South Coast
Air Quality Management District
South Coast AQMD 21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

HYBRID TECHNOLOGY COMMITTEE MEETING

Committee Members

Councilmember Carlos Rodriguez, Committee Chair
Supervisor Curt Hagman
Mayor Patricia Lock Dawson
Mayor Pro Tem Larry McCallon
Board Member Veronica Padilla-Campos
Supervisor Donald Wagner

November 15, 2024 ♦ 12:00 p.m.

TELECONFERENCE LOCATION

County Administration North
400 Civic Center Drive
6th floor, Room 601A
Santa Ana, CA 92701

A meeting of the South Coast Air Quality Management District Technology Committee will be held at 12:00 p.m. on Friday, November 15, 2024 through a hybrid format of in-person attendance in the Dr. William A. Burke Auditorium at the South Coast AQMD Headquarters, 21865 Copley Drive, Diamond Bar, California, and remote attendance via videoconferencing and by telephone. Please follow the instructions below to join the meeting remotely.

Please refer to South Coast AQMD's website for information regarding the format of the meeting, updates if the meeting is changed to a full remote via webcast format, and details on how to participate:

http://www.aqmd.gov/home/news-events/meeting-agendas-minutes

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(Instructions provided at bottom of the agenda)

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Audience will be allowed to provide public comment in person or through Zoom connection or telephone.

PUBLIC COMMENT WILL STILL BE TAKEN

Cleaning the air we breathe…

AGENDA

Members of the public may address this body concerning any agenda item before or during consideration of that item (Gov't. Code Section 54954.3(a)). If you wish to speak, raise your hand on Zoom or press Star 9 if participating by telephone. All agendas for regular meetings are posted at South Coast AQMD Headquarters, 21865 Copley Drive, Diamond Bar, California, at least 72 hours in advance of the regular meeting. Speakers may be limited to three (3) minutes total for all items on the agenda.

CALL TO ORDER

ROLL CALL

ACTION ITEMS (1-3):

1. Execute Contracts to Develop and Demonstrate Class 2B/3 and Class 4/5 Medium-Duty Battery Electric Trucks *(Motion Requested)*

Sam Cao, Ph.D.
Program Supervisor

CARB's Advanced Clean Trucks and Advanced Clean Fleets regulations require the transition of medium- and heavy-duty vehicles to zero-emission (ZE) technologies starting 2024. The development, demonstration, and deployment of faster charging and increased availability of ZE medium-duty trucks are needed. These actions are to execute contracts with: 1) Voltu Motor, Inc. to develop, demonstrate and deploy 10 Ford F350 Class 2B and 3 battery electric trucks in an amount not to exceed $600,000 which consists of $300,000 from the Clean Fuels Program Fund (31) and $300,000 from the Mobile Source Air Pollution Reduction Fund (23); 2) Enevate Corporation to develop and test a fast-charging battery pack for medium-duty Class 4 and 5 battery electric vehicles in an amount not to exceed $500,000, which consists of $250,000 from Fund (31) and $250,000 from Fund (23); and 3) Evolectric, Inc. to integrate the battery pack and demonstrate the fast-charging system developed by Enevate Corporation within a Class 4 and 5 medium-duty battery electric truck in an amount not to exceed $500,000, which consists of $250,000 from Fund (31) and $250,000 from Fund (23).

2. Execute Contracts to Implement Zero-Emission Infrastructure Projects Under Carl Moyer and Community Air Protection Programs *(Motion Requested)*

Tom Lee
Planning & Rules Manager

In December 2023, Carl Moyer Program Announcement PA2024-02 was released to solicit zero-emission infrastructure project applications and closed in February 2024. The solicitation was oversubscribed and received close to $400 million dollars in applications. These actions are to: 1) Execute contracts for zero-emission infrastructure projects under the Carl Moyer and Community Air Protection Programs for a total of $109,125,778, and back up projects if funds become available; and 2) Authorize the Executive Officer to redistribute the source of funds for the various incentive program grants to ensure program liquidation targets are met.

3. Execute Sponsorship Agreement to Support Workforce Training and Professional Development of Electric Vehicle and Battery Engineers *(Motion Requested)*

Vasileios Papapostolou, Sc.D.
Planning & Rules Manager

California State University, Los Angeles, has been selected as one of 12 universities nationwide to participate in the Battery Workforce Challenge. This engineering competition will challenge universities and their partners to design, build, test and integrate advanced EV battery packs into a Stellantis vehicle. This program will help prepare and train the next generation of engineers and technicians to handle the increased demand for EVs. This action is to execute a sponsorship agreement with California State University, Los Angeles, in an amount not to exceed $150,000 from the Clean Fuels Program Fund (31).

4. Other Business

Any member of the Committee, or its staff, on his or her own initiative or in response to questions posed by the public, may ask a question for clarification, may make a brief announcement or report on his or her own activities, provide a reference to staff regarding factual information, request staff to report back at a subsequent meeting concerning any matter, or may take action to direct staff to place a matter of business on a future agenda. (Gov't. Code Section 54954.2)

5. Public Comment Period

At the end of the regular meeting agenda, an opportunity is provided for the public to speak on any subject within the Committee's authority that is not on the agenda. Speakers may be limited to three (3) minutes each.

6. Next Meeting Date

Friday, December 20, 2024 at 9:00 a.m. Note the change of meeting time.

ADJOURNMENT

Document Availability

All documents (i) constituting non-exempt public records, (ii) relating to an item on an agenda for a regular meeting, and (iii) having been distributed to at least a majority of the Committee after the agenda is posted, are available by contacting Penny Shaw Cedillo at 909.396.3179, or send the request to pcedillo@aqmd.gov.

Americans with Disabilities Act and Language Accessibility
Disability and language-related accommodations can be requested to allow participation in the Technology Committee meeting. The agenda will be made available, upon request, in appropriate alternative formats to assist persons with a disability (Gov't Code Section 54954.2(a)). In addition, other documents may be requested in alternative formats and languages. Any disability or language-related accommodation must be requested as soon as practicable. Requests will be accommodated unless providing the accommodation would result in a fundamental alteration or undue burden to South Coast AQMD. Please contact Penny Shaw Cedillo at 909.396.3179 from 7:00 a.m. to 5:30 p.m., Tuesday through Friday, or send the request to pcedillo@aqmd.gov.

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As an attendee, you will have the opportunity to virtually raise your hand and provide public comment.

Before joining the call, please silence your other communication devices such as your cell or desk phone. This will prevent any feedback or interruptions during the meeting.

Please note: During the meeting, all participants will be placed on Mute by the host. You will not be able to mute or unmute your lines manually.

After each agenda item, the Chair will announce public comment.

Speakers may be limited to a total of 3 minutes for the entirety of the consent calendar plus board calendar, and three minutes or less for each of the other agenda items.

A countdown timer will be displayed on the screen for each public comment.

If interpretation is needed, more time will be allotted.

Once you raise your hand to provide public comment, your name will be added to the speaker list. Your name will be called when it is your turn to comment. The host will then unmute your line.

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- This will signal to the host that you would like to provide a public comment and you will be added to the list.

Directions for Video Zoom on a SMARTPHONE:

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Directions for TELEPHONE line only:

- If you would like to make public comment, please **dial *9** on your keypad to signal that you would like to comment.

BOARD MEETING DATE: December 6, 2024 AGENDA NO.

PROPOSAL: Execute Contracts to Develop and Demonstrate Class 2B/3 and Class 4/5 Medium-Duty Battery Electric Trucks

SYNOPSIS: CARB's Advanced Clean Trucks and Advanced Clean Fleets regulations require the transition of medium- and heavy-duty vehicles to zero-emission (ZE) technologies starting 2024. The development, demonstration, and deployment of faster charging and increased availability of ZE medium-duty trucks are needed. These actions are to execute contracts with: 1) Voltu Motor, Inc. to develop, demonstrate and deploy 10 Ford F350 Class 2B and 3 battery electric trucks in an amount not to exceed $600,000 which consists of $300,000 from the Clean Fuels Program Fund (31) and $300,000 from the Mobile Source Air Pollution Reduction Fund (23); 2) Enevate Corporation to develop and test a fast-charging battery pack for medium-duty Class 4 and 5 battery electric vehicles in an amount not to exceed $500,000, which consists of $250,000 from Fund (31) and $250,000 from Fund (23); and 3) Evolectric, Inc. to integrate the battery pack and demonstrate the fast-charging system developed by Enevate Corporation within a Class 4 and 5 medium-duty battery electric truck in an amount not to exceed $500,000, which consists of $250,000 from Fund (31) and $250,000 from Fund (23).

COMMITTEE: Technology, November 15, 2024; Recommend for Approval

RECOMMENDED ACTIONS:
Authorize the Executive Officer to execute a contract with:

1. Voltu Motor, Inc. to develop, demonstrate and deploy 10 Ford F350 Class 2B/3 medium-duty work trucks at the City of Riverside in an amount not to exceed $600,000 which consists of $300,000 from the Clean Fuels Program Fund (31) and $300,000 from the Mobile Source Air Pollution Reduction Fund (23);
2. Enevate Corporation to develop and test a fast-charging battery pack for medium-duty battery electric vehicle applications in an amount not to exceed $500,000 which consists of $250,000 from the Clean Fuels Program Fund (31) and $250,000 from the Mobile Source Air Pollution Reduction Fund (23); and

3. Evolectric, Inc. to integrate and demonstrate the battery pack developed by Enevate within a Class 4/5 medium-duty battery electric vehicles in an amount not to exceed $500,000 which consists of $250,000 from the Clean Fuels Program Fund (31) and $250,000 from the Mobile Source Air Pollution Reduction Fund (23).

Wayne Nastri
Executive Officer

AK:MW:VP:SC:CR

Background

CARB's Advanced Clean Trucks and Advanced Clean Fleets regulations require fleets to transition their medium- and heavy-duty trucks to zero-emission (ZE) technologies. There is a need to increase the ZE options for Class 2B and 3 service body trucks. The current availability of Class 2B and 3 ZE trucks are all for small delivery vans. There is a need by commercial fleets to utilize ZE class 2B and 3 service body work trucks with flexible truck bed options to serve a wide variety of applications.

Secondly, the continued development and deployment of fast charging vehicles and chargers is needed to accelerate the commercialization of battery electric ZE technologies. In March 2024, the Board approved a project to develop and demonstrate innovative megawatt fast charging systems to extend the operational range and reduce charging times for Class 7 and 8 battery electric trucks. Similar fast-charging technologies are needed for medium-duty battery electric vehicles. Many of the current medium-duty electric trucks require overnight Alternating Current charging or slow Direct Current (DC) charging. The development and demonstration of battery packs and fast chargers for medium duty trucks is needed to reduce charging dwell times.

Proposal

Class 2B/3 Medium-Duty Battery Electric Work Trucks Development

Voltu Motors, Inc. proposes to partner with the City of Riverside and the University of California, Riverside (UCR) CE-CERT to develop, demonstrate and deploy 10 electric Ford F350 work trucks for the City of Riverside and Riverside Public Utilities fleets. The proposed work truck units will be integrated at their Moreno Valley facility with up to 166 kWh battery packs and dual electric motors capable of up to 250 miles of range and up to 200kW DC charge rate. Voltu Motor will collaborate with UCR CE-CERT to perform data analytics for a period of 6-months following deployment.

Fast-Charging Class 4/5 Medium-Duty Battery Electric Trucks

Enevate Corporation (Enevate) is an Irvine, California based EV battery company that has developed silicon-dominant anode advanced battery technology that allows fast-charging and with higher charge densities compared to a conventional battery cell. Enevate has proposed to develop and test a fast-charging battery pack for medium-duty battery electric vehicle applications. The proposed technology will enable the vehicle battery to be fast charged in 15 minutes from zero to eighty percent.

Evolectric, Inc., (Evolectric), a Rancho Dominguez, California-based electric truck battery manufacturer that focuses on retrofitting technology, proposes to integrate and demonstrate Enevate's fast-charging battery technology on Evolectric's medium-duty vehicle platform. SBR Express, Inc. (SBR), a local fleet, has agreed on a 6-months pilot deployment, evaluation, and data collection. Prior to integration, the battery pack will be tested at the University of California, Irvine Horiba Institute for its fast-charging capability.

Sole Source Justification

Section VIII.B.2 of the Procurement Policy and Procedure identifies four major provisions under which sole source award may be justified. The request for sole source awards for the Enevate and Evolectric contracts is made under provision B.2.d.(1) Projects involving cost sharing by multiple sponsors. The proposed project includes match share by MSRC, Evolectric, Enevate and SBR. The request for sole source award for the Voltu Motor contract is made under provision B.2.d.(1) Projects involving cost sharing by multiple sponsors. The proposed project includes match share by MSRC, Voltu Motor, UCR CE-CERT and the City of Riverside.

Benefits to South Coast AQMD

South Coast Air Basin is classified as an "extreme" nonattainment area for ozone under the Federal Clean Air Act. Successful development and pilot demonstration of fast-charging trucks and Class 2B/3 work trucks will increase ZE vehicle adoption to help reduce Ozone and PM2.5 air pollution. The projects support the Technology Advancement Office Clean Fuels Program 2024 Plan Update under the categories of *"Electric/Hybrid Technologies"* and *"Zero Emission Infrastructure."*

Resource Impacts

The contract with Voltu Motor, Inc. to develop, demonstrate and deploy Class 2B/3 medium-duty work trucks will not exceed $600,000. South Coast AQMD proposes contributing $300,000 towards this project from the Clean Fuels Program Fund (31). On November 21, 2024, MSRC approved contributing $300,000 from the Mobile Source Air Pollution Reduction Fund (23) towards this project. The MSRC's contribution is under consideration for Board approval under a separate item.

Class 2B/3 Battery Electric Work Truck Development

Funding Source	Funding Amount	Percent
Voltu Motor	$380,000	17
UCR/CE-CERT (in-kind)	$20,000	1
City of Riverside	$1,200,000	54
MSRC	$300,000	14
South Coast AQMD *(requested)*	$300,000	14
Total	**$2,200,000**	**100%**

The contracts with Enevate and Evolectric to develop new battery pack and demonstrate fast-charging medium-duty trucks will not exceed $1,000,000. South Coast AQMD proposes contributing $500,000 towards this project from the Clean Fuels Program Fund (31). On November 21, 2024, MSRC approved contributing $500,000 from the Mobile Source Air Pollution Reduction Fund (23) towards this project. The MSRC's contribution is under consideration for Board approval under a separate item.

Fast-Charging Medium-Duty Trucks

Funding Source	Funding Amount	Percent
Enevate	$266,920	16
Evolectric	$412,000	24
SBR (in-kind)	$12,525	1
MSRC	$500,000	30
South Coast AQMD *(requested)*	$500,000	30
Total	**$1,691,445**	**100%**

Sufficient funds are available in the Clean Fuels Program Fund (31) and the Mobile Source Air Pollution Reduction Fund (23) for the proposed projects.

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. Successful development and pilot demonstration of battery electric fast-charging Class 2B and 3 work trucks will lead to full commercialization of ZE work trucks that reduces Ozone precursors and PM2.5.

Back to Agenda

Agenda Item #1

Execute Contracts to Develop and Demonstrate Class 2B/3 and Class 4/5 Medium-Duty Battery Electric Trucks

Sam Cao

Background

- CARB Zero-Emission (ZE) regulations require all trucks in California to transition to ZE
- Need medium-duty ZE options
- Need for fast charging

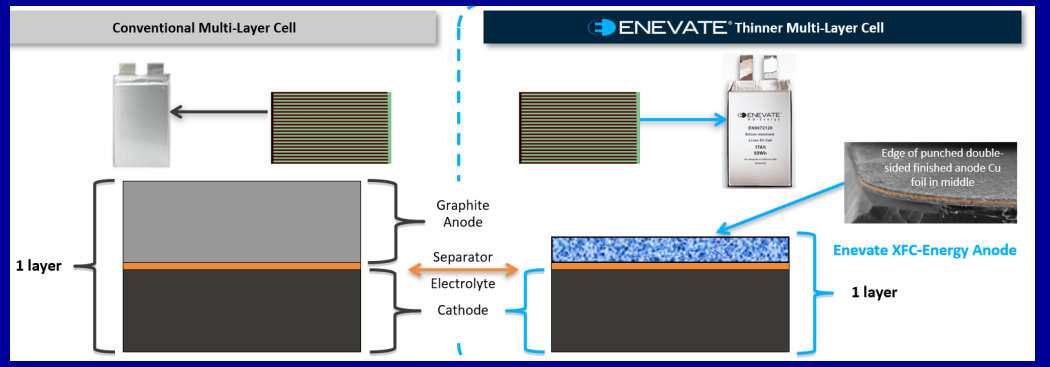
CARB Advanced Clean Truck (ACT) & Advance Clean Fleet (ACF) Regulations starting MY2024

Proposal – Class 2B/3 Electric Work Trucks

- Voltu Motors proposes to Develop, demonstrate and deploy 10 Class 3 Ford F350 battery electric work trucks
  - Design, build and test the new battery electric work trucks in Moreno Valley
  - Datalogging and analysis with UCR/ CE-CERT
  - City of Riverside and Riverside Public Utilities will use all 10 trucks in their fleets

Proposal – Fast-Charging Electric Truck

- Enevate to design, integration and testing of a fast-charging battery pack
- Irvine, CA based company
- Design build a fast-charging battery pack for medium-duty commercial vehicles
  - 15 mins to 80% state of charge
- Charging testing and validation with UC Irvine Horiba Institute (HIMaC)



Proposal – Fast-Charging Electric Truck

- Evolectric to lead the integration onto a Class 4/5 electric truck
  - Based in Rancho Dominguez, CA
  - Repower existing diesel trucks to full electric
  - Engineering and integration of the Enevate fast-charging battery pack
  - 6-months demonstration with SBR Express, Inc.

Proposed Project Cost - Voltu

Proposed Partners	Funding Amount
Voltu Motors	$380,000
City of Riverside	$1,200,000
UCR/CE-CERT (in-kind)	$20,000
MSRC*	$300,000
South Coast AQMD (requested)*	***$300,000***
Total Project Cost	**$2,200,000**

*pending MSRC approval
**Clean Fuels Program Fund (31)

Proposed Project Cost – Enevate/Evolectric

Proposed Partners	Funding Amount
Enevate	$266,920
Evolectric	$412,000
SBR (in-kind)	$12,525
MSRC*	$500,000
South Coast AQMD (requested)*	***$500,000***
Total Project Cost	**$1,691,445**

*pending MSRC approval
**Clean Fuels Program Fund (31)

Summary of Recommended Actions

- Voltu Motor Inc. to develop, demonstrate and deploy 10 Ford F350 Class 2B/3 battery electric trucks
- Enevate Corporation to develop a fast-charging battery pack for medium-duty battery electric trucks; and
- Evolectric Inc. to integrate and demonstrate the fast-charging Class 4/5 medium-duty battery electric truck

BOARD MEETING DATE: December 6, 2024 AGENDA NO.

PROPOSAL: Execute Contracts to Implement Zero-Emission Infrastructure Projects Under Carl Moyer and Community Air Protection Programs

SYNOPSIS: In December 2023, Carl Moyer Program Announcement PA2024-02 was released to solicit zero-emission infrastructure project applications and closed in February 2024. The solicitation was oversubscribed and received close to $400 million dollars in applications. These actions are to: 1) Execute contracts for zero-emission infrastructure projects under the Carl Moyer and Community Air Protection Programs for a total of $109,125,778, and back up projects if funds become available; and 2) Authorize the Executive Officer to redistribute the source of funds for the various incentive program grants to ensure program liquidation targets are met.

COMMITTEE: Technology, November 15, 2024; Recommended for Approval

RECOMMENDED ACTIONS:

1. Authorize the Executive Officer to:
   a) Execute contracts for zero-emission infrastructure projects under the Carl Moyer Program as listed in Tables 2 & 3 for a total not to exceed amount of $109,125,778, which is comprised of $49,780,486 from the Carl Moyer Program SB 1107 Fund (32), $7,467,074 from the Carl Moyer AB 923 Match Fund (80), $10,000,000 from interest earned and available in the Carl Moyer Program Fund (32), $31,878,218 from the Community Air Protection AB 134 Fund (77) and $10,000,000 from interest earned and available in the Community Air Protection AB 134 Fund (77);
   b) Execute contracts from the backup projects as listed in Table 4 should returned funds become available from any of the approved funding sources, or should any additional funds become available from the Carl Moyer, State Reserve, Community Air Protection programs, and Ocean-Going Vessel At Berth Remediation Fund (88);
2. Authorize the Executive Officer to redistribute the source of funds for approved projects from the following funding sources as needed: SB 1107, SB 129, State

Reserve, and associated interest funds in Fund (32), Carl Moyer AB 923 Fund (80), and the Community Air Protection Fund (77); and reassign Carl Moyer Program projects between funding years, as needed; in order to expeditiously meet program funding liquidation requirements to the extent that such actions are not in conflict with any applicable guidance, requirement or direction from CARB.

Wayne Nastri
Executive Officer

AK:MW:TL:KM

Background

In December 2023, the Board approved the issuance of the Program Announcement (PA) PA#2024-02 to solicit infrastructure projects. A total of 84 project applications were received requesting $396 million. As listed in Table 1, approximately $109 million is available to fund the recommended project awards. These funds are made available from withdrawn projects under the Carl Moyer program years 23 & 24 and Community Air Protection Program (CAPP) year 3 program funds. In addition, the Board approved the allocation of $22 million from Carl Moyer Year 26 fund for the solicitation PA#2024-02. Also, the Ocean-Going Vessel At Berth Remediation Fund (88) is available to support the additional projects received under this solicitation.

All the projects received under this solicitation were evaluated using the Carl Moyer Program guidelines.

Outreach

In accordance with South Coast AQMD's Procurement Policy and Procedure, a public notice advertising the PA and inviting bids was published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County's Press Enterprise newspapers to leverage the most cost-effective method of outreach. Additionally, potential applicants were notified utilizing South Coast AQMD's own electronic listing of certified minority vendors. Notices of the PA were emailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations and placed on South Coast AQMD's website (http://www.aqmd.gov) where it can be viewed by making menu selection "Grants & Bids." South Coast AQMD posts pre-recorded presentations and host meetings to provide program information and application assistance for applicants interested in participating in the Carl Moyer Program.

Proposal
Staff is recommending projects in Table 2 to be funded with Carl Moyer Program funds (Funds 32 and 80). All the infrastructure projects were evaluated based on criteria scoring published in the PA, and the selected projects will help accelerate the transition to zero-emission fleets in the South Coast Air Basin. Table 3 represents the recommended projects to be funded by Community Air Protection Program funds (Fund 77). Each project in this table is located within the boundaries of an AB617 community and will offer emission reduction and other benefits to the community. The remaining projects were placed on a backup list in Table 4 and may be funded if additional funding becomes available or projects in Tables 2 and 3 fall through. Staff also recommends that eligible Table 4 backup projects be funded from Ocean Going Vessel At Berth Remediation Fund (Fund 88).

To ensure program funding liquidation targets are met, staff recommends the Board authorize the Executive Officer to redistribute the source of funds as needed and reassign Carl Moyer projects between funding years, for projects approved under this Board Letter.

Overburdened Communities
The Carl Moyer Program Guidelines include the requirement that at least 50 percent of the program funds to be expended on projects that will reduce emissions in disproportionately impacted areas, which is tracked on a cumulative basis for all air districts. At least half of the funding allocated under SB 1107 and collected under AB 923 will be awarded to projects in disproportionately impacted areas. The Carl Moyer Guidelines also require that at least 50 percent of all funding available for the Carl Moyer Program, including roll -over funds from previous years and any returned funds from projects that fall through, be allocated to projects that will reduce emissions in disproportionately impacted areas. AB 617 Community Air Protection Program funds must be expended on projects that impact designated AB 617 communities.

Based on the recommended awards, over 75 percent of the projects under the Carl Moyer and CAPP, as well as all the recommended projects listed as backup, will provide emission benefits to overburdened and low-income communities, surpassing program requirements.

Benefits to South Coast AQMD
Successful implementation of zero-emission infrastructure projects is essential in deploying zero-emission equipment in the goods movement and other sectors within South Coast AQMD jurisdiction. The infrastructure equipment funded will operate for many years, providing charging and hydrogen fueling for zero-emission vehicles and equipment that will reduce emissions in the South Coast Basin.

Resource Impacts
Total funding for projects under the Carl Moyer Program will not exceed $109,125,778 comprised of the following funding sources:

Program	Total Funds Awarded
Carl Moyer SB 1107 (Fund 32)	$49,780,486
Carl Moyer/State Reserve Interest Funds (Fund 32)	$10,000,000
Carl Moyer AB 923 Match Funds (Fund 80)	$7,467,074
Community Air Protection Funds (Fund 77)	$31,878,218
Community Air Protection Interest Funds (Fund 77)	$10,000,000
Total	$109,125,778

Attachments
Table 1: Total Amount of Available Funds
Table 2: Carl Moyer Program Awards
Table 3: CAPP Incentive Awards in AB 617 Communities
Table 4: Recommended List of Backup Projects

Table 1: Total Amount of Available Funds			
Funding Source	**Available Project Funds**	**Grant Number**	**Comment**
Carl Moyer Program	$22,000,000 (Year 26)	G23-MO-28	
	$23,500,000 (Year 24)	G21-MO-27	
	$4,280,486 (Year 23)	G20-MO-30	
Carl Moyer Interest Fund	$10,000,000	N/A	Total unobligated interest funds in Fund 32 as of 9/30/2024 including interest from both Carl Moyer and State Reserve Programs.
AB 923 Match Funds	$7,467,074	N/A	Required match for Carl Moyer Program, less 15% as South Coast AQMD's in-kind contribution allowed by the Carl Moyer Program.
Community Air Protection Program	$31,878,218 (Year 3)	G19-MCAP-03	
	$10,000,000	N/A	Total unobligated interest funds in Fund 77 as of 9/30/2024
Total:	**$109,125,778**		

Table 2: Carl Moyer Program Awards		
Applicant	**Project Category**	**Recommended Award**
FirstElement Fuel, Inc. (Buena Park)	Infrastructure - Hydrogen	$1,731,000
FirstElement Fuel, Inc. (Riverside)	Infrastructure - Hydrogen	$1,731,000
FirstElement Fuel, Inc. (San Bernardino)	Infrastructure - Hydrogen	$1,731,000
Los Angeles Unified School District (Sun Valley)	Infrastructure - Electric	$8,000,000
Lemon King III, LLC* (Coachella Valley)	Infrastructure - Electric	$137,813
Moreno Valley Unified School District	Infrastructure - Electric	$5,000,000
OLAM Palm Springs, LLC	Infrastructure - Electric	$2,500,000
Penske Truck Leasing Co., L.P. (Fontana)	Infrastructure - Electric	$1,460,213
Penske Truck Leasing Co., L.P. (Santa Ana)	Infrastructure - Electric	$857,301
Penske Truck Leasing Co., L.P. (Temecula)	Infrastructure - Electric	$471,325
Pilot Travel Centers LLC (Rialto)	Infrastructure - Hydrogen	$4,000,000
Prologis Mobility LLC (Van Nuys)	Infrastructure - Electric	$8,934,090
Southern California Gas Company (Pico Rivera)	Infrastructure - Hydrogen	$9,000,000
Tom's Truck Center North County, LLC (Santa Fe Springs)	Infrastructure - Hydrogen	$9,428,571
Voltera Power, LLC (Rialto)	Infrastructure - Electric	$6,090,302
WATTEV CA6, Inc. (Perris)	Infrastructure - Electric	$6,174,945
	Total	**$67,247,560****

*This project is pending CARB case-by-case approval and/or South Coast AQMD qualification check.
**Comprised of $59,780,486 in Carl Moyer Program funds and $7,467,074 in AB 923 match funding.

Table 3: CAPP Incentive Awards in AB 617 Communities				
AB 617 Community	**Applicant**	**Project Category**	**Recommended Award**	**Total**
East Los Angeles/Boyle Heights/West Commerce	Cal State LA University Auxiliary Services, Inc.	Infrastructure - Hydrogen	$2,207,818	$2,207,818
San Bernardino/ Muscoy	EV Realty, Inc. (San Bernardino)	Infrastructure - Electric	$5,885,910	$5,885,910
Southeast Los Angeles (SELA) Emission Boundary	Penske Truck Leasing Co., L.P. (Vernon)	Infrastructure - Electric	$526,897	$526,897
South Los Angeles	Voltera Power, LLC (Lynwood)	Infrastructure - Electric	$5,347,414	$5,347,414
Wilmington/ Carson/West Long Beach	Forum Mobility, Inc. (Rancho Dominguez)	Infrastructure - Electric	$8,424,868	$27,910,179
	LBCT LLC	Infrastructure – Electric	$2,869,924	
	Prologis Mobility LLC (Carson – Presidio)	Infrastructure - Electric	$121,842	
	Prologis Mobility LLC (Carson – Wilmington)	Infrastructure - Electric	$146,297	
	Prologis Mobility LLC (Long Beach)	Infrastructure - Electric	$5,122,476	
	Prologis Mobility LLC (Rancho Dominguez)	Infrastructure – Electric	$230,260	
	SSA Terminals (Pier A), LLC (Long Beach)	Infrastructure - Electric	$5,994,512	
	Zeem Solutions Long Beach Depot LLC*	Infrastructure – Electric	$5,000,000	
			Total	**$41,878,218**

*This project is pending CARB case-by-case approval and/or South Coast AQMD qualification check.

Table 4: Recommended List of Backup Projects		
Applicant	**Project Category**	**Recommended Award**
4 Gen Logistics, L.L.C. (Long Beach)	Infrastructure Expansion - Electric	$12,227,280
4 Gen Logistics, L.L.C. (Rialto)	Infrastructure - Electric	$9,793,056
4G Management, Inc.* (Long Beach)	Infrastructure - Hydrogen	$8,267,025
City of Colton	Infrastructure - Electric	$198,702
City of Pasadena	Infrastructure - Electric	$2,446,125
Clean Energy Fuels Corp. (Wilmington)	Infrastructure - Hydrogen	$8,297,107
County of Orange (Glassel)	Infrastructure - Electric	$89,280
County of Orange (Grand)	Infrastructure - Electric	$153,194
County of Orange (Santa Ana)	Infrastructure - Electric	$894,875
Green Water and Power LLC (Sun Valley)	Infrastructure - Electric	$356,920
Southern Counties Terminals DBA Griley Airfreight (Playa Vista)	Infrastructure - Electric	$741,447
LBCT LLC (Long Beach)	Infrastructure - Electric	$62,507,006
Penske Truck Leasing Co., L.P. (City of Industry – Arenthe)	Infrastructure - Electric	$606,238
Penske Truck Leasing Co., L.P. (Chino)	Infrastructure - Electric	$430,975
Penske Truck Leasing Co., L.P. (City of Industry – Valley)	Infrastructure - Electric	$497,997
Penske Truck Leasing Co., L.P. (La Mirada)	Infrastructure - Electric	$586,684
Penske Truck Leasing Co., L.P. (Los Angeles)	Infrastructure - Electric	$460,073
Penske Truck Leasing Co., L.P. (Mira Loma)	Infrastructure - Electric	$1,414,468
Penske Truck Leasing Co., L.P. (Moreno Valley)	Infrastructure - Electric	$1,520,542
Penske Truck Leasing Co., L.P. (Ontario)	Infrastructure - Electric	$3,188,222
Penske Truck Leasing Co., L.P. (Riverside)	Infrastructure - Electric	$1,471,925
Penske Truck Leasing Co., L.P. (Sun Valley)	Infrastructure - Electric	$1,038,948
Prologis Mobility LLC (Compton)	Infrastructure - Electric	$17,587,404
Prologis Mobility LLC (Mira Loma)	Infrastructure - Electric	$661,076
Prologis Mobility LLC (Commerce)	Infrastructure - Electric	$19,077,647
Prologis Mobility LLC (Ontario – Cucamonga)	Infrastructure - Electric	$103,796

Table 4: Recommended List of Backup Projects		
Applicant	**Project Category**	**Recommended Award**
Prologis Mobility LLC (Ontario – Eucalyptus)	Infrastructure - Electric	$18,646,590
Prologis Mobility LLC (Rancho Cucamonga)	Infrastructure - Electric	$12,832,965
Republic Services of Southern California, LLC (Anaheim)	Infrastructure - Electric	$947,750
San Gabriel Valley Water Company (El Monte)	Infrastructure - Electric	$276,233
San Gabriel Valley Water Company (Fontana)	Infrastructure - Electric	$40,590
Schneider Resources, Inc. (San Bernardino)	Infrastructure - Electric	$8,054,365
Supra National Express, Inc. (San Bernardino)	Infrastructure - Electric	$9,459,500
Voltera Power, LLC (Ontario)	Infrastructure - Electric	$5,992,565
	Total	**$210,868,570**

*This project is pending CARB case-by-case approval and/or South Coast AQMD qualification check.

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Agenda Item #2

Execute Contracts to Implement Zero-Emission Infrastructure Projects Under Carl Moyer and Community Air Protection Programs

Tom Lee

Background

- Zero-emission Infrastructure Program Announcement opened in December 2023 and closed in February 2024
- $396 million requested
- 67 submitted projects
- Available project funds:

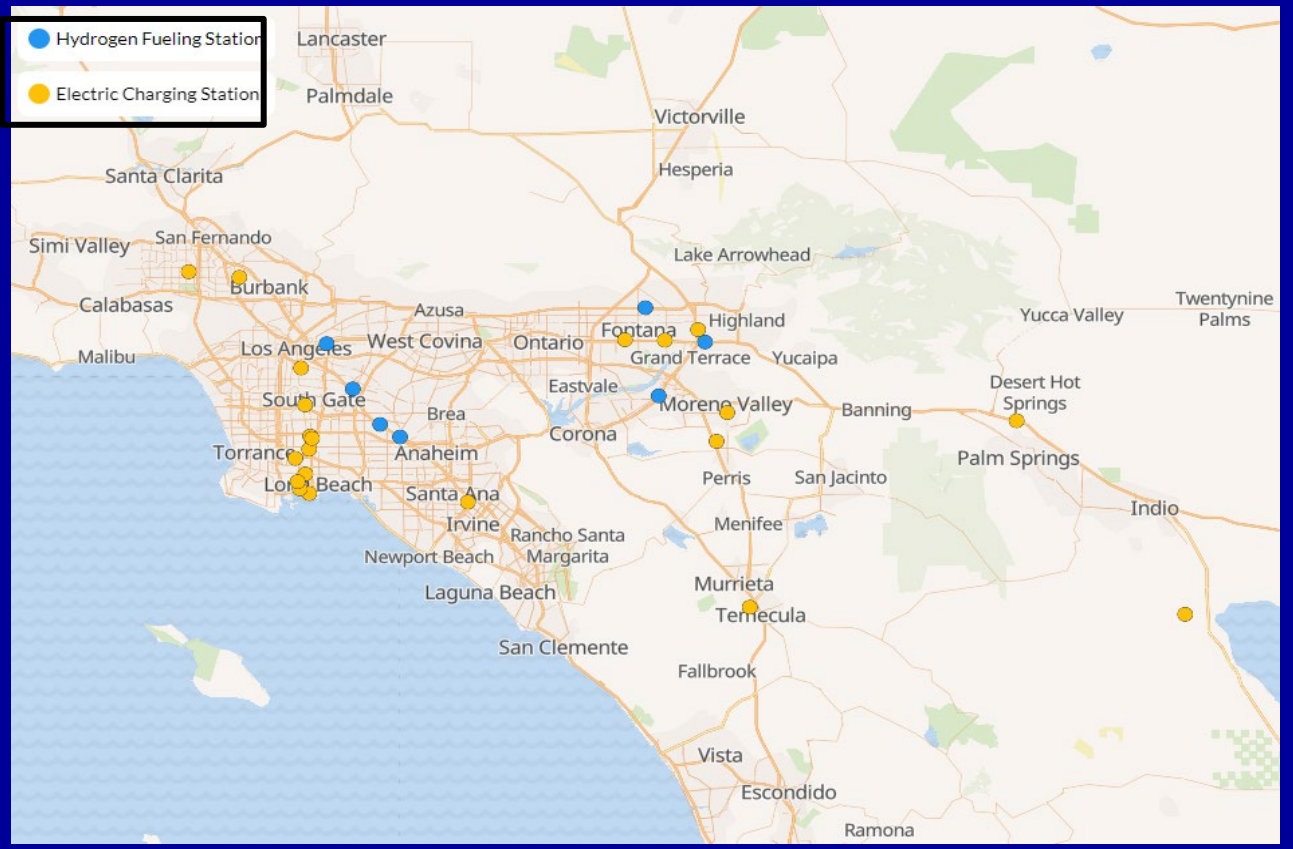
Program	Total Funds Awarded
Carl Moyer SB 1107 (Fund 32)	$59,780,486
Carl Moyer AB 923 Match Funds (Fund 80)	$7,467,074
Community Air Protection Funds (Fund 77)	$41,878,218
Total	$109,125,778

Proposal

- Prioritizing hydrogen fueling
- 7 hydrogen stations
  - Adding >30 dispensers
  - Support all vehicle types
  - 1 university site for workforce training
- 21 electric charging stations
  - Adding >800 connectors
  - Fast chargers for HD trucks
  - 2 public school districts
- 34 backup projects

Benefits to South Coast AQMD

- Adding infrastructure along trade corridors:
  - San Pedro Bay Ports
  - I-710, I-105, I-5, I-10, I-15, I-215, I-405, CA-55, CA-60, CA-91, CA-210, CA-1
- 12 projects in AB617 communities
- >90% within disadvantaged communities
- Emission reductions of 487 TPY NOx and 7 TPY of PM



Summary of Recommended Actions

- Authorize Executive Officer to execute contracts for Carl Moyer and CAPP Programs in amount not to exceed $109,125,778 and to execute contracts on backup list
- Authorize Executive Officer to redistribute source of funds between Carl Moyer Program (including State Reserve and associated interest & match funds) and CAPP Incentives to meet program and liquidation requirements

BOARD MEETING DATE: December 6, 2024 AGENDA NO.

PROPOSAL: Execute Sponsorship Agreement to Support Workforce Training and Professional Development of Electric Vehicle and Battery Engineers

SYNOPSIS: California State University, Los Angeles, has been selected as one of 12 universities nationwide to participate in the Battery Workforce Challenge. This engineering competition will challenge universities and their partners to design, build, test and integrate advanced EV battery packs into a Stellantis vehicle. This program will help prepare and train the next generation of engineers and technicians to handle the increased demand for EVs. This action is to execute a sponsorship agreement with California State University, Los Angeles, in an amount not to exceed $150,000 from the Clean Fuels Program Fund (31).

COMMITTEE: Technology, November 15, 2024; Recommended for Approval

RECOMMENDED ACTION:
Authorize the Executive Officer to execute a sponsorship agreement with California State University, Los Angeles, to support their participation in the Battery Workforce Challenge and promote the training and growth of next generation EV engineers in an amount not to exceed $150,000 from the Clean Fuels Program Fund (31).

Wayne Nastri.
Executive Officer

AK:MW:VP:HL

Background

In 2023, California State University, Los Angeles (Cal State LA) was selected as one of 12 universities nationwide to participate in the (DOE and Stellantis N.V. (Stellantis) Battery Workforce Challenge (BWC). BWC is a collegiate and

engineering competition that gives students hands-on, real-world experience in battery design and implementation. The three-year competition partners 12 university engineering departments with 12 local vocational schools together to design, build, and integrate an advanced EV battery pack into a Stellantis vehicle. The Cal State LA team is the Charging Eagles and is comprised of 66 engineering students that currently are designing an 82-kWh battery pack in the first year of this competition to operate safely, reliably, and meet performance requirements. In the second and third year of this competition, the team will test the battery within the Stellantis vehicle and compete against other teams against different performance measures. All these challenges will incur costs related to the purchase of vehicle parts, tools, computers, software licenses, student stipends, faculty release time, outreach materials, and office consumables.

Proposal

Through the BWC, a public-private partnership will be established that trains the next generation of engineers, technicians, and workers to help support the workforce demand for a domestic EV battery design and development. The team at Cal State LA has secured over $500,000 in funding from competition sponsors, including the Sikand Center for Sustainable and Intelligent Infrastructure (Sikand SITI –Center) and the College of Engineering, Computer Science, and Technology (ECST). This effort is led by Cal State LA faculty in the Departments of Electrical Engineering, Mechanical Engineering, and Engineering Technology.

South Coast AQMD sponsorship of the Cal State LA team for this competition will support the purchase of the needed hardware and software as well as student stipends, faculty release time, and travel expenses related to the competition. The successful completion of this competition will provide the students, majority of whom reside within overburdened communities, an opportunity to secure high-paying engineering careers.

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 provision B.2.d.: Other circumstances exist which in the determination of the Executive Officer require such waiver in the best interests of the South Coast AQMD. Specifically, these circumstances are B.2.d.(8): Research and development efforts with educational institutions or nonprofit organizations. The proposed project will include contributions and cost-share by Sikand SITI-Center and ECST.

Benefits to South Coast AQMD
Projects to support the development and demonstration of EV technologies and supporting infrastructure are included in the Technology Advancement Office Clean Fuels Program 2024 Plan Update under the "Demonstrate Light-Duty Battery Electric Vehicles and Plug-In Hybrid Vehicles." The design and development of advanced batteries are a key component to electrify the transportation sector. The deployment of EVs within the South Coast region will create a demand for a domestic EV battery workforce. Engineering a battery pack is challenging and takes years of experience and a variety of skill sets. BWC seeks to motivate and build a highly skilled domestic workforce with the hands-on experience and knowledge needed for in-demand positions throughout the EV and battery industry. Students participating in this competition will be educated and trained to become highly skilled engineers driving battery technology, and South Coast AQMD's support for this project will foster the next generation of EV and battery experts, which is synergistic to South Coast AQMD's vision and future projects.

Resource Impacts
South Coast AQMD's support for the Training and Professional Growth of Next Generation Electric Vehicle and Battery Engineers shall not exceed $150,000 from the Clean Fuels Program Fund (31). In addition, Cal State LA has secured over $500,000 in contributions from the Sikand SITI-Center and ECST, both of whom are competition sponsors.

Sufficient funds are available from the Clean Fuels Program 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.

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Agenda Item #3

Execute Sponsorship Agreement to Support Workforce Training and Professional Development of Electric Vehicle and Battery Engineers

Vasileios Papapostolou

Background

- California State University, Los Angeles was one of 12 universities nationwide selected to participate in the Battery Workforce Challenge (BWC)
- BWC is a collegiate and engineering competition that gives students hands-on, real-world experience in battery design and realization
- Prepares and trains the next generation of engineers and technicians to handle the increased demand for electric vehicles

Proposal

- Over $500,000 in funding secured from competition sponsors:
  - Sikand SITI Center
  - College of Engineering, Computer Science, and Technology
- Successful completion of BWC enables students from overburdened communities to secure top jobs from the nation's leading automotive and battery companies
- Staff proposes to sponsor the BWC Competition to cover for items such as vehicle parts, equipment and software tools

Summary of Recommended Action

Authorize the Executive Officer to execute a sponsorship agreement with California State University, Los Angeles in an amount not to exceed $150,000 from the Clean Fuels Program Fund (31)