BOARD MEETING DATE: November 5, 2021 AGENDA NO. 27B

REPORT: Marine Port Committee

SYNOPSIS: The Marine Port Committee held a meeting remotely on Friday,

October 15, 2021. The following is a summary of this meeting.

RECOMMENDED ACTION:

Receive and file.

Rex Richardson, Co-Chair Marine Port Committee

IM:de

Committee Members

Present:

Vice Mayor Rex Richardson/Co-Chair

Senator (Ret.) Vanessa Delgado

Board Member Veronica Padilla-Campos

Absent: Council Member Joe Buscaino/Co-Chair

Supervisor Lisa Bartlett

Mayor Pro Tem Larry McCallon

Call to Order

Co-Chair Richardson called the meeting to order at 12:30 p.m.

INFORMATIONAL ITEM:

1a. Market Readiness and Demand for ZE/NZE Trucks

Dr. Matt Miyasato, Chief Technologist and Deputy Executive Officer/Science and Technology Advancement, provided an overview of the market readiness and demand for zero-emission (ZE) and near-zero-emission (NZE) trucks, based on the technology implementation incentive programs administered by South Coast AQMD since 2016.

1b. Manufacturing Capacity for ZE/NZE Trucks

Tom Swenson, Cummins, introduced his company as the advanced diesel and natural gas heavy-duty engine manufacturer, with heavy investments in battery electric and hydrogen technologies. Cummins offers ultra-low NOx natural gas engines with suitable applications ranging from medium-duty box trucks, heavy-duty semi-trucks, to those up to 96,000 lbs. These natural gas engines are in normal and regular production alongside their diesel counterparts, and they are built in New York and North Carolina plants. Truck- production is also normal and includes truck brands such as Freightliner, Kenworth, Mack, Peterbilt and Volvo with configurations for day cabs and sleepers. He stated that Cummins, and its truck manufacturing partners, can produce and deliver ultra-low NOx natural gas trucks ordered by customers and such trucks have been delivered to drayage fleets operating at the Ports of Los Angeles and Long Beach. Cummins will introduce a 15-liter ultra-low NOx natural gas engine to be introduced to the market in 2024. Mr. Swenson indicated that the delivery of ultra-low NOx natural gas engines is meeting the demand and production timeframe of the original equipment manufacturers (OEM) of trucks. However, truck OEMs are currently faced with challenges in finding available build slots due to much higher-than-predicted demand for new trucks.

Lacy Robertson, Rush Enterprises, commercial vehicle dealership group representing OEMs including Peterbilt, Navistar, Isuzu, Hino, and Ford, added that there are shortages in truck parts across the supply chain. She stated that despite the expected ramped-up production of ZE trucks over the next two years, dealerships are currently taking ZE truck orders. Production volume of these trucks is anticipated to be limited and their delivery timeline will be protracted.

Jed Proctor, eMobility at Daimler Trucks North America, , stated that Daimler began taking order of battery electric trucks in April 2021 and will go into production in October 2022. With an order placed today, the delivery timeline is estimated to be mid-2023. Daimler's current manufacturing capacity of ZE trucks will satisfy the expected market demand for the next few years and the company will scale up the production as required by the market demand.

Dr. Aravind Kailas, Volvo Group North America, , stated that South Coast AQMD's Volvo LIGHTS program is demonstrating the success of battery electric truck technologies in real-world customer operations. The program includes approximately 25 trucks in three different configurations: straight trucks, four-by-two and six-by-two day cab tractors. The trucks are equipped with 455-horsepower drivetrains and have up to 120-150 miles in range and up to 65 miles per hour in speed. All trucks are built in Volvo's Virginia plant. While Volvo's battery electric trucks are available to order today, Dr. Kailas emphasized continued incentives and sufficient charging infrastructure as key factors to grow the nascent market of battery electric trucks. He added that only a small portion of Volvo LIGHTS routes and application focused on drayage fleets due to

their unique economics and operations. He concluded that ZE solutions, especially for drayage fleets, will require long-term commitments from state agencies and creative industry solutions.

Robert Carrick Vehicle Velocity Group, a dealership for Freightliner trucks, promotes ZE trucks and installing charging infrastructure at their own facilities. He cited Mr. Proctor's estimated availability of Daimler's battery electric trucks and indicated that the dealership is ready to take order today and will deliver as soon as the vehicles become available around mid-2023. In terms of ultra-low NOx natural gas trucks, Mr. Carrick stated that due to supply chain issues, the delivery timeline is one year if ordered today compared to six months of lead time only six months ago. He opined that renewable natural gas fueled ultra-low NOx natural gas trucks can complement ZE trucks for drayage fleets.

Public Comments:

Elliot Gonzales urged South Coast AQMD to adopt a strong indirect source rule (ISR) for marine ports and refrain from using "near-zero" to refer to natural gas trucking technologies when communicating with the public. He stated that there is no renewable source for natural gas and that the term "near-zero" does not accurately describe natural gas, or methane, which is a more potent greenhouse gas (GHG) than carbon dioxide (CO2). He appealed to South Coast AQMD to describe ZE/NZE technologies by their energy source.

Matt Schrap, Harbor Trucking Association (HTA), stated that its members' recent experience with truck dealerships concurs with the one-year order-to-delivery timeframe for new truck in general and the 2023 delivery timeline for ZE trucks. He expressed concerns over the approaching deadline of January 1, 2023 to turn over more than 6,000 drayage trucks, to comply with California's Truck and Bus Regulation.

Yassi Kevezade, Sierra Club, commented on the benefits of ZE solution investment for global businesses and the success of ZE technology projects such as Volvo LIGHTS. She opined that South Coast AQMD continues to prioritize fossil fuel combustion technology more than ZE technologies, by referencing Dr. Miyasato's presentation where more grants were shown to be awarded to purchase NZE than ZE trucks from 2016 to date. Ms. Kevezade suggested that the Ports MOU discussion needs to include investments in ZE infrastructure to help implement (proposed) CARB regulations with compliance deadlines around 2030. She urged South Coast AQMD to rely on technology solutions other than combustion of fossil fuels, to address the public health crisis of ozone non-attainment. She expressed her organization's support of a regulatory approach instead of an MOU to reduce emissions from port sources.

Fernando Gaytan, Earthjustice, expressed support for a regulatory approach, citing the Ports being not yet ready in proposing specific emission reduction measures. He

commented that South Coast AQMD should regulate port emissions especially under the new 24/7 operating model at the ports. He urged South Coast AQMD to focus on emissions associated with whole port operation and their impact on regional air quality. Mr. Gaytan urged that South Coast AQMD to align its priorities with those of the state, to transition to ZE across mobile and stationary sources. He added that the transition cannot rely on incentives alone and that equipment turnover schedule must be coupled with targeted caps on emissions with set timetables.

Todd Campbell, Clean Energy, a company which offers renewable natural gas (RNG) and hydrogen fueling infrastructure, commented that RNG comprises 100 percent of fuel used for compressed natural gas (CNG) trucks in California. He stated that RNG is a negative carbon fuel consisting of organic methane from waste, and the use of RNG reduces emissions of short-lived climate pollutant by, first, preventing organic methane from being directly emitted into the air, and second, eliminating diesel particulate matter (DPM)/black carbon emissions by replacing diesel. Mr. Campbell cited the 6,000 drayage trucks that need to be turned over by January 1, 2023 and the market availability of ZE trucks in mid-2023. He commented that if these drayage trucks are not turned over to NZE, where the term "near-zero" refers to engines certified to reduce at least 90 percent of oxides of nitrogen (NOx) from latest diesel engines, they will be replaced by diesel trucks.

Mandeera Wijetunga, Pacific Environment, expressed the need to reduce emissions from port operations as a whole. He added that ships, including harbor craft and oceangoing vessels (OGVs), are the largest polluting source at the ports. He highlighted the continued use of diesel engines for trucks and other onsite vehicles is harmful for residents in the adjacent communities. Mr. Wijetunga advocated for a higher Clean Truck Program (CTP) fee rate of \$70 or more per twenty-foot-equivalent (TEU) container to fund ZE deployment at the Ports.

Board Member Comments:

Board Member Padilla-Campos commented that the region should not rely on natural gas trucks to replace diesel trucks and indicated that natural gas technologies will not lead us to the needed emission reductions in the long-run and will become eventually obsolete. She stated that diesel trucks need to be replaced by ZE technologies, and that investments should be made on ZE infrastructure instead of on near-zero natural gas technologies. She added that South Coast AQMD needs to signal to the industry and to the Ports to do more to reduce the emissions they are directly contributing to. She concluded by stressing the need to begin ordering ZE trucks to get them built and operated in communities.

Senator Delgado asked Dr. Miyasato to clarify whether a truck ordered today will only be delivered in 2023. He responded that, in the case of (ultra-low NOx) natural gas trucks, a truck ordered today will be delivered around the end of 2022 or early 2023.

Senator Delgado asked the OEMs what public agencies can do to assist with ZE/NZE truck deployment, given the current order backlog. Mr. Proctor responded that, while the supply chain challenge is impacting the delivery of diesel and natural gas trucks, the ZE truck delivery timeframe of mid-2023 is related to the company's internal testing and production schedule. Meanwhile, ZE truck deployment at scale will be more likely if ZE infrastructure is installed in and around the Ports, thus allowing for vehicle charging outside of a truck fleet's own warehouses and depots and along the fleet's daily routes. Rethinking the truck queuing process at the ports to allow for best utilization of onsite charging infrastructure could offer additional help. Dr. Kailas followed by emphasizing the need to bring down ZE truck prices via incentives for early ZE technology adopters. He mentioned the likely deployment of a few hundred Volvo ZE trucks over the next few years, with a 6-to-8-month delivery timeframe, are associated with about 200 vouchers under California's Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP) and about 90 trucks with South Coast AQMD grants. While supply chain issues can impact truck delivery, Dr. Kailas commented that ZE infrastructure is an additional factor. First, for behind-the-fence charging infrastructure installation, he cited lead time of 12-18 months based on the Volvo LIGHTS project experience, which was for large fleets that can better manage and afford on-site infrastructure installation. Second, infrastructure planning may vary by duty cycle. For example, drayage trucks may need charging hubs if behind-the-fence charging is unavailable.

Dr Miyasato commented that up to 1,000 ZE trucks will be deployed over the next few years, based on staff's knowledge from working with major OEMs and on-the ground experience of charging infrastructure installation projects. In comparison, Cummins is currently able to produce about 1,000 NZE natural gas trucks per month. This at-scale production of trucks with engines that are at least 90 percent cleaner than their diesel counterparts is the reason behind staff's push for near-term NZE truck deployment.

Senator Delgado then inquired about ZE truck charging standard. Dr. Kailas responded that the trucking industry is already working on standardization of charging for new connectors including developing a megawatt charging standard that could be potentially set next year to facilitate the subsequent development and manufacturing of necessary components. Backward compatibility between current and new connectors will also be developed.

Senator Delgado expressed her interest in working with other Board Members in utilizing the MOU process to help with the transition to ZE technologies.

Co-Chair Richardson stressed the need for CARB to ensure that the new trucks ordered in 2022 will help fleets comply with the Truck and Bus Regulation, even if the trucks are not delivered until 2023 due to supply chain issues. He expressed interest in working through the Ports MOU to offer incentives for truck components made locally, which

will bring ZE truck production closer to the fleets that are buying these trucks and can additionally help with circumventing supply chain issues. Mr. Wayne Nastri, Executive Officer, indicated that staff needs to get clarifications from CARB on whether the 2023 deadline applies to actual purchase or truck delivery. Dr. Kailas stated that Volvo has dealerships and supporting services for ZE truck deployment in California, but truck manufacturing currently takes place in Virginia except for sourcing of battery from abroad.

Board Member Padilla-Campos acknowledged the long delivery timeframe of heavy-duty ZE vehicles and the need for ZE infrastructure. Co-Chair Richardson indicated the Committee's interest in receiving an update on the ZE charging infrastructure plan at the San Pedro Bay Ports.

1c. Ports MOU Status Update

Ian MacMillan, Assistant Deputy Executive Officer/Planning, Rule Development and Area Sources, provided a status update on the Ports MOU progress.

Co-Chair Richardson commented that the Committee conveyed a clear message to the Ports staff at the last Committee meeting two weeks ago that they need to go beyond the Clean Air Action Plan (CAAP) and bring additional specific measures to the MOU discussion that would lead to additional emission reductions, including a structure to generate more revenues needed for drayage truck turnover to cleaner technologies. Ports staff were requested to go back to their respective boards and ask for more authorization to discuss reduction of emissions from trucks but also from other port sources. Co-Chair Richardson emphasized the need for an equitable and just transition to cleaner technologies and asked staff about stakeholder meetings with port communities and labor. He expressed his interest in a MOU mechanism to fast-track funding upfront to ensure immediate-term turnover of all 6,000 strong drayage trucks to cleaner technologies and the subsequent turnover of 18,000 trucks regionwide. Co-Chair Richardson stressed the need for a contingency plan in the MOU to ensure that real emission reductions would be achieved in an equitable and just manner.

Because of the ports' 24/7 operation and the associated implications on the adjacent communities, Board Member Padilla-Campos urged the Committee to continue pushing for real emission reductions and serious movement within the given MOU timeframe.

Co-Chair Richardson requested that staff report back at the next Committee meeting on the topic of 24/7 ports operation, its potential air quality impacts, and how the Ports MOU discussion may factor this in. Senator Delgado expressed concerns that the federal priority for the Ports to move to 24/7 operation, would potentially be used by Ports staff as justification to further extend the MOU discussion. She agreed with Co-Chair Richardson's request for staff to report back on this topic.

Public Comments:

Ramon Ponce de Leon, International Longshore and Warehouse Union (ILWU) Local 13, commented that a regulatory approach will be an adversarial move and that the Ports and South Coast MOU must work in partnerships to negotiate and execute a MOU. Citing the Governor's executive order this past summer to waive the requirements for Ocean Going Vessels (OGVs) to plug into shore power due to electric grid capacity issues, Mr. de Leon expressed concerns over the need for charging infrastructure to deploy ZE drayage trucks and therefore putting higher demand on the grid. He further expressed concern about the affordability of ZE trucks for independent truck owners/operators. Mr. de Leon advocated for increased use of rail, potentially combined with the transition to electric locomotives, as a better way to replace diesel drayage trucks for emission reductions, which would also reduce highway congestion close to the Ports.

Harvey Eder, Public Solar Power Coalition, commented on his history advocating for solar conversion and in contacting BYD and Tesla to manufacture ZE trucks.

Chris Chavez, Coalition for Clean Air, expressed continued support for an ISR over a MOU for the marine ports, and cited the AB 617 communities' support for an ISR. He commented that the Governor's executive order to temporarily waive shore power requirements, was triggered by an extreme heat event, which evidenced the need for emission reductions from the Ports. Mr. Chavez referenced the Port of San Diego's recently announced zero-emission commitment, which he contends should set the standard for all ports. He asked if South Coast AQMD was consulted on the air quality impacts with regards to the federal intervention that led to 24/7 operation at the Ports.

Mr. Robert Nothoff, Los Angeles County Federation of Labor, expressed the organization's support for a robust MOU as it allows for more flexibility in protecting labor. He stated that a collaborative process and real buy-in from stakeholders and communities are paramount for the execution and implementation of a successful MOU, which would: 1) lead to better environmental standards and investments in ZE technologies; 2) ensure that the deployment of ZE technologies is tied to proper worker classification and good wages; 3) ensure that ZE truck manufacturing and infrastructure installation are done by skilled and trained workforce; and 4) lead to a cleaner and more efficient port complex.

Mr. Gaytan reiterated his earlier comments and applauded Board Members' support for ZE infrastructure. Mr. Gonzalez reiterated his earlier comments and his support for an ISR to achieve attainment, fair labor practice, and deployment of ZE trucks and infrastructure. Ms. Kevezade expressed concerns about the MOU process being used to prolong the Ports' delay in taking substantial actions to reduce emissions from port sources. She projected that an ISR process would facilitate ZE infrastructure deployment, actual onsite emission reductions to reduce health risk for the port

communities, and the transition to ZE in general. She opined that the associated actions are within South Coast AQMD's jurisdiction and communicated her wish for the Ports staff to share with the public their current thinking on the Ports MOU. Mr. Wijetunga cited no significant updates as the reason for South Coast AQMD to move to ISR development. He referred to the approximately 50-odd ships anchored offshore and asked South Coast AQMD to look into regulating OGV emissions and referenced CARB's proposed amendments to the harbor craft regulation. Mr. Wijetunga reiterated the need to reduce emissions from all port sources and to use the CTP revenue funded by a much higher fee rate to expand electrification at the Ports.

Co-Chair Richardson the asked staff about progress in the intervening two weeks since the last meeting with the ports. Mr. Nastri responded that there were two weekly staff meetings with Ports staff but without substantive discussion, as they needed approval from their respective boards to communicate with staff on any additional specific measures. Mr. Nastri also met with the Executive Director of the Port of Long Beach and the President of the Long Beach Harbor Commissioners, who expressed optimism of a potential agreement to do more. Mr. Nastri also met with labor groups including ILWU the day before the Committee meeting. He suggested that monthly Committee meetings be regularly scheduled going forward, to allow for a good balance of scheduling, content, and Committee member availability. Co-Chair Richardson emphasized the importance of spending time on engaging various stakeholders to achieve an MOU that can simultaneously meet multiple goals.

OTHER MATTERS:

2. Other Business

There was no other business to report.

3. Public Comment Period

Mr. Eder commented that the world's use of crude oil is increasing rapidly and this is not a sustainable path. He expressed that the Defense Production Act would need to be leveraged to introduce changes.

4. Next Meeting Date

TBD

Adjournment

The meeting adjourned at 2:12 p.m.

Attachment

Attendance Record

ATTACHMENT 1

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT MARINE PORT COMMITTEE MEETING Attendance – October 15, 2021

Senator (Ret.) Vanessa Delgado	South Coast AQMD Board Member
Genevieve Amsalem	,
Jacob Haik	` ,
Matthew Hamlett	` '
Amy Wong	` '
Ross Zelen	
1055 20101	Board Consultant (Macov)
Mark Abramowitz	Enviropolicy
Yasmine Agelidis	Earthjustice
Vasila Ahmed	OC Gov
Matthew Arms	Port of Long Beach
Angie Balderas	. Sierra Club
Brett Barry	
Christine Batikian	Port of Los Angeles
Erin Berger	. So Cal Gas
Teresa Bui	Pacific Environment
Irene Burga	. C40 Cities
Todd Campbell	Clean Energy Fuels
Christopher Cannon	Port of Los Angeles
Robert Carrick	VVG Truck
Morgan Caswell	Port of Long Beach
Chris Chavez	Coalition for Clean Air
Joy Crose	Port of Los Angeles
Mike DiBernardo	Port of Los Angeles
Tim DeMoss	Post of Los Angeles
Emma Downs	OC Gov
Fernando Gaytan	Earthjustice
Elliot Gonzales	Public Member
Aravind Kailas	Volvo
Yassamin Kavezade	Sierra Club
Sudhir Lay	City of Long Beach
David Libatique	Port of Los Angeles
Erick Martell	Port of Los Angeles
Dawn McIntosh	City of Long Beach
Jacqueline Moore	PMSA

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Michael Munoz	
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Jed Proctor	
Leela Rao	ε
Max Reyes	•
Lacy Robertson	
Madeline Rose	Pacific Environment
Matt Schrap	HTA
Tom Swenson	Cummins
Heather Tomley	Port of Long Beach
Eleanor Torres	Port of Long Beach
Peter Whittingham	
Mandeera Wijetunga	Pacific Environment
Derrick Alatorre	South Coast AQMD Staff
Barbara Baird	South Coast AQMD Staff
Phil Barroca	South Coast AQMD Staff
Philip Crabbe	
Danielle Escontrias	South Coast AQMD Staff
Joyce Iledan	South Coast AQMD Staff
Aaron Katzenstein	South Coast AQMD Staff
Angela Kim	
Patricia Kwon	South Coast AQMD Staff
Tom Lee	South Coast AQMD Staff
Ian MacMillan	South Coast AQMD Staff
Karin Manwaring	South Coast AQMD Staff
Matt Miyasato	South Coast AQMD Staff
Ron Moskowitz	~
Wayne Nastri	South Coast AQMD Staff
Sarah Rees	South Coast AQMD Staff
Kathryn Roberts	South Coast AQMD Staff
Elaine Shen	~
Lisa Tanaka	South Coast AQMD Staff
Veera Tyagi	South Coast AQMD Staff
Vicki White	South Coast AQMD Staff
Jill Whynot	South Coast AQMD Staff