BOARD MEETING DATE: June 6, 2025 AGENDA NO. 3

PROPOSAL: Adopt Resolution and Accept Terms and Conditions, Recognize Revenue, Execute Agreements to Deploy Battery Electric Trucks and Chargers, and Demonstrate a Fast-Charging Capable Truck, Transfer Funds, and Reimburse General Fund

SYNOPSIS: CARB and CEC awarded South Coast AQMD $41,295,211 for the Strategic Pathways for Extended Electric Drayage (SPEED) project to deploy Volvo Class 8 battery electric trucks and truck chargers in Southern California, develop and demonstrate a high-power charging-capable truck, collect truck and charger operational data, and develop and implement a workforce training program for battery electric trucks and charging equipment under the CARB and CEC joint Advanced Technology Demonstration and Pilot Projects (ATDPP) program. Also, on May 3, 2024, the Board recognized funding for a project to electrify Balboa Island Ferries and install supporting charging infrastructure (BIF) under ATDPP. These actions are to: 1) adopt a Resolution, accept terms and conditions of the ATDPP solicitation for both SPEED and BIF, commit to $3,250,000 as South Coast AQMD cost share for SPEED, authorize the Executive Officer to execute necessary agreements with CARB and CEC, and recognize, upon receipt, $41,295,211 for SPEED into the GHG Reduction Projects Special Revenue Fund (67); 2) transfer $3,250,000 of South Coast AQMD SPEED project cost share into GHG Reduction Projects Special Revenue Fund (67); 3) transfer $2,000,000 as a temporary loan for SPEED from the Clean Fuels Program Fund (31) into GHG Reduction Projects Special Revenue Fund (67); 4) authorize the Executive Officer to execute agreements with Volvo Group North America LLC, WattEV Inc., and the Regents of the University of California, Riverside, to implement the SPEED project; 5) Authorize the Executive Officer to take all necessary steps to carry out this Resolution, including making modifications to the agreements for SPEED and BIF projects; and 6) reimburse the General Fund up to $3,560,000 for SPEED administrative costs from the GHG Reduction Projects Special Revenue Fund (67).

COMMITTEE: Technology, May 16, 2025; Recommended for Approval

RECOMMENDED ACTIONS:

1. Adopt the attached Resolution for Strategic Pathways for Extended Electric Drayage (SPEED) and Electrification of Balboa Island Ferries and Installation of Supporting Charging Infrastructure (BIF) per the CARB and CEC joint Advanced Technology Demonstration and Pilot Projects (ATDPP) solicitation, accept the terms and conditions of the ADTPP solicitation, commit to $3,250,000 as South Coast AQMD cost share for SPEED, execute necessary agreements with CARB and CEC, and recognize, upon receipt, $41,295,211 for SPEED, which includes $22,000,000 from the California Climate Investment Program and the State's General Fund and $19,295,211 from CEC's Clean Transportation Program funds of which $3,560,000 will be used for administrative costs for South Coast AQMD, into the GHG Reduction Projects Special Revenue Fund (67);
2. Transfer up to $3,250,000 from the Clean Fuels Program Fund (31) into the GHG Reduction Projects Special Revenue Fund (67) for SPEED project cost-share by South Coast AQMD;
3. Transfer up to $2,000,000 as a temporary loan for SPEED, as needed, from the Clean Fuels Program Fund (31) into the GHG Reduction Projects Special Revenue Fund (67);
4. Authorize, upon recognition and receipt of award funding, the Executive Officer to execute agreements for SPEED with the following entities:
    a. Volvo Group North America LLC. to deploy Class 8 battery electric trucks and Combined Charging System (CCS) ports, demonstrating a high-power charging-capable truck, battery recycling, and conduct workforce training, public engagement, and media communication in an amount not to exceed $37,428,950, consisting of $35,428,950 from the GHG Reduction Projects Special Revenue Fund (67) and, pending Board approval, $2,000,000 from the Mobile Source Air Pollution Reduction Fund (23);
    b. WattEV, Inc. to develop a truck charging facility with 15 CCS ports and chargers in an amount not to exceed $4,999,725 from the GHG Reduction Projects Special Revenue Fund (67);
    c. The Regents of The University of California, Riverside (UCR), to conduct data collection for the deployed trucks and chargers in an amount not to exceed $556,536 from the GHG Reduction Projects Special Revenue Fund (67);
5. Authorize the Executive Officer to take all steps necessary to carry out this Resolution, including making modifications to the agreements with CARB and CEC, as needed, for the SPEED and BIF projects; and

6. Reimburse the General Fund up to $3,560,000 from the GHG Reduction Projects Special Revenue Fund (67) for administrative costs necessary to implement the SPEED project.

Wayne Nastri
Executive Officer

AK:MW:VP:FX

Background

On October 26, 2023, South Coast AQMD submitted a proposal for the SPEED project in response to a joint CARB and CEC solicitation for CARB's Fiscal Year (FY) 2021-2022 and FY 2022-2023 ATDPP. On January 15, 2025, CARB notified South Coast AQMD of the preliminary award. On February 6, 2025, CEC released a Notice of Proposed Awards in which South Coast AQMD was awarded $22,000,000 in CARB funds and $19,295,211 in CEC funds for the SPEED project. On May 3, 2024, the Board approved the grant for the BIF project, which was also under the FY 2021-2022 and FY 2022-2023 ATDPP solicitation. The CARB ATDPP solicitation requires a Resolution of the grantee's governing board prior to execution of the grant agreements. The resolution for both the SPEED and BIF projects is attached.

Following the success of the Volvo Low Impact Green Heavy Transport Solutions (LIGHTS) zero-emission truck deployment project, which deployed 70 class 8 Volvo battery electric trucks to several fleets across Southern California for regional freight distribution and drayage, South Coast AQMD, in partnership with Volvo, is leading a collaborative effort to expand the truck deployment in the South Coast AQMD jurisdiction and beyond. This new initiative will further advance battery electric truck (BET) technologies by developing and demonstrating a high-power (750 kW) charging-capable truck for regional transportation between Southern California and the Central Valley. This project also aims to meet the workforce needs driven by the growing adoption of battery electric trucks, supporting infrastructure, and the upcoming rollout of high-power truck charging technologies. The project aligns with the goal of ATDPP to strategically accelerate the advancement of innovative and economically viable technologies into the commercial marketplace.

Proposal

Under the SPEED project, it is anticipated that Volvo plans to deploy 100 Class 8 Volvo battery electric trucks with approximately 10 truck fleets in the South Coast AQMD and San Diego County Air Pollution Control District (SDCAPCD) areas. Each truck deployed within the South Coast AQMD area will receive funding up to $242,222 and each truck deployed within SDCAPCD area will receive funding up to $220,000. An

estimated seventy-nine (79) CCS ports, each receiving funding up to $80,000, will be deployed at the participating fleets' depots.

Volvo plans to execute contracts with individual truck fleets for the deployment of the battery electric trucks and support the installation of the truck charging ports at the fleet depots. The participating truck fleets may include King Fio Trucking, LLC, Pacific American Fish Company, Bali Express, Junction Collaborative Transports, Mountain Valley Express, West Coast Trucking, Quick Container Drayage, Inc., Tradelink Transportation, Inc., RPM Transportation, Inc., 4 Gen Logistics, and others. A backup truck list will be pursued if participating trucks withdraw for unforeseen reasons.

The SPEED project plans to develop a fast-charging capable truck, a workforce training and battery recycling programs, a truck charging facility, and will collect truck operational and charger data. Specifically:

Fast-Charging Capable Truck
In response to increasing demands for faster charging compared to diesel refueling times, Volvo plans to develop and demonstrate a truck capable of charging at 750 kW (referred to here as high-power charging). The truck will be pilot tested in cross-regional transportation between Southern California and surrounding areas. Two megawatt chargers will be installed to charge the truck during its day trips. Data on the demonstration unit will be collected to produce a technical industry report and lessons learned.

Workforce Training and Public Engagement
Volvo plans to execute contracts with the following project partners in the SPEED application, Cerritos College, Clean Fuels Education, TRC Environmental Corporation, CharIN, Inc., and Mightycomm to conduct workforce training and development activities and public engagement. Specifically, enhanced training courses will be provided to technicians that work on battery electric trucks, charging infrastructure, and electric vehicles. In addition, training will be provided to first responders on fire safety, especially for high-energy charging infrastructure. A toolkit will be developed to help truck fleets understand BETs and infrastructure, improve and optimize their uptime, develop electrification plans, and share best practices. Educational events will be organized for megawatt charging standards, rapid charging, and their impact on drayage operations.

Battery Recycling
As part of this project, Volvo would develop a battery recycling program to repurpose used truck batteries for second life applications and to recycle used truck battery materials. The efforts will outline the first and second uses of the truck batteries and set parameters for a cost-effective and sustainable process to recover materials and support battery production for Volvo product lines. The program will help improve truck battery

design for first and second life uses and further improve recycling efforts. Results from this program will be reported as part of this project's deliverables.

Truck Charging Facility
As part of the proposal submitted under the ATDPP solicitation, a truck charging station with 15 CCS ports and 3 megawatt chargers will be developed by WattEV to enhance the regional truck charging network. The site will also provide public accessibility for truck charging and truck charging data will be collected. In the event that WattEV is unable to deliver this implementation in a timely manner, an alternative station operator will be identified to develop an equivalent truck charging station site.

Data Collection and Analysis
University of California, Riverside, will collect operational data of deployed trucks and chargers for a minimum of one year to gain more insight about the performance and challenges of truck electrification following the requirements set in the grant agreements with CARB and CEC. The data would include but will not be limited to vehicle usage, load weight, battery health, driver experience, electricity usage, charging patterns, number and duration of charging sessions, charger uptime percentage, average downtime, operation cost, and repair and maintenance records.

Sole Source Justification
Section VIII.B.2. of the Procurement Policy and Procedure includes four possible provisions under which a sole source award may be justified. The request for sole source awards for the technology and fleet partners in this project is made under the provisions B.2.c.(1): The unique experience and capabilities of the proposed contractor or contractor team; B.2.c.(2): The project involves the use of proprietary technology; and B.2.d.(1): Projects involving cost-sharing by multiple sponsors. Volvo, CARB, CEC, MSRC, truck fleets, WattEV, workforce training providers, including Cerritos College, Clean Fuels Education, TRC Environmental Corporation Companies, and CharIN, Inc. and other partners have extensive knowledge and experience in advanced EV technologies that are needed to complete this project successfully. The manufacturer will utilize their proprietary technologies to develop high-power capable trucks for future Class 8 battery electric truck production design for the North American market. The Project's megawatt chargers will support the future state of high-power heavy-duty truck charging. The request for sole source award to The Regents of UCR is made under section B.2.d.(8): Research and development efforts with educational institutions or nonprofit organizations. The Project will be cost-shared by project partners as discussed in the Resource Impacts section.

Benefits to South Coast AQMD

The SPEED project supports the acceleration of battery electric truck development and progresses the development of high-power charging infrastructure and trucks, which aligns with the Technology Advancement Office Clean Fuels Program 2025 Plan Update, specifically the categories of "*Develop and Demonstrate Electric and Hybrid Vehicles*" and "*Zero Emission Infrastructure.*" Successful completion of the SPEED project will contribute to further development of infrastructure, deployment of zero-emission trucks, and further enhancement of workforce on BET and supporting infrastructure to progress towards attainment of National Ambient Air Quality Standards in the South Coast Air Basin by eliminating PM and NOx emissions.

Resource Impacts

The execution of agreements with CARB, CEC, and the project partners will include the cost-share contributions presented in the following table.

Proposed Project Funding

Source	Amount	Percent
CARB	$22,000,000	25%
CEC	$19,295,211	22%
MSRC	$2,000,000*	2%
Volvo	$6,095,000	7%
Volvo/Participating Fleets	$30,320,000**	34%
WattEV	$4,999,725**	6%
South Coast AQMD *(requested)*	$3,250,000	4%
Total	**$87,959,936**	**100%**

*Pending approval by MSRC Committee

** Volvo/Participating Fleets and WattEV may supplement the funding from other sources, such as SCE Drayage Truck Rebate program and VW Environmental Mitigation Trust Fund, subject to final awards and approval by South Coast AQMD, CARB and CEC.

The MSRC is contributing up to $2,000,000 from the Mobile Source Air Pollution Reduction Fund (23) towards this project, pending approval by the South Coast AQMD Board under a separate item. Sufficient funds will be available from CARB and CEC in the GHG Reduction Projects Special Revenue Fund (67) and, upon Board approval, the Mobile Source Air Pollution Reduction Fund (23) to execute agreements for the SPEED project. Sufficient funds are available from the Clean Fuels Program Fund (31) to transfer up to $3,250,000 for South Coast AQMD project cost-share, and up to $2,000,000 as a temporary loan, as needed, to provide cash flow for contractor payments as a buffer for the slower CARB and CEC cost-reimbursement process into the GHG Reduction Projects Special Revenue Fund (67) for the SPEED 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.

Attachment
Resolution

RESOLUTION NO. xx

A Resolution of the South Coast Air Quality Management District (South Coast AQMD) Board Recognizing Funds and Accepting Grant Funds from the California Energy Commission (CEC) and California Air Resources Board (CARB) Joint Advanced Technology Demonstration and Pilot Projects program

WHEREAS, under Health & Safety Code §40400 et seq., the South Coast Air Quality Management District (South Coast AQMD) is the local agency with the primary responsibility for the development, implementation, monitoring and enforcement of air pollution control strategies, clean fuels programs and motor vehicle use reduction measures; and

WHEREAS, the South Coast AQMD is authorized by Health & Safety Code §§40402, 40440, and 40448.5 to implement programs to reduce transportation emissions, including programs to encourage the use of alternative fuels and zero and low emission vehicles; to develop and implement other strategies and measures to reduce air contaminants and achieve the state and federal air quality standards; and

WHEREAS, the Governing Board has adopted several programs to reduce emissions from on-road and off-road vehicles, as well as emissions from other equipment, including infrastructure, and participated extensively in projects intended to demonstrate new technologies for on-road and off-road vehicles with the intention of reducing emissions of air pollutants; and

WHEREAS, CARB and CEC announced the availability of $225,000,000 million in funds to support commercial and pre-commercial zero and near-zero emission on-road or off-road vehicles, vessels, and equipment, supported with new or innovative systems or infrastructure, education and outreach, and workforce development.; and

WHEREAS, the solicitation was open to local air districts, California-based public entities(e.g., public agencies, municipalities, counties, cities, special districts), and California-based non-profit organizations; and

WHEREAS, on October 26, 2023, the South Coast AQMD submitted five proposals in response to the Fiscal Year (FY) 2021-22 and FY 2022-23 Advanced Technology Demonstration and Pilot Projects Solicitation including a project for the electrification of Balboa Island Ferries (BIF) and installation of supporting charging infrastructure to replace or repower three BIF diesel ferries with three ZE electric ferries; and another project that partners the Mobile Source Air Pollution Reduction Review Committee (MSRC), Volvo Group North America LLC, WattEV, Inc, participating fleets (4 Gen Logistics, Bali Express, Junction Collaborative Transports, King Fio Trucking LLC, Mountain Valley Express, Pacific American Fish Company, Quick Container Drayage Inc, RPM Transportation Inc, Tradelink Transportation Inc, West Coast Trucking) , TRC Companies Inc, CharIN, Clean Fuels Education, Cerritos College, and

Mightycomm to deploy 100 Volvo Class 8 battery electric trucks and 99 charging ports, demonstrate a fast-charging capable truck, conduct workforce training, and demonstrate battery recycling; and

WHEREAS, on March 7, 2024, CEC released a Notice of Proposed Awards in which South Coast AQMD was awarded $8,297,549 in CARB funds for South Coast AQMD's Electrification of Balboa Island Ferries (BIF) and Installation of Supporting Infrastructure Project; and on January 7, 2025, CEC released a Revised Notice of Proposed Awards in which South Coast AQMD was awarded $22,000,000 in CARB funds and $19,295,211 in CEC funds for the Strategic Pathways for Extended Electric Drayage (SPEED) Project; and

WHEREAS, On March 7, 2024, CARB released a Preliminary Award Letter in which South Coast AQMD was awarded $8,297,549 in CARB funds for the BIF Project; and on January 15, 2025, CARB released a Preliminary Award Letter in which South Coast AQMD was awarded $22,000,000 in CARB funds and $19,295,211 in CEC funds for the SPEED Project; and

WHEREAS, the Governing Board, in regular session assembled on May 3, 2024, accepted the BIF grant award and recognized up to $8,297,548 in CARB funds and committed to cost-share by South Coast AQMD and its project partners in the amount of up to $250,000 for the electrification of Balboa Island Ferries (BIF) and installation of supporting charging infrastructure to replace or repower three BIF diesel ferries with three ZE electric ferries; and

WHEREAS, CARB and CEC require applicants to submit a resolution of its Governing Board prior to execution of the grant agreements that commit the agency to comply with the requirements of the solicitation, accept the funds, and commit to cost- share provided by South Coast AQMD and its project partners.

THEREFORE, BE IT RESOLVED that the Governing Board, in regular session assembled on June 6, 2025, does hereby accept the SPEED grant award and recognizes up to $22,000,000 in CARB funds and $19,295,211 in CEC funds, and commit to $3,250,000 as South Coast AQMD cost share to deploy 100 Volvo Class 8 battery electric trucks and 99 charging ports, demonstrate a fast-charging capable truck, conduct workforce training, and demonstrate battery recycling.

BE IT FURTHER RESOLVED that the Governing Board agrees to comply with the terms in the FY 2021-22 and FY 2022-23 Grant Solicitation for the Advanced Technology Demonstration and Pilot Projects program and commits to cost-share by South Coast AQMD and its project partners in the amount of up to $3,250,000 at the time that South Coast AQMD executes grant agreements with CARB and CEC.

BE IT FURTHER RESOLVED that the Executive Officer is authorized and

directed to take all steps necessary to carry out this Resolution, including making modifications to the grant agreements with CARB and CEC, as needed, to implement the SPEED and BIF Project.

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Date Faye Thomas, Clerk of the Board