

BOARD MEETING DATE: May 2, 2025

AGENDA NO. 22

REPORT: Technology Committee

SYNOPSIS: The Technology Committee held a hybrid meeting on Friday, April 18, 2025. The following is a summary of the meeting.

RECOMMENDED ACTION:  
Receive and file.

Carlos Rodriguez, Chair  
Technology Committee

AK:psc

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### **Committee Members**

Present: Supervisor Curt Hagman  
Mayor Patricia Lock Dawson  
Mayor Pro Tem Larry McCallon  
Supervisor Janet Nguyen  
Board Member Veronica Padilla-Campos  
Mayor Pro Tem Carlos Rodriguez, Committee Chair

### **Call to Order**

Committee Chair Carlos Rodriguez called the meeting to order at 12:42 p.m.

For additional details of the Technology Committee Meeting, please refer to the [Webcast](#).

### **Roll Call**

### **ACTION ITEMS:**

#### **1. Execute Contract to Evaluate Performance and Emissions of a Linear Generator**

Sam Cao, Program Supervisor, Technology Advancement Office, presented on a project to conduct an emissions study to assess the long-term performance, applications, efficiencies, and emission profile of a linear generator. This action is to

execute a contract with Institute of Gas Technology (GTI Energy) to assess the performance and efficiency and evaluate emissions from a Mainspring linear generator using renewable fuels in an amount not to exceed \$660,000 using the Clean Fuels Program Fund (31). For additional details, please refer to the [Webcast](#) beginning at 2:48.

Mayor Pro Tem Larry McCallon asked about the number of linear generator manufacturers. Aaron Katzenstein, Deputy Executive Officer, Technology Advancement Office, responded that there are two linear generator manufacturers: Mainspring, and Hyliion, and this project is focused on the Mainspring linear generator. For additional details, please refer to the [Webcast](#) beginning at 6:37.

Supervisor Hagman expressed interest in bringing more of these technologies to work with South Coast AQMD. Dr. Katzenstein responded that the Technology Advancement Office is actively engaging with companies, and this is a unique opportunity with GTI and CEC funding. Dr. Katzenstein explained that Prologis has multiple charging sites looking to deploy innovative charging technologies. For additional details, please refer to the [Webcast](#) beginning at 7:34.

Ranji George, a public member, expressed that linear generator studies need to focus on the start-up of the generator operation. For additional details, please refer to the [Webcast](#) beginning at 9:30.

Harvey Eder, Public Solar Power Coalitions, concurred with Ranji George's comments. For additional details, please refer to the [Webcast](#) beginning at 10:34.

Committee Chair Rodriguez commented that this project is a significant partnership and investment and asked if there are other linear generator deployments other than the Torrance Prologis site. Dr. Katzenstein, responded there is another example of a grocery/cold storage site in Colton. Mayor Pro Tem Larry McCallon commented that the cold storage (Food 4 Less) site in Colton has the Mainspring generator deployed. For additional details, please refer to the [Webcast](#) beginning at 11:05.

Moved by Hagman; seconded by McCallon; unanimously approved.

Ayes: Hagman, Lock Dawson, McCallon, Nguyen, Padilla-Campos, Rodriguez  
Noes: None  
Abstain: None  
Absent: None

**2. Transfer Funds for the Development of the Carl Moyer Program Grant Management System**

Yuh Jiun Tan, Program Supervisor, Technology Advancement Office, presented on the final development phase of the Grant Management System that requires the integration of an invoicing module and annual report tracker. This action is to transfer and appropriate up to \$135,000 from the administrative portion of the Carl Moyer Program Fund (32) into Information Management’s FY 2024-25 and/or 2025-26 Budget, Professional and Special Services and Supplies and/or Capital Outlays Major Objects for the further development and maintenance of the Carl Moyer Grant Management System. For additional details, please refer to the [Webcast](#) beginning at 14:50.

Committee Chair Rodriguez expressed support for the item as it helps streamline the process. For additional details, please refer to the [Webcast](#) beginning at 17:38.

Supervisor Hagman expressed support for the item, but inquired why the additional modules were not included in the previously approved funding and whether this would be the final phase. Dr. Katzenstein added that the Carl Moyer Program constantly changes, and while this is the final planned phase, future modifications may be needed to accommodate future modifications to the Carl Moyer Program. For additional details, please refer to the [Webcast](#) beginning at 17:48.

In response to a question from Board Member Padilla-Campos, staff confirmed that the system is for both internal and external use. For additional details, please refer to the [Webcast](#) beginning at 20:08.

Moved by Hagman; seconded by Lock Dawson; unanimously approved.

Ayes: Hagman, Lock Dawson, McCallon, Nguyen, Padilla-Campos, Rodriguez  
Noes: None  
Abstain: None  
Absent: None

**3. Appropriate Funds, Execute Agreement for EV Hardware at South Coast AQMD Headquarters and Authorize Removal of Fixed Assets Inventory**

Vasileios Papapostolou, Planning and Rules Manager, Technology Advancement Office, presented on the execution of a contract with GreenWealth Energy Solutions, Inc. (GreenWealth) to install and maintain a new EV charger network at South Coast AQMD headquarters. These actions are to: 1) authorize the appropriation of funds and execute the previously approved contract with GreenWealth from the Technology Advancement Office’s FY 2024–2025 or FY 2025–2026 Budget; 2) execute an agreement with ChargePoint, Inc. to donate South Coast AQMD’s existing old EV chargers in exchange for new EV chargers and release them to GreenWealth for installation; and 3) declare South Coast AQMD’s existing old chargers nonoperational and approve the removal and donation of the chargers. For additional details, please refer to the [Webcast](#) beginning at 21:34.

Mayor Pro Tem McCallon asked if the agency will be replacing the chargers in a phased approach and if the project will begin with the parking area outside of Conference Room CC-8. Dr. Katzenstein confirmed that the project will use a phased approach, and it will take approximately 2 weeks to replace the chargers in the parking lot, starting with the CC-8 parking lot. Mayor Pro Tem McCallon also asked if the charger replacement will interfere with the meetings held in the auditorium. Dr. Katzenstein confirmed the meetings will be considered when replacing the chargers. For additional details, please refer to the [Webcast](#) beginning at 24:43.

Board Member Padilla-Campos asked for clarification about the charger donation. Dr. Papapostolou explained that South Coast AQMD is donating the old chargers to this program in order for them to be repurposed to have a “second life” and, by doing so, the new chargers will be released to the selected vendor for installation. For additional details, please refer to the [Webcast](#) beginning at 25:41.

Committee Chair Rodriguez asked if the 55 new charging stations are new or repurposed, the general life expectancy of the chargers, and the life span of the South Coast AQMD chargers that will be replaced. Dr. Papapostolou confirmed the chargers are new and have an average life expectancy between 5 and 7 years with 7-year service agreement and warranty, and the replaced chargers are more than a decade old. For additional details, please refer to the [Webcast](#) beginning at 27:32.

Moved by McCallon; seconded by Hagman; unanimously approved.

Ayes: Hagman, Lock Dawson, McCallon, Nguyen, Padilla-Campos, Rodriguez  
Noes: None  
Abstain: None  
Absent: None

**INFORMATIONAL ITEM:**

**4. Capture and Control System for Ocean-Going Vessel**

Randall Pasek, STAX Engineering Inc., presented an overview of the development and implementation of Range Energy’s electric trailer system that reduces diesel fuel consumption for a multitude of trailer operating conditions. For additional details, please refer to the [Webcast](#) beginning at 29:57.

Committee Chair Rodriguez inquired about the emission reduction benefits. Dr. Pasek responded that he does not have a quantitative figure, and explained that there are a wide variety of vessel types such as auto carriers, container, and tanker vessels that are using this technology and this technology is part of the State Implementation Plan to reduce NOx emissions and meet air quality goals. For additional details, please refer to the [Webcast](#) beginning at 41:52.

Mayor Pro Tem McCallon inquired if the contracts are with the terminal, vessel operator, or the Ports. Dr. Pasek responded that contracts are primarily with the fleets and are occasionally with the terminals. The Ports are also involved and placed STAX on an approved vendor list to allow for easier access. Mayor Pro Tem McCallon also inquired why STAX chose methanol instead of hydrogen. Dr. Pasek explained that methanol storage has a much smaller footprint compared to hydrogen, and methanol has been used widely in the shipping industry. For additional details, please refer to the [Webcast](#) beginning at 45:00.

Mr. George inquired if the tanker vessels have multiple stacks and offered funding suggestions for these types of technologies. Dr. Pasek responded that STAX Engineering will have an approved Executive Order to treat multiple stacks. For additional details, please refer to the [Webcast](#) beginning at 48:05.

**OTHER MATTERS:**

**5. Other Business**

There was no other business to report.

**6. Public Comment Period**

There was no public comment to report.

**7. Next Meeting Date**

The next regular Technology Committee meeting is scheduled for Friday, May 16, 2025, at noon.

**Adjournment**

The meeting adjourned at 1:35 p.m.

**Attachment**

Attendance Record

**ATTACHMENT**

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
TECHNOLOGY COMMITTEE MEETING  
Attendance Record – April 18, 2025**

Supervisor Curt Hagman .....	South Coast AQMD Board Member
Mayor Patricia Lock Dawson .....	South Coast AQMD Board Member
Mayor Pro Tem Larry McCallon .....	South Coast AQMD Board Member
Board Member Veronica Padilla-Campos .....	South Coast AQMD Board Member
Mayor Pro Tem Carlos Rodriguez .....	South Coast AQMD Board Member
Supervisor Janet Nguyen .....	South Coast AQMD Board Member
Debra Mendelsohn .....	Board Consultant/Assistant (McCallon)
Fred Minassian .....	Board Consultant/Assistant (Padilla-Campos)
Christian Contreras .....	Public Member
Kiera Dixon .....	Public Member
Harvey Eder .....	Public Solar Power Coalition
Ranji George .....	Public Member
Franco Ghadiri .....	Mainspring
Altie Holcomb .....	Public Member
Lisa Mirisola .....	Public Member
Randall Pasek .....	STAX Engineering
Peter Whittingham .....	Public Member
Debra Ashby .....	South Coast AQMD Staff
Jason Aspell .....	South Coast AQMD Staff
Cindy Bustillos .....	South Coast AQMD Staff
Sam Cao .....	South Coast AQMD Staff
Penny Shaw Cedillo .....	South Coast AQMD Staff
Scott Gallegos .....	South Coast AQMD Staff
Dé Groeneveld .....	South Coast AQMD Staff
Sheri Hanizavareh .....	South Coast AQMD Staff
Maryam Hajbabaei .....	South Coast AQMD Staff
Anissa Heard-Johnson .....	South Coast AQMD Staff
Justin Joe .....	South Coast AQMD Staff
John Jones .....	South Coast AQMD Staff
Aaron Katzenstein .....	South Coast AQMD Staff
Brandee Keith .....	South Coast AQMD Staff
Angela Kim .....	South Coast AQMD Staff
Howard Lee .....	South Coast AQMD Staff
Tom Lee .....	South Coast AQMD Staff
Hay Lo .....	South Coast AQMD Staff
Jospeh Lopat .....	South Coast AQMD Staff

Ron Moskowitz ..... South Coast AQMD Staff  
Ghislain Muberwa ..... South Coast AQMD Staff  
Susan Nakamura ..... South Coast AQMD Staff  
Vasileios Papapostolou ..... South Coast AQMD Staff  
Robert Paud ..... South Coast AQMD Staff  
Cynthia Ravenstein ..... South Coast AQMD Staff  
Kristin Remy ..... South Coast AQMD Staff  
Brian Roberts ..... South Coast AQMD Staff  
Yuh Jiun Tan ..... South Coast AQMD Staff  
Alexis Throuwer ..... South Coast AQMD Staff  
Alejandra Vega ..... South Coast AQMD Staff  
Kristina Voorhees ..... South Coast AQMD Staff  
Mei Wang ..... South Coast AQMD Staff  
Victor Yip ..... South Coast AQMD Staff