



REPORT to the MAYOR and MEMBERS of the CITY COUNCIL
From the CITY MANAGER

DATE: September 10, 2024

SUBJECT: RESOLUTION AUTHORIZING A PURCHASE
AGREEMENT WITH BEAM GLOBAL FOR SOLAR
POWERED ELECTRIC VEHICLE CHARGING
STATIONS

ISSUING DEPARTMENT: Public Works

SUMMARY:

Issues:

Should the City Council adopt a resolution to authorize a purchase agreement with Beam Global for solar powered electric vehicle charging stations?

Recommendation:

Staff recommends the City Council adopt a resolution to authorize a purchase agreement with Beam Global for solar powered electric vehicle charging stations.

Fiscal Impact:

The cost for the purchase agreement is \$82,516 of which \$72,226 will be reimbursed by grant funds awarded to the La Mesa Park & Recreation Foundation by the San Diego Community Power Clean Energy Grant Program to revenue account 208-48990-301. The purchase agreement of \$82,516 does not include tax, Remote Monitoring and Management System (RMMS) and manufacturer warranties, which will be charged to the Environmental Services account 208-65840-301 in the amount of \$16,817.21.

City's Strategic Goals:

- Promote a high quality of life that current and future generations can afford to call home.

- Invest in infrastructure to serve the needs of the community.

Climate Action Plan Reduction Strategy:

- E-5 Solar Photovoltaic Program – Promote efforts that increase the generation of local renewable energy, such as solar, within the City
- T-5 Alternative Refueling Infrastructure Development – Support community-wide use of alternative fuel vehicles through expansion of alternative vehicle refueling infrastructure.

BACKGROUND:

In March 2018, City Council approved the Climate Action Plan (CAP), which charts a course to reduce community-wide greenhouse gas (GHG) emissions and provides a roadmap by which La Mesa can reduce GHG emissions through the implementation of measures and key actions in energy, transportation, solid waste, water, and green infrastructure. The CAP is currently being updated as committed to in the 2018 CAP.

The CAP includes Measure T-5, Alternative Refueling Infrastructure Development, which details the City's commitment to supporting community-wide use of alternative fuel vehicles through expansion of alternative refueling infrastructure, including electric vehicle (EV) charging stations, and Measure E-5, Solar Photovoltaic Program, to install solar photovoltaic (PV) systems on residential and non-residential property in the community, and identify opportunities for municipal installations on City property.

Additionally, it is expected that there will be a large increase in zero-emission vehicles (ZEVs) on California roads due to the Governor of California issuing Executive Orders (EO) to achieve the following goals relating to EVs and EV charging: EO B-16-2012: At least 1.5 million ZEVs on California roadways by 2025, with easy access to ZEV infrastructure, or EV charging stations; EO B-48-2018: At least 5 million ZEVs on California roadways by 2030 and 250,000 ZEV chargers by 2025; and EO N-79-20: In-state sales of passenger cars and trucks will be 100 percent ZEVs by 2035.

DISCUSSION:

In April 2024, City Council approved Resolution 2024-035 authorizing the application and acceptance of funding for the Energy Efficiency and Conservation Block (EECBG) grant to fund and purchase Beam Global solar-powered EV charging stations. The Beam Global EV ARC 2020 systems (EV ARCs) are large portable electric vehicle charging stations powered by embedded solar panels. These EV ARCs would be made available to the public, encouraging the increased adoption of electric vehicles powered by renewable energy. Providing EV ARCs to La Mesa residents would allow residents to

charge their electric vehicles for free. Beam Global, founded in 2006, is a San Diego-based company that has provided their services and products to over 100 other U.S. jurisdictions. EV ARCs are capable of generating and storing enough clean, solar electricity to charge up to 265 electric miles in a single day. These mobile chargers offer versatility with battery storage, and use BeamTrak, which follows the sun throughout the day, providing the system the ability to charge electric vehicles during the day, night, and on cloudy days. This means the solar array will move to maintain the best incidence angle with the sun.

Additionally, the solar charging and battery system are an asset in the case of a power grid failure, providing energy resiliency. Due to the mobile nature of EV ARCs, they do not need to undergo permitting, construction, or electrical work. Therefore, the purchase of the EV ARCs will help accelerate La Mesa's switch to renewable fuel alternatives. An EV ARC includes two electric vehicle charging station ports and can fit in a single standard size parking space. The EV ARCs will be placed in City-managed parking lots and will be available for use by City fleet EVs and for public use.

A total of approximately 40 EV ARCs are deployed throughout the San Diego region. Other San Diego jurisdictions that have purchased EV ARCs include the City of San Diego (6 units), the Port of San Diego (1 unit), and the County of San Diego (11 units). Government agencies such as the California Department of Transportation, the US Navy, and the US Marine Corps also have deployed EV ARCs.

In June 2024, two EV ARCs were purchased and the assembly of the units is in production. The purchase agreement with Beam Global includes the purchase of a third EV ARC and the Remote Monitoring and Management System (RMMS) for an additional 9 years (for a total of 10 years) and Manufacturer Warranties for an additional 4 years (for a total of 5 years) for all three EV ARCs. The third EV ARC will be purchased by the City and \$72,226 will be reimbursed by grant funds received by the La Mesa Park & Recreation Foundation from the San Diego Community Power Clean Energy Grant Program award. The remaining balance of \$16,817.21 for tax, RMMS, and manufacturer warranties will be charged to Environmental Services account 208-65840-301.

CONCLUSION:

Staff recommends the City Council adopt a resolution to authorize a purchase agreement with Beam Global for solar powered electric vehicle charging stations.

Reviewed by:

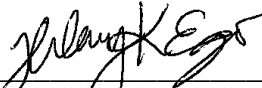


Greg Humora
City Manager

Respectfully submitted by:



Michael Throne, PE
Director of Public Works



Hilary Ego
Environmental Sustainability Manager

Attachments:

- A. Resolution
- B. EV ARC Pricing