

BOARD MEETING DATE: February 2, 2024

AGENDA NO. 7

PROPOSAL: Execute Contract to Demonstrate Off-Grid Electrical Fast Charging Solution to Support UCLA's Electric Fleet

SYNOPSIS The University of California, Los Angeles (UCLA) is committed to a sustainability goal and has a comprehensive transportation plan to reduce its environmental impact, including electrifying its fleet. However, upgrading the electrical infrastructure will take some time. To address the infrastructure challenge, UCLA plans to demonstrate an interim off-grid charging solution in partnership with GenCell, Inc. This action is to execute a contract with GenCell, Inc. to develop and demonstrate an off-grid fast charging solution to support UCLA's electric fleet in an amount not to exceed \$200,000 from the Clean Fuels Program Fund (31).

COMMITTEE: Technology, January 19, 2024; Recommended for Approval

RECOMMENDED ACTION:

Authorize the Chair, or on the Chair's behalf, the Executive Officer, to execute a contract with GenCell, Inc. to develop and demonstrate an off-grid fast charging solution to support the University of California, Los Angeles' (UCLA) electric fleet in an amount not to exceed \$200,000 from the Clean Fuels Program Fund (31).

Wayne Natri
Executive Officer

AK:MW:VP:MH

Background

UCLA is committed to achieving an aggressive sustainability goal and has devised a comprehensive transportation plan to minimize its environmental impact on the community. A critical element of this plan is the electrification of its fleet which consists of a range of vehicles, from heavy-duty buses to golf carts. With over 1,000 vehicles on campus, UCLA has set a near term target of operating 60 percent of its fleet

on alternative energy sources. While UCLA is working on upgrading its electrical infrastructure, this process will take several years. The challenges with infrastructure upgrades has implications for UCLA to transition to an electric fleet and meet its decarbonization goals, which also impacts the regional air quality. In partnership with UCLA, GenCell, Inc. (GenCell) intends to pilot the GenCell EVOX charging solution to assess its full capability and verify performance. GenCell envisions a long-term partnership to promote sustainable transportation and infrastructure development.

Proposal

GenCell proposes to install and evaluate the novel off-grid direct current (DC) fast charging solution, GenCell EVOX. GenCell will provide and install the electrical infrastructure necessary to provide the fast-charging capability at a UCLA vehicle maintenance facility for the expansion of electric vehicles in place of a grid upgrade. Vehicles include campus police, maintenance, hospital transport buses, and other administrative cars. The unit is intended to transform the existing single-phase power to three-phase power and increase the available grid power using hydrogen to power a fuel cell. In addition, this unit is capable of supplying off-grid power during grid power outages.

South Coast AQMD funding will be used to develop, build, test, validate and demonstrate this charging solution. This action is to execute a contract with GenCell that does not exceed \$200,000 from the Clean Fuels Program Fund (31).

Sole Source Justification

Section VIII.B.2 of the Procurement Policy and Procedure identifies four major provisions under which a sole source award may be justified. This request for sole source award is made under the following justifications: B.2.c.(2) The project involves the use of proprietary technology; B.2.C.(3) The contractor has ownership of key assets required for project performance; and B.2.d.(1) Project involving cost-sharing by multiple sponsors. The proposed project will demonstrate GenCell's proprietary technology and include in-kind contributions and cost-share by UCLA and GenCell.

Benefits to South Coast AQMD

Projects to support the development and demonstration of zero-emission vehicle technologies and supporting infrastructure are included in the Technology Advancement Office Clean Fuels Program 2023 Plan Update under the "Zero Emission Infrastructure." This project is to develop and demonstrate an off-grid DC fast-charging solution for goods movement electrification. Implementation of this project is consistent with the 2022 AQMP, which relies on zero-emission technologies to achieve National Ambient Air Quality Standards for ozone and PM2.5. Additionally, this project assists in reducing diesel particulate matter, which is a carcinogen, by advancing zero-emission vehicle technologies and infrastructure. The successful demonstration of the fast-charging solution system, which transforms alternative energy sources including solar,

grid, wind, and fuel cell and provides off-grid power during grid loss, will serve as a model to build confidence among end-users and provide rapid deployment and mobility around their facilities, and offer temporary solutions to electrification projects.

Resource Impacts

The total cost for the proposed project is \$1,187,092, of which South Coast AQMD’s proposed contribution will not exceed \$200,000 from the Clean Fuels Program Fund (31), as summarized below.

Proposed Zero Emission Port Demonstration Project Costs

Source	Funding Amount	% of Total Cost
GenCell, Inc.	\$805,500	68
UCLA	\$181,592	15
South Coast AQMD (proposed)	\$200,000	17
Total	\$1,187,092	100

Sufficient funds are available in the Clean Fuels Program Fund (31) for this proposed project. The Clean Fuels Program Fund (31) is established as a special revenue fund resulting from the state mandated Clean Fuels Program. The Clean Fuels Program, under Health and Safety Code Sections 40448.5 and 40512 and Vehicle Code Section 9250.11, establishes mechanisms to collect revenues from mobile sources to support projects to increase the utilization of clean fuels, including the development of the necessary advanced enabling technologies. Funds collected from motor vehicles are restricted, by statute, to be used for projects and program activities related to mobile sources that support the objectives of the Clean Fuels Program.