City Council Agenda Item

City Council Meeting Date: June 6, 2023

TO: Dean Albro, City Manager

FROM: Steven Valle, Administrative Analyst
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Charles Berry, Utility Director
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SUBJECT: Adoption of Resolution No. 6579(23) Authorizing Receipt of 2022 Clean Air Grants for Infrastructure Program Award from the Santa Barbara County Air Pollution Control District to Purchase Solar-Powered Electric Vehicle Chargers for Fleet Charging at the Corporate Yard, and Allowing Use of Greenhouse Gas Allowance Proceeds to Fund Projects Supporting Fuel-Switching and Zero-Emission Vehicles, and Approving Supplemental Appropriations

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Recommendation:

Staff recommends the City Council adopt Resolution No. 6579(23) (Attachment 1), which will:

1) Amend Resolution No. 5889(14) to allow the use of Greenhouse Gas Allowance proceeds to fund projects supporting fuel-switching and zero-emission vehicles;

2) Authorize the City Manager, or designee, to execute all documents necessary to receive a grant award of $100,000 from the Santa Barbara County Air Pollution Control District's 2022 Clean Air Grants for Infrastructure Program (Program) to use towards the purchase of two Electric Vehicle Autonomous Renewal Charger (EV ARC) solar-powered electric vehicle chargers manufactured by Beam Global for fleet vehicle charging at the Corporate Yard; and

3) Approve supplemental appropriations for the Project.

Background:

On September 23, 2020, Governor Newsom issued Executive Order (EO) N-79-20 (Attachment 2), setting statewide goals to phase out gasoline-powered cars and trucks in

California. Under that EO, 100% of in-state sales of new passenger cars and trucks are to be zero-emission by 2035, 100% of in-state sales of medium- and heavy-duty trucks and buses are to be zero-emission by 2045, where feasible, and 100% of off-road vehicles and equipment sales are to be zero-emission by 2035, where feasible.

Through EO N-79-20, the Governor also directed the California Air Resources Board (CARB) and other State agencies to develop regulations, or take other steps within existing authority, to achieve the goals outlined in EO N-79-20. On April 28, 2023, CARB issued the Advanced Clean Fleet Regulation (CARB ACFR) requiring fleets throughout the state, including the City, to ensure 50% of vehicle purchases are zero-emission beginning in 2024 and 100% of vehicle purchases are zero-emission by 2027. The CARB ACFR only applies to fleet vehicles considered Class 2b or greater, and there are exemptions to ensure vehicles used for emergency operations, such as police, fire, and urban forestry are not affected.

Out of the 324 vehicles that the City's Fleet Division maintains, 118 are considered Class 2b or greater, subjecting those vehicles from the CARB ACFR requirement. Over 60% of the Class 2b or greater Fleet vehicles are not considered emergency operation vehicles and will be subject to comply with the CARB ACFR beginning in 2024.

Due to the CARB ACFR requirements and in anticipation of further regulatory efforts to advance transportation electrification within the State, staff has sought funding opportunities to assist in the electrification of City-maintained Fleet vehicles.

Discussion:

The Program was established to benefit public health through emissions reductions by providing funding toward the installation of fueling or energy infrastructure to fuel or power covered sources. The grant funds were made available through the California Air Resources Board's Carl Moyer Program, Community Air Protection Program, Funding Agricultural Replacement Measures for Emission Reductions (FARMER) and California Department of Motor Vehicles surcharge revenue.

Projects eligible for the Program include, but are not limited to, the following:

- Electric Vehicle Battery Charging Station: New, conversion of existing, or expansion to existing non-residential level 2 or greater electric vehicle battery charging stations, including, but not limited to:
    - Public Chargers: Non-residential charging stations that at a minimum must be accessible to the public daily during regular business hours;
    - Workplace charging;
    - Fleet charging;

  - Direct current fast chargers along freeway roadway corridors; and

  - Long-term charging at destination areas such as airports, hotels, schools, hospitals, and shopping centers.

- Alternative Fueling Stations: New, conversion of existing, or expansion to existing hydrogen or natural gas fueling stations.

Staff applied for the Program in August of 2022. The application submitted by the City included a plan to purchase and install two EV ARC solar-powered level two charging stations at the Corporate Yard for Fleet vehicle charging. The electric vehicle chargers will not be available to the public. They will be used by Fleet as a fueling resource for future electric vehicles added to the City's fleet, as well as a transportable energy resource.

The City's grant application was approved in November 2022 and City has been offered a total grant award of up to $100,000 or 60% of total eligible project costs, whichever is less, to purchase two EV ARC level 2 charging stations. The award is contingent upon the City Council's acceptance of the grant and affirmation of the City Manager's authority to execute the grant award documentation.

The EV ARC solar-powered electric vehicle charging stations are grid-independent, transportable and 100% sustainable, providing the City an electric vehicle charging option that is solely powered by solar energy. Each EV ARC station features a 222 square foot photovoltaic array with a system capacity of 4.3 kW and "BeamTrak" sun tracking technology, which allows the stations to capture as much solar energy as possible in any location. The stations are rated to withstand wind speeds of up to 120 miles per hour, are flood-proofed up to 9.5' and have a 9' minimum clearance height.

Additionally, the EV ARC stations will contain four J1772 plugs (two plugs per station) each providing between 1.9 kW to 7.2 kW of power per plug depending on the amount of power available. This amount of power will provide an electric vehicle with approximately 4 to 25 miles of driving range per hour charged, depending on the electric vehicle's efficiency (MPGe[1]).

Further, the EV ARC stations will serve the City as emergency preparedness and energy resiliency assets. Each station will include a 42 kWh battery storage system with an emergency power panel that is able to provide up to 6 kW of continuous power in the event of an emergency or grid failure. The emergency power panel outlets will be protected by a locked metal cover plate with the following outlets included in each panel:

- One 240 V National Electrical Manufacturers Association (NEMA) L14-30 Outlet;

- Two 120 V NEMA 5-20 Duplex Outlets; and

[1] Miles per gallon of gasoline equivalent.

- Two 120 V NEMA L5-20 Outlets.

The EV ARC is also included in the U.S. Federal Emergency Management Agency's Authorized Equipment List and has been granted a statewide contract[2] by California's Department of General Services (DGS). DGS allows local jurisdictions to piggyback on their procurement process[3] allowing the City to benefit from the State's open procurement process.

Many electric vehicle options, both grid-tied and non, were considered during the initial application preparation and review processes. The EV ARC stations were chosen by staff based on factors including ease of deployment, projected total cost of ownership, and the current and anticipated needs of the City. Since the charging stations are solar-powered and are not grid-tied, there will be no recurring energy costs associated. The stations are also transportable and equipped with an emergency power panel, enabling the chargers to act as a mobile emergency preparedness and energy resiliency asset. APCD has pre-inspected the City's Corporate Yard parking lot and deemed it a feasible location for the charging stations.

Use of Greenhouse Gas Allowance Proceeds

Resolution No. 5889(14) adopted by the City Council on February 18, 2014, allows the City's Electric Utility to use proceeds from the sale of its free Greenhouse Gas (GHG) allowance proceeds for the following purposes:

1. 4kv to 12kv electrical circuit conversions;

2. Upgrades at the City's geothermal facilities;

3. LED street light conversions;

4. Renewable power procurement; and

5. In 2020 a one-time distribution of proceeds from the sale of the City's free GHG allowances to utility customers with electric accounts, in a nonvolumetric manner, in the form of on-bill or off-bill distributions[4].

Use of GHG allowance proceeds to fund projects supporting fuel-switching and zero-emission vehicles, is also a permissible use of GHG allowance proceeds.

[2] State of California Contract ID 1-22-61-16.
[3] Authorized by Lompoc Municipal Code section 3.36.040.
[4] Resolution No. 6329(20).

Fiscal Impact:

The APCD's Clean Air Infrastructure grant award would be issued to the City on a reimbursement basis towards eligible project costs. That reimbursement will be made once the City has paid for the entire cost of the project. A breakdown of the EV ARC procurement and project costs is detailed below:

Item	Cost
Two (2) EV ARC 2020 Electric Vehicle Charging Stations	$167,162.52
Shipping	0.00
Sales and Use Taxes (@ 8.75%)	14,626.72
Installation Cost (Paint & Signage)	5,000.00
Contingency Allocation (@ 1.7%)	3,210.76
Total Project Cost	190,000.00
APCD Grant Reimbursement	- 100,000.00
Net Project Cost	**$90,000**

Since the planned siting locations of the EV ARC stations are in California, the City will not incur shipping charges on the delivery of the stations, an estimated savings of $10,200.

There will be no net impact to the City's General Fund due to the use of GHG credits.

To account for the procurement of the capital assets provided by the infrastructure grant, supplemental appropriations are requested as follows:

Funding Resources	Amount
752-100520 Restricted Cash Electric Carbon Credit Proceeds (CARB Credits) / 752 Electric Fund Restricted Fund Balance	$90,000.00
752REL-455040 SBCo APCD Grant	100,000.00
Total Resources	**$190,000.00**
Additional Appropriations	**Amount**

752EDS-710005 Capital Outlay – Charging Stations	$90,000.00
752EDS-710005 Capital Outlay – Charging Stations	100,000.00
Total Appropriations Requested	**$190,000.00**

Conclusion:

The adoption of Resolution No. 6579(23) will allow the City to ensure compliance with fast-approaching regulatory requirements relating to transportation electrification is attainable, with financial assistance to do so in the form of a grant from APCD's 2022 Clean Air Infrastructure Grant Program.

Respectfully submitted,

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Steven Valle, Administrative Analyst

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Charles Berry, Utility Director

APPROVED FOR SUBMITTAL TO THE CITY COUNCIL:

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Dean Albro, City Manager

Attachments: 1) Resolution No.6579(23) Accepting APCD Grant for EV Chargers
2) Executive Order N-79-20