

BOARD MEETING DATE: November 3, 2017

AGENDA NO. 5

PROPOSAL: Amend Contract to Develop and Demonstrate Catenary Zero Emissions Goods Movement System

SYNOPSIS: In April 2013 the Board awarded a contract to Siemens Industry Inc. to develop and demonstrate a zero emission goods movement system using overhead catenary technology. Unexpected subsurface obstructions on Alameda Street in Carson caused delays and added cost for Siemens to redesign the system, including adding previously unbudgeted safety barriers required by the City of Carson around above-ground foundations. This action is to amend the contract with Siemens to cofund safety barriers, adding additional funds not to exceed \$430,000 from the Clean Fuels Fund (31).

COMMITTEE: Technology, October 20, 2017; Recommended for Approval

RECOMMENDED ACTION:

Authorize the Executive Officer to amend the contract with Siemens Industry Inc., adding additional funds not to exceed \$430,000 from the Clean Fuels Fund (31), to cofund safety barriers as part of the development and demonstration of the catenary zero emissions goods movement system.

Wayne Natri
Executive Officer

MMM:FM:NB:JI

Background

The SCAQMD has identified the development and deployment of zero emissions goods movement transportation systems as one of the agency's top priorities in order to attain federal air quality standards. On April 5, 2013, the Board awarded a contract to Siemens Industry Inc. to construct a one-mile catenary system and develop and demonstrate a catenary hybrid electric class 8 truck. During construction, an unidentified pipeline was discovered under the roadway preventing Siemens from using their design for a below-grade foundation for the poles that support the catenary lines

along Alameda Street in the City of Carson. Siemens proposed a redesign of the foundations for the poles to be entirely above ground. The City of Carson approved the new design and required Siemens to employ safety barriers around the above-ground foundations to prevent serious damage or injury to vehicles and occupants that may come into contact with the foundations. The redesign and the safety barriers resulted in added cost and delays for Siemens, including eliminating installation of a pantograph and testing of a fourth truck due to commensurate scheduling conflicts.

Proposal

The addition of crash barriers and other safety features has resulted in an increase in project costs of \$892,869. The necessary permits for the redesign of the catenary pole foundations and safety barriers were approved by the City of Carson and Siemens completed the construction of the system. The demonstration of the trucks on the catenary began July 1, 2017, and will continue through the end of December 2017.

This action is to amend the contract with Siemens, adding an amount not to exceed \$430,000, to cover a portion of the costs of required safety features. The elimination of the fourth truck resulted in an additional \$200,000 in funding becoming available from the Los Angeles County Metropolitan Transportation Authority (Metro), and Metro has agreed to allow the funds to be used towards the safety barriers.

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 when project funding does not come from federal monies. For the Siemens contract, a sole source recommendation is made under provision B.2.d.: Other circumstances exist which in the determination of the Executive Officer require such waiver in the best interest of the SCAQMD. Specifically, these circumstances are: B.2.d.(1) Project involving cost-sharing by multiple sponsors. The safety barriers will also be cost-shared by Siemens and Metro. Additional circumstances are B.2.c.(1) the unique experience and capabilities of the proposed contractor or contractor team; and B.2.c.(2) the project involves the use of proprietary technology.

Benefits to SCAQMD

SCAQMD's Clean Fuels Program has been active in funding the development and demonstration of zero emission and near-zero emission electric transportation and goods movement technologies. The proposed project is included in the *Technology Advancement Office Clean Fuels Program 2017 Plan Update* under the category "Electric/Hybrid Technologies & Infrastructure". The Siemens eHighway technology infrastructure supports a variety of architectures including electric and hybrid electric trucks.

Resource Impacts

The total project cost for the safety barriers is estimated at \$892,869, of which SCAQMD's cost-share shall not exceed \$430,000 from the Clean Fuels Fund (31), in addition to in-kind cofunding of \$262,869 from Siemens Industry Inc. and \$200,000 in cofunding from Metro redirected from another task no longer being performed.

Sufficient funds are available from the Clean Fuels Fund (31), 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.