

# **Florida Public Service Commission Electric Vehicle Charging Roundtable**

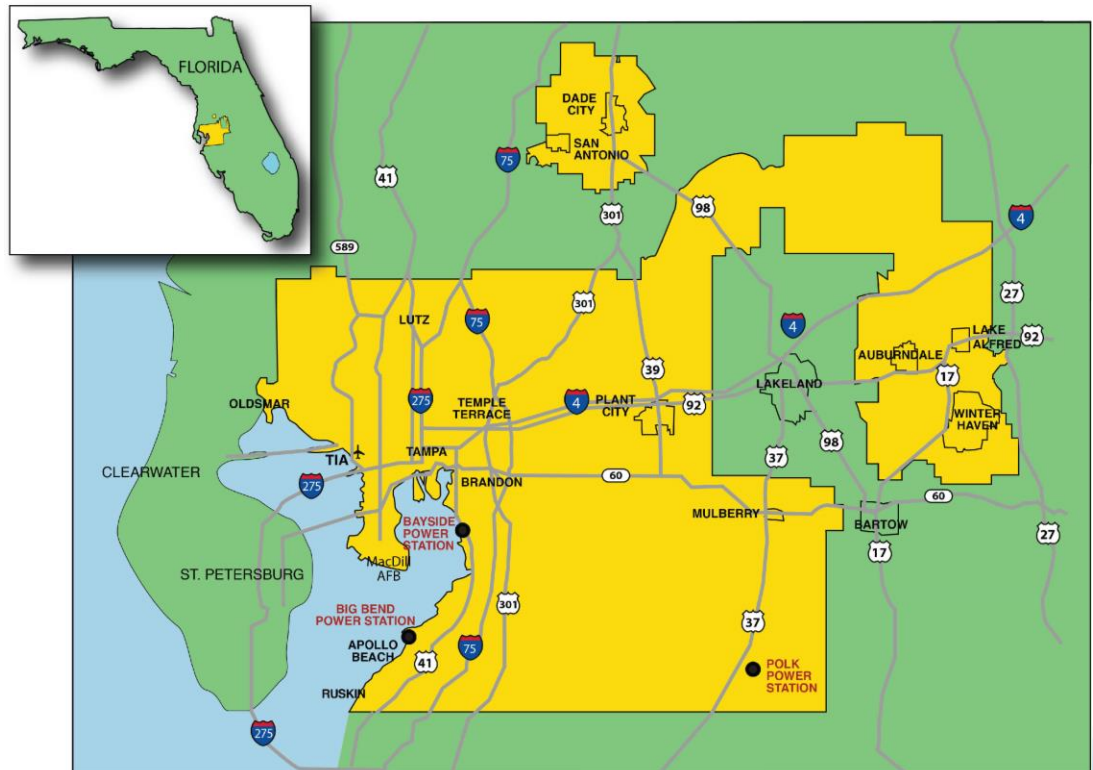
October 17, 2017

# About Tampa Electric

- Operating since 1899
- Subsidiary of Emera Inc. headquartered in Nova Scotia
- Serves 750,000 customers in West Central Florida
- Approximately 2,000 square mile service area



## SERVICE AREA



# Current EV Landscape

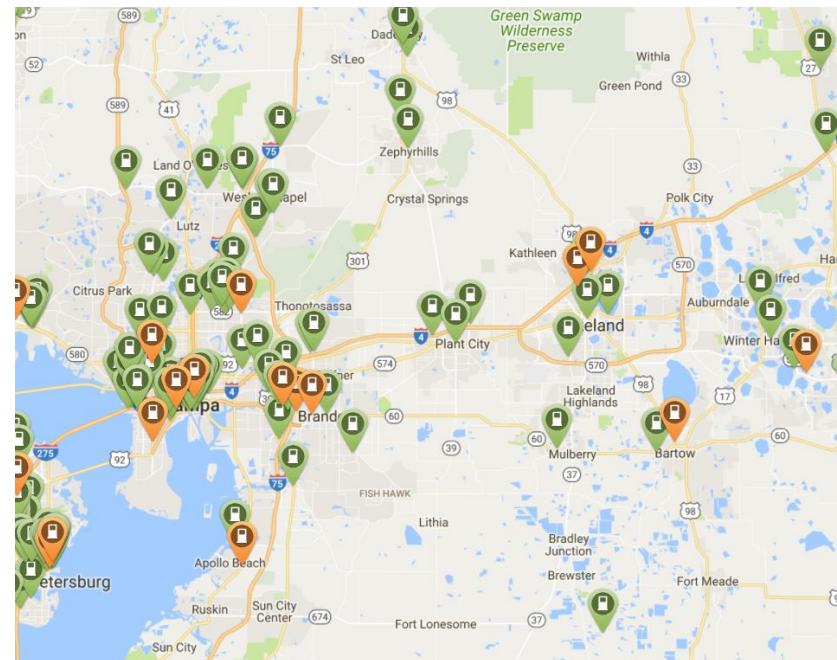
## Cumulative PEV Market Growth (TECO Service Area)

2012	2013	2014	2015	2016	2017 YTD
246	531	837	1057	1653	2058

## Public Charging Infrastructure

120+ public charging stations

Including 11 DC fast charge sites



# Current Initiatives

## Our Fleet

- 24 PEVs
- 17 Plug-in Electric Boom Trucks
- 5 new PEV pick-up trucks by EOY

## Workplace Charging

31 stations (across 13 locations)





# Current Initiatives

## Funding Innovation

Hillsborough Area Regional Transit

- Partnership with Tesla
- HyperLINK “door-to-bus” EV service



## Education

Energy Education for future drivers

- One EV and charger at five high schools
- Education materials jointly developed with University of South Florida

# Grid Impacts/Reliability

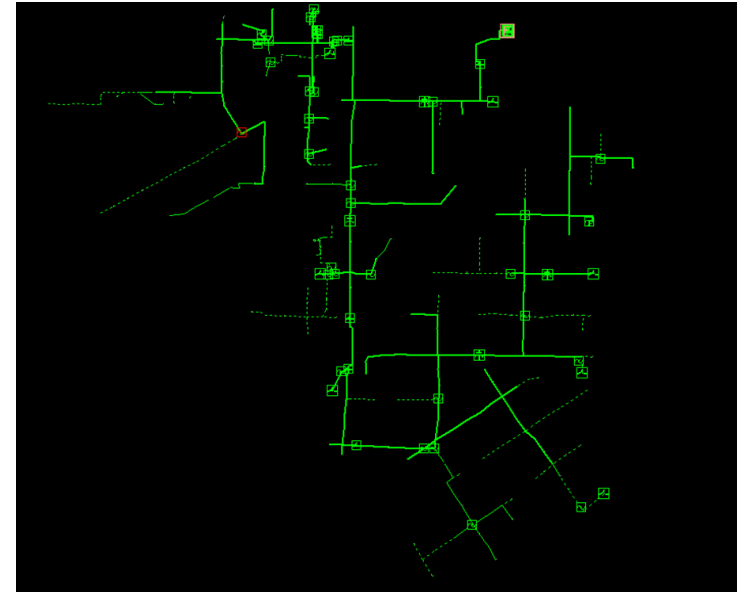
## Load Growth Modeling

- Previous work demonstrates minimal negative impacts to grid
- EV market escalation has been lower-paced
- Current planning cycles will identify and accommodate incremental load growth

## Research

Center for Urban Transportation Research (USF)

- Utility impacts from increased EV adoption
- Potential gaps in DC fast charging (urban requirements)
- Workplace charging (impacts to on-peak charging)



# Future Regulatory Considerations

## Evolution of the Smart Grid

- Framework of the utility's role is still developing
- Consideration of utility upgrades/costs required through increased EV adoption
- Increased utility-scale solar and relationship to on-peak vs. off-peak charging
- Vehicle-to-Grid technologies

