have Rates and Load Management Programs that incentivize beneficial charging behavior and deliver off-peak and fuel savings.
  - Implement a coherent, streamlined and consistent policy with all utilities to reduce charger development friction.
  - Establish and maintain a fair fee structure for electric vehicles, which may include road usage charges, mileage-based user fees or other mechanisms.
  - Make public funds available for <u>Beneficial Electrification</u>. <u>Vermont's S337</u> is an example of a state promoting beneficial electrification.
  - Any regulatory structure needs to allow for a certain amount of utility cost recovery
    outside a rate case to encourage beneficial electrification, if the societal benefits
    significantly outweigh the short-term costs.
- B. Provide comment on what constitutes competitively neutral policies in the electric vehicle-charging marketplace.
  - Strike an equitable balance between creating charging standards that facilitate EV adoption and coherency without minimizing barriers to entry for third party charging companies or EV adoption (e.g. EV user fees). Work with other states to understand what has worked and has not worked and coordinate regional policies to facilitate consistency.
- C. Provide comment on the participation of public utilities in the electric vehicle-charging marketplace.
  - JEA is in an early stage review of charging strategies and it is our general belief that utilities may not need to be the primary owner in the public charging marketplace. The competitive market usually provides creativity and the marketing success required for a robust charging marketplace. That said, JEA does believe utilities can play a significant facilitation role by providing customer education, Level II charger installation assistance, facilitating underserved areas that do not readily attract third party developers and providing marketplace services to streamline customer-buying decisions.
- D. Provide examples of regulatory structures adopted, or being considered, in other states regarding electricity supply to EV charging station infrastructure, including examples of competitively neutral policies and the participation of public utilities in the marketplace, that could be implemented in Florida.

Tariffs that apply to public DCFC should balance the utilities costs of construction
against the construction and operating costs for the charger owner. Recognizing that
public EV charging services are a societal benefit, similar to gas stations. Charger
companies and utilities should be able to earn a reasonable profit for their service. It
could be that utilities are allowed to recover actual cost of service gaps in their general
rate base.