

M E M O R A N D U M

To: Tom Harmer, Town Manager

From: Allen Parsons, AICP
Director, Planning, Zoning & Building Department

Report date: May 27, 2021

Meeting date: June 7, 2021

Subject: Discussion Regarding FPL “EVoLution” Grant Program for Electric Vehicle Charging Station Infrastructure

Recommended Action

Provide direction to Manager.

Background

At the April 23, 2012 Commission Retreat, the Commission added a new initiative related to evaluating opportunities for Green technology, including electric vehicles (EV) and use of gas-powered equipment. The Town was made aware of a grant program through Florida Power and Light (FPL) for the installation of EV charging stations. Town staff is seeking Commission direction on the potential to participate in the FPL “Evolution” grant program.

The program provides EV charging stations, signage, along with providing for the costs of installation and ongoing maintenance of the equipment, at no cost to partner organizations, other than the 7-year cost to provide electricity.

Participation requires three primary components:

- A 7-year commitment, with the option to renew. At the end of the 7-year agreement period the Town would have the option to buy the EV charging stations for their depreciated cost, or the Town could choose to install different charging stations at the locations, with FPL taking the old ones away.
- Dedicated parking spaces for the EV charging stations.
- An obligation to cover the EV charging stations’ electrical costs at typical electric rates.

FPL’s EVoLution program is a pilot project established to install approximately 600 new EV charging stations, at approximately 100 locations throughout their service area. Partnership opportunities in the program are on a first-come, first-served basis, with the program ending this year. Preliminary coordination with FPL’s EVoLution Program Manager indicates that the window to participate in the program requires a decision, and a request by the end of June, in order to meet the program requirements of installations completed by end of year.

Typical minimum EV charging station installations under the program entail two (2), “Level 2¹” charging stations, with each charging station having dual charging connections, for a total of 4 EV charging spots.

Primary locational criteria to participate in the program include availability to the public and access to adjacent amenities such as shopping, services or other more active destinations. FPL has expressed interest in entering a grant agreement with the Town for two charging stations. Staff has identified two locations that would meet these criteria: The Town Center site and Town Hall. There is awareness that for a user to obtain a full charge, the vehicle may need to be parked for several hours, and therefore may tie up that public parking for a period of time. The Town currently has one charger in Bayfront Park that was installed in partnership with Sarasota County in 2017. That charger is a single charging station and, based on the grant requirements at the time, does not charge end-users.

Estimated electrical costs, provided by FPL, indicate an average monthly electrical cost of approximately \$180 to \$240 for 2 dual EV charging stations (providing electricity to 4 parking/charging spaces). This was considered to be a conservative estimate based on utilization of all 4 parking/charging spaces, 7 days per week and 8 hours each day. Average annual costs for program implementation is anticipated to be approximately \$2,400 (\$200 per month), with total program costs, over the 7-year life of the agreement, estimated to be approximately \$17,000.

Staff requested estimates for equipment costs, to provide a comparison, if the Town wanted to pursue installing EV charging equipment without obligations to provide electricity for free. Information provided by FPL indicated that equipment and installation costs, for 2 dual EV charging stations range from approximately \$35,000 to \$55,000. In addition, ongoing maintenance costs that were estimated to be approximately \$2,000 to \$4,000 annually.

Staff recognizes the role of government in providing both EV infrastructure and associated incentives, via providing free electricity, are important policy questions to consider. This involvement is clearly distinct from that provided to traditional motor vehicles.

Governments at the Federal, State and local levels have entered this space, in part, because the transportation sector is one of the largest contributors to greenhouse gas emissions. According a report² from the Florida Department of Agriculture and Consumer Services, electric vehicles can reduce emissions that contribute to climate change and improve public health in comparison to typical motor vehicles. The report

¹ There are 3 primary types of EV charging stations, referred to as Level 1, 2 or 3. Level 1 EV charging stations are typically a standard household outlet, and operate on 120 volt energy, alternating current (AC). Charging time (or the range gained per hour) with Level 1 stations is 3-5 miles per hour. Level 2 EV charging stations are similar to a water heater or dryer plug, found in public places and operate on a 240 volt energy, alternating current (AC). Charging time (or the range gained per hour) with Level 2 stations is 10-60 miles per hour. Level 3 EV charging stations require high voltage equipment and are typically found in high capacity locations (such as near major highway or transportation corridors) and operate on 208-600 volt energy, direct current (DC). Charging time (or the range gained per hour) with Level 3 stations is 60-80 miles per half hour.

² Florida Electric Vehicle Roadmap, December 2020.

notes that “Electric vehicles (EVs) are poised to assume a significant role in transportation over the next five to ten years. EV battery prices continue to decline and EV costs are expected to reach price parity with conventionally fueled vehicles across the passenger vehicle segment by 2025.” The provision of both infrastructure and associated incentives are ways that governments at various levels have assisted with building the infrastructure to support this anticipated transition and contribute to greenhouse gas reduction goals.

If the Commission is interested in adding to incentivized, and publicly available EV charging equipment infrastructure on the island, staff’s opinion is that the FPL EVolution program is a relatively low-cost option with limited obligations for the Town. Next steps would involve staff to locate viable locations that would serve EV users, as well as preserve adequate access to public venue for the public, site evaluations by FPL, and then entering into an agreement (typical Agreement included as Attachment A). Due to the upcoming grant deadline, if the Commission wishes to proceed with this opportunity, we would ask that you authorize the Town Manager to execute the required grant application.

Staff Recommendation

Provide direction to Manager.

Attachments

- A. FPL EVolution Municipal Agreement (Available in Town Clerk’s Office)
- B. PowerPoint Presentation (Available in Town Clerk’s Office)

End of Agenda Item