



**THE PORT
OF LOS ANGELES**

Executive Director's
Report to the
Board of Harbor Commissioners

DATE: JUNE 11, 2019

FROM: ENVIRONMENTAL MANAGEMENT

SUBJECT: RESOLUTION NO. _____ - GRANT ACCEPTANCE AND APPROVAL OF A GRANT AGREEMENT AWARD NO. ARV-17-049 WITH THE CALIFORNIA ENERGY COMMISSION AND APPROVAL OF A FUNDING AGREEMENT WITH THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT TO IMPLEMENT AN ADVANCED INFRASTRUCTURE DEMONSTRATION PROJECT

SUMMARY:

Staff requests that the Board of Harbor Commissioners (Board) accept and approve a California Energy Commission (CEC) Grant Agreement Award No. ARV-17-049, in the amount of \$7,842,270 to fund the Zero Emission Freight Vehicle Advanced Infrastructure Demonstration Project (Project) with West Basin Container Terminal (WBCT) and Wireless Advanced Vehicle Electrification, Inc. (WAVE). The Project will construct and demonstrate an advanced infrastructure system developed by WAVE to support the operations of 10 battery-electric yard tractors at WBCT. The City of Los Angeles Harbor Department (Harbor Department) will cover in-house staff time for managing the grant estimated at \$80,000.

Separately, the 10 battery-electric yard tractors will be funded under a 2016 Targeted Air Shed Grant (TASG), between the U.S. Environmental Protection Agency (EPA) and the South Coast Air Quality Management District (SCAQMD). SCAQMD applied for the TASG on behalf of the Harbor Department and WBCT. In order to support the TASG, staff also requests that the Board approve a Funding Agreement with SCAQMD in the amount of \$312,500 to provide a portion of the funding for the purchase of the 10 battery-electric yard tractors.

The total cost of the Project is estimated to be \$11,349,155 and is anticipated to be funded by the \$7,842,270 CEC grant and \$3,506,885 in matching funds. Acceptance and approval of the proposed Grant Agreement would require the Harbor Department to contribute aggregate matching funds of \$392,500, comprised of \$80,000 in staff time to manage the CEC grant and \$312,500 in cash funding for the purchase of the 10 battery-electric yard tractors.

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RECOMMENDATION:

It is recommended that the Board of Harbor Commissioners (Board):

1. Find that the Director of Environmental Management has determined that the proposed action is administratively exempt from the requirements of the California Environmental Quality Act (CEQA) under Article II Class 2(f), of the Los Angeles City CEQA Guidelines;
2. Accept and approve the Grant Agreement between the City of Los Angeles Harbor Department and the California Energy Commission in the amount of \$7,842,270;
3. Authorize the Executive Director to execute and the Board Secretary to attest to said Grant Agreement for and on behalf of the Board;
4. Approve the delegation of authority to the Executive Director to accept and execute non-significant changes to the Grant Agreement, as defined by the California Energy Commission Grant Award Terms and Conditions and with approval as to form and legality by the Office of the City Attorney;
5. Approve the Funding Agreement between the City of Los Angeles Harbor Department and the South Coast Air Quality Management District in the amount of \$312,500;
6. Authorize the Executive Director to execute and the Board Secretary to attest to said funding agreement for and on behalf of the Board;
7. Adopt Resolution No. _____.

DISCUSSION:

Background/Context – On February 23, 2018, the Harbor Department submitted a grant proposal to the CEC under the Alternative and Renewable Fuel Vehicle Technology Program (ARFVTP). The Harbor Department applied for the grant on behalf of WBCT, who developed the proposed Project to provide the infrastructure required to support 10 battery-electric yard tractors that will be purchased under the EPA's TASG grant described above. On April 6, 2018, the CEC offered the Harbor Department a preliminary grant award in the amount of \$7,842,270 to fund the proposed Project (Transmittal 1). The grant award will fund the development, construction, and installation of a series of advanced wireless charging systems at the WBCT.

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The grant award is contingent upon the resolution of CEQA requirements, and commitments to the proposed match funding.

Proposed Project – The proposed Project will install an advanced charging system to support the 10 battery-electric yard tractors that will be operated at WBCT under the CEC grant (Transmittal 2). These installations will be manufactured by WAVE, utilizing an inductive charging system. Inductive charging uses electromagnetic fields to transfer energy wirelessly between two pads. In the versions built by WAVE, the charging pad is installed in the ground, which sends energy to a receiving pad installed underneath a battery-electric vehicle. Twelve charging stations will be installed at WBCT: 10 stations at the equipment corral lanes where WBCT currently parks their yard tractors when off-duty; and, two additional stations will be installed on terminal at a central break facility as an opportunity charging station. The estimated time to fully charge a yard tractor using this technology could be as little as two hours. The opportunity stations will be able to provide quick top-off charges during a work shift or during scheduled work breaks. The 10-station system at the equipment corral will also demonstrate a battery storage system to minimize peak-demand charges that will result from a sudden influx of 10 high-power yard tractors all charging off the electrical grid at the same time. In order to demonstrate these charging stations, the Harbor Department will contract with a third-party construction company via a competitive bid process to bring enough power to the site, as well as to construct the peak-shaving system.

The 10 battery operated yard tractors would be funded under a separate grant from the EPA to the SCAQMD, a portion of which SCAQMD has offered to pass along to the Harbor Department, subject to a cost share. This separate grant and cost share is described below.

In October 2017, the EPA awarded a Targeted Air Shed Grant (TASG) to the SCAQMD to deploy battery-electric yard tractors at the ports of Los Angeles and Long Beach. The SCAQMD has agreed to provide a portion of that grant award to WBCT to assist in funding 10 battery-electric yard tractors at its facility. The WBCT will pay the standard cost for a diesel yard tractor (approximately \$120,000), and the SCAQMD will utilize the EPA award to provide the difference between this standard cost of a diesel yard tractor and the cost of each battery-electric yard tractor. Additionally, under the TASG, pending Board approval, the Harbor Department proposed to provide SCAQMD \$312,500 funding towards the purchase of the battery-electric yard tractors as well as the requisite infrastructure for charging the tractors. The purchase of these yard tractors will be managed by the SCAQMD on behalf of the WBCT, with the Harbor Department providing additional funding as part of the overall match share requirements of the TASG (Transmittals 3-4).

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Project Budget – The total cost of the Project is estimated to be \$11,349,155 with funding to be provided through March 2022. Funding for the Project will be provided mostly through the \$7,842,270 CEC grant award with the remaining \$3,506,885 to be provided through matching funds. Matching funds required under this grant will be provided by WAVE, WBCT and the Harbor Department in the following amounts:

WAVE	\$126,885
WBCT	\$2,987,500
Harbor Department	\$392,500
Total Matching Funds	\$3,506,885

The total proposed matching funds will be fulfilled as follows:

1. Purchase of 10 battery-electric yard tractors (WBCT and Harbor Department);
2. Staff time on non-recurring engineering (WAVE);
3. Installation of the necessary electrical charging infrastructure (Harbor Department, via a to-be-determined construction company); and
4. Staff time to manage the Project (Harbor Department).

Project Schedule and Budget Updates – Minor shifts in project scope have been made since the original proposal and preliminary award agreement was drafted and formally approved by the CEC, and these discussions have caused a significant delay. WBCT has yet to select their final yard tractor provider, and CEC staff had to work with the Harbor Department and team to clarify several minor discrepancies between the proposed budget and the draft agreement. The Project team also decided to use a competitive bidding process to determine the battery manufacturer for the peak-shaving system. The Project schedule will be adjusted to accommodate these delays, and the official budget sheets updated to reflect the final project scope. CEC staff has requested that the Harbor Department accept the Grant Agreement as approved by the CEC Board, with the understanding that changes to the scope and budget will be made in accordance with that agreement's provisions. This Board item requests delegation of authority to the Executive Director to approve project schedule and budget updates that fall within the grant parameters. Requests that fall outside the grant parameters would require Board approval.

Sub-Recipient Grant Agreement(s) – The Project will be implemented through subrecipient agreements with WAVE and WBCT. Subrecipients are required to comply

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with all conditions and schedules in accordance with the CEC Grant Agreement. Staff will return to the Board for approval of the subrecipient agreements.

ENVIRONMENTAL ASSESSMENT:

The proposed action is the approval of a proposed Funding Agreement between the City of Los Angeles Harbor Department and the South Coast Air Quality Management District in the amount of \$312,500, which is an administratively exempt activity. Therefore, the Director of Environmental Management has determined that the proposed action is administratively exempt from the requirements of the California Environmental Quality Act (CEQA) in accordance with Article II Class 2(f) of the Los Angeles City CEQA Guidelines.

FINANCIAL IMPACT:

Acceptance and approval of the proposed Grant Agreement would make the Harbor Department eligible to receive \$7,842,270 in CEC grant funds for the construction and demonstration of an advanced infrastructure system to support the operations of 10 battery-electric yard tractors. In conjunction with requesting acceptance and approval of the proposed Grant Agreement, staff is also requesting the acceptance and approval of a Funding Agreement, which would obligate the Harbor Department to make a \$312,500 matching contribution towards the project.

The table below summarizes the Total Cost of the Project and funding commitments by all participants:

Participants	CEC Funds	TASG Funds *	Match Funds	TOTAL
WAVE	\$3,045,320		\$126,885	\$3,172,205
WBCT *		\$1,787,500	\$1,200,000	\$2,987,500
Harbor Department	\$4,796,950		** \$392,500	\$5,189,450
TOTAL	\$7,842,270	\$1,787,500	\$1,719,385	\$11,349,155

* EPA's TASG funding is considered Match Funds by the CEC, and includes cost-share from the SCAQMD for support of that grant.

** This total represents \$312,500 to support the TASG plus an estimated \$80,000 in Harbor Department staff time.

The Harbor Department, through the Engineering Division, will advertise and issue a bid to design and develop the infrastructure for the Project. The Harbor Department will function as the grant administrator and will pass the CEC grant funds to WAVE, WBCT and the construction contractor. Payments to the subrecipients will be made after CEC distributes funds to the Harbor Department.

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The Harbor Department's financial responsibility as part of the Funding Agreement includes \$312,500 applied towards the purchase of the yard tractors and will be paid to SCAQMD in FY 2020/21. Future fiscal year funding will be requested as part of the annual budget adoption process.

Project funds are anticipated to be spent by all parties as follows:

FY 2019/20	\$380,000
FY 2020/21	\$5,733,105
FY 2021/22	\$5,236,050
TOTAL	\$11,349,155

CITY ATTORNEY:

The office of the City Attorney has reviewed and approved the proposed agreement as to form and legality.

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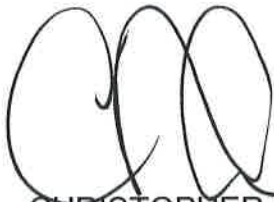
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TRANSMITTALS:

1. Grant Agreement with the California Energy Commission
2. Project Proposal
3. West Basin Container Terminal Letter of Commitment
4. Wireless Advanced Vehicle Electrification, Inc. Match Funds Letter of Commitment
5. South Coast Air Quality Management District Funding Agreement

FIS Approval: MB
CA Approval: Jmd



CHRISTOPHER CANNON
Director of Environmental Management



FOR MICHAEL DiBERNARDO
Deputy Executive Director

APPROVED:



FOR

EUGENE D. SEROKA
Executive Director

CC/yo
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