



City Council Agenda Item

City Council Meeting Date: July 6, 2021

TO: Jim Throop, City Manager

FROM: Steven Valle, Utility Conservation Coordinator
s_valle@ci.lompoc.ca.us

SUBJECT: Adoption of Resolution No. 6431(21) Accepting Grant Award from the Santa Barbara County Air Pollution Control District's Clean Air Infrastructure Program to Partially Fund Solar-Powered Publicly-Accessible Charging for Electric Vehicles at the Lompoc Valley Medical Center (LVMC); Purchase of Two EV ARC Chargers; Approve Memorandum of Understanding with LVMC for Placement of Charging Stations in Parking Lot at 1515 East Ocean Avenue

Recommendation:

Staff recommends the City Council:

- 1) Approve the purchase and installation of two (2) Electric Vehicle Autonomous Renewable Charger (EV ARC) solar-powered electric vehicle charging stations (Project) and authorize the City Manager to execute any documents necessary to make the purchase;
- 2) Adopt Resolution No. 6431(21) (Attachment 1), which will:
 - a. Accept the Clean Air Infrastructure Grant award from the Santa Barbara County Air Pollution Control District to fund a portion of the Project;
 - b. Grant the City Manager, or his designee, authority to execute any and all necessary grant documents related to the Clean Air Infrastructure Grant Program;
 - c. Grant the City Manager authority to offer publicly accessible electric vehicle charging at both EV ARC stations at no cost to station users;
 - d. Approve supplemental revenue and appropriations to allow for the receipt of the grant and acquisition and installation of the Project as follows:

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- i. Supplemental revenue of \$100,000 recognizing the Santa Barbara County Air Pollution Control District Clean Air Infrastructure Grant Program award;
 - ii. Supplemental appropriations of \$75,000 of Electric Public Benefit Fund's investment in renewable energy sources to fund the City's share of the Project;
 - iii. Supplemental appropriation of \$175,000 for the acquisition and installation of the Project;
 - e. Approve the payment of the \$75,000 City contribution from the Electric Public Benefit Fund to the Electric Utility Fund to provide for the acquisition and installation of the Project from the Electric Utility Capital Outlay – EV Charging Stations account;
- 3) Approve placing both EV ARC electric vehicle charging stations within the Lompoc Valley Medical Center's (LVMC) parking lot located at 1515 East Ocean Avenue; and
 - a. Authorize the City Manager, or designee, to execute a Memorandum of Understanding with LVMC (Attachment 2); or
- 4) Provide alternate direction.

Background:

In accordance with Governor Newsom's zero-emission by 2035 executive order (N-79-20), staff has begun examining the City's potential to offer publicly accessible electric vehicle charging to the Lompoc community, as well as funding opportunities to assist with electric vehicle related projects and programs. The City does not currently own any publicly accessible electric vehicle charging stations and staff has found that there is a miniscule amount of electric vehicle charging stations within the Lompoc community.

The Santa Barbara County Air Pollution Control District's (SBAPCD) Clean Air Infrastructure Grant Program was established to benefit public health 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 Program and California Department of Motor Vehicles surcharge revenue.

Projects eligible for the SBAPCD's Clean Air Infrastructure grant include, but are not limited to, the following:

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- 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.

In addition, projects eligible for the Clean Air Infrastructure grant must meet the following criteria:

- 1) Located in a low-income community, as defined by AB 1550;
- 2) Accessible to the public; and
- 3) Located in a strategic Electric Vehicle Supply Equipment (EVSE) siting location, as defined by the Central Coast Go-Zero: Zero Emission Vehicle Readiness Implementation Plan – Final Report.

City staff applied for the Clean Air Infrastructure Grant Program in October 2020. The initial application submitted by the City included a plan to install two grid-tied electric vehicle charging stations, one level two alternating current (AC) charging station and one level three direct current (DC) charging station.

Since submitting the application, staff has worked with SBAPCD to better recognize the City's current EVSE needs and has revised the initial application to include two EV ARC solar-powered level two charging stations (Attachment 3) in lieu of grid-tied EVSE options.

Discussion:

The SBAPCD approved the City's Clean Air Infrastructure Grant Program application in January of 2021 and has offered the City a total grant award of up to \$100,000 or 70% of total eligible project costs, whichever is less, to purchase two EV ARC level 2 charging stations (see Attachments 34 and 45). This award is contingent upon the City Council's

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acceptance of the grant and affirmation of the City Manager's authority to further execute the grant award documentation.

The EV ARC solar-powered electric vehicle charging stations are grid-independent, transportable and 100% sustainable, providing the community an electric vehicle charging option that is solely powered by solar energy. Each EV ARC station features a 222 square foot solar array with "BeamTrak" sun tracking technology, which allows the stations to capture as much solar energy as possible in a given location. The stations are rated to withstand wind speeds of up to 120 miles per hour and would have no issues withstanding the average wind speed of 12 miles per hour in Lompoc. They are also 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 1.9kW to 3.8kW of power per plug. This amount of power will provide an electric vehicle approximately 4 to 15 miles of driving range per hour charged, depending on the electric vehicle's fuel efficiency (MPGe). EV ARC stations are classified as "derated level 2" charging stations, and the amount of power that an EV ARC provides is about half as much as a typical level 2 charging station. This is meant to both prolong battery life and ensure both charging plugs are able to be used simultaneously at any given time, whether day or night.

Further, the EV ARC stations will serve the City as emergency preparedness and energy resiliency assets, as well as a demonstration site that may be utilized to educate the community on nano-grid technologies. Both stations will include a 38 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 lockable metal cover plate with the following outlets included in each panel:

- One (1) 240 V National Electrical Manufacturers Association (NEMA) L14-30 Outlet;
- Two (2) 120 V NEMA 5-20 Duplex Outlets; and
- Two (2) 120 V NEMA L5-20 Outlets

The EV ARC is also included in the U.S. Federal Emergency Management Agency's (FEMA) Authorized Equipment List (AEL) and has been granted a statewide contract (State of California Contract ID 1-18-61-16) by California's Department of General Services (DGS). The DGS allows local jurisdictions to piggyback on their procurement process, as does the City's Purchasing Policy and Procurement Code found in the Lompoc Municipal Code (Ch. 3.36.040), 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

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staff based on factors including ease of deployment, projected maintenance costs, and the needs of the community. Since the charging stations are solar-powered and are not grid-tied, there will be no recurring energy costs associated, allowing the City the ability to offer free electric vehicle charging at these stations to the community.

Memorandum of Understanding with LVMC

Considering the derated classification, the LVMC parking lot located at 1515 East Ocean Avenue has been selected as the test location to situate both EV ARC electric vehicle charging stations due to the ability to serve those employed by the hospital or visiting in an emergency situation. SBAPCD has pre-inspected the LVMC parking lot and deemed it a feasible location for the charging stations. LVMC’s Board of Directors approved the siting of City-owned EV chargers within the hospital’s parking lot on April 22, 2021. Other possible siting locations include, but are not limited to, the following:

- City-owned parking lot located at 117 West Cypress Avenue;
- City Hall parking lot located at 100 Civic Center Plaza; and
- City’s Corporate Yard parking lot located at 1300 West Laurel Avenue.

Staff has prepared a Memorandum of Understanding (MOU) with LVMC for placement of the chargers in the LVMC parking lot (Attachment 2). The MOU will allow the City to place the chargers in the LVMC parking lot for an initial term of three years, following inspection of the chargers and approval of the location by SBAPCD. The City will not pay LVMC for use of its parking lot, but will be responsible to pay for installation, maintenance, and eventual removal of the chargers. LVMC has agreed to the terms of the MOU.

In line with the current state legislation and market trends, staff is continuing to research the feasibility of the City to offer publicly accessible electric vehicle charging throughout Lompoc, as well as the City’s fleet electrification transition.

Fiscal Impact:

The SBAPCD’s Clean Air Infrastructure grant award would be issued to the City on a reimbursement basis towards eligible project costs and will occur 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 EV ARC 2020 Electric Vehicle Charging Stations	\$ 150,402.56
Two Emergency Preparedness Panels	\$ 3,851.40
Shipping – Free within California	\$ 0.00

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Sales and Use Taxes at 8.75%	\$ 13,497.22
Installation Cost (Paint & Signage)	\$ 5,844.00
Contingency & Change Orders (@ 0.9%)	\$ 1,404.82
Total Project Cost	\$ 175,000.00
SBAPCD Grant Reimbursement	- \$ 100,000.00
Net Project Cost	\$ 75,000.00

Since the planned siting location of the EV ARC stations is located in California, the City will not incur shipping charges on the delivery of the stations, an estimated savings of \$10,200, as provided for by the State of California Contract ID 1-18-61-16.

There is no direct impact to the City's General Fund due to the adoption of Resolution No. 6431(21) accepting SBAPCD grant funds to offer free electric vehicle charging at LVMC. However, the City's General Fund will receive approximately \$3,000 from the purchase of the stations (1% Measure I use tax and 1% Bradley-Burns sales tax).

There are also no additional direct fiscal impacts to the City's Electric Utility Fund because all expenditures related to the project have been approved and budgeted using resources provided through Public Benefit (PB) charges. The PB charge is a dedicated, state-mandated charge applied to electric customer revenues, and subsequently budgeted as the Electric PB Fund. Providing for research, development and demonstration projects, as well as renewable energy sources and technologies are allowable uses of PB resources.

To account for the procurement of the capital assets provided by the infrastructure grant, supplemental appropriations are recommended for the full estimated project amount of \$175,000 to Account 752EDS-710005 – Capital Outlay – Charging Stations. Funding for the project is recommended to be from the following accounts:

Resources - Accounts	Amount
738EPB-572030 – Investment in Renewed Energy Sources	\$ 75,000.00
752REL-455040 – SBAPCD Grant	\$ 100,000.00
Total Resources	\$ 175,000.00

These supplemental appropriations are included in the proposed Resolution as well as the payment of the \$75,000 from the Electric Public Benefit Fund to the Electric Utility Fund to provide the entire \$175,000 in Account 752EDS-710005 – Capital Outlay – Charging Stations for the acquisition and installation of the Project.

Conclusion:

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The adoption of Resolution No. 6431(21), purchase of the EV ARC chargers, and approval of the MOU will allow the City to widen its visibility in the electric vehicle community by offering free, publicly accessible electric vehicle charging at the LVMC parking lot located at 1515 East Ocean Avenue, with financial assistance to do so in the form of a grant from Santa Barbara County's SBAPCD Clean Air Infrastructure Grant Program.

Respectfully submitted,

Steven Valle, Utility Conservation Coordinator

APPROVED FOR SUBMITTAL TO THE CITY MANAGER:

Charles Berry, Utility Director

APPROVED FOR SUBMITTAL TO THE CITY COUNCIL:

Jim Throop, City Manager

- Attachments:
- 1) Resolution No. 6431(21)
 - 2) Memorandum of Understanding
 - 3) Beam EV Quote Dated 6-24-2021
 - 4) Beam EV ARC Structure #1
 - 5) Beam EV ARC Structure #2