



April 20, 2017

California Air Resources Board
1001 I St.
Sacramento, CA 95814

Re: 2017 Revisions to the Carl Moyer Memorial Air Quality Standards Attainment Program Guidelines

The California Electric Transportation Coalition (CalETC) appreciates the opportunity to comment on the California Air Resources Board (CARB) staff report, outlining proposed revisions to the Carl Moyer Memorial Air Quality Standards Attainment Program Guidelines to comply with Senate Bill 513 (Beall, 2015).

CalETC is a non-profit association promoting economic growth, clean air, fuel diversity and energy independence, and combating climate change through the use of electric transportation. CalETC is committed to the successful introduction and large-scale deployment of all forms of electric transportation including plug-in electric vehicles of all weight classes, transit buses, port electrification, off-road electric vehicles and equipment, and rail. Our board of directors includes: Los Angeles Department of Water and Power, Pacific Gas and Electric, Sacramento Municipal Utility District, San Diego Gas and Electric, Southern California Edison, and the Southern California Public Power Authority. Our membership also includes major automakers, manufacturers of zero-emission trucks and buses, and other industry leaders supporting transportation electrification.

Although California is leading the nation in zero-emission vehicle (ZEV) adoption, our state still has a long way to go to reach the goals in the Governor's Executive Order B-16-2012: 1.5 million ZEVs on California roads by 2025 and zero-emission vehicle infrastructure able to support 1 million vehicles by 2020. In addition, the state must implement SB 1275 (De León, 2014) and SB 1204 (Lara, 2014), which set targets for the deployment of 1 million zero- and near-zero-emission vehicles by 2023, access to these vehicles by disadvantaged and low- and moderate-income communities, and deployment of zero- and near-zero-emission medium- and heavy-duty vehicle technologies.

CalETC is supportive of the proposed amendments to the Carl Moyer Guidelines intended to provide support for the transformative, zero-emission technologies necessary to meet State Implementation Plan commitments and we respectfully provide the following feedback:

Overall considerations: Relating to all of the technologies eligible for funding through the Carl Moyer Program, we hope staff and the implementing air districts consider the implications of funding non-zero-emission technologies, like diesel engines, and how such projects will delay a

transition to zero-emission technologies, like plug-in electric vehicles, electric shore power, and electric power takeoff. Many of CARB's regulatory-, planning-, and funding-related actions seek to transition fleets to zero-emission, and while we recognize that reducing emissions from the dirtiest sectors in the near-term is important, we urge staff to keep the longer-term vision in mind. In addition, as recognized by staff in the report, as verified by test programs and reflected in planning estimates, engine-exhaust emissions often increase over time due to wear-and-tear on emission controls and other variables such as incomplete maintenance and tampering.¹ Zero-emission technologies do not have this emissions problem, and for plug-in electric vehicles, these vehicles continue to get cleaner as more renewables are added to the grid. Zero-emission technologies, as stated in the California Sustainable Freight Action Plan, should be used everywhere feasible, and near-zero-emission technologies, powered by clean, low-carbon renewable fuels, should be used everywhere else.² With regard to the Carl Moyer Program, we hope that staff's proposed amendments to the guidelines will complement this target and help transition fleets to zero-emission technologies.

Cost-effectiveness limits: CalETC supports the revised cost-effectiveness limits and tiered funding approach. The \$100,000 limit per weighted ton of emission reductions proposed for advanced technology projects that are zero-emission, or meet the cleanest certified optional standard applicable by source category, will be essential to ensure that fleets transition to the cleanest technologies now emerging in the marketplace. Staff's tiered proposal—which applies the \$30,000 limit to all early reductions to the required standard, and then allows the higher limit of \$100,000 to be applied to the increment of extra reductions beyond the required standard for engines certified to the cleanest optional standard or for zero-emission technologies—is reasonable to ensure funds are used in a cost-effective manner, but also could increase funding for zero-emission technologies.

Infrastructure funding: CalETC supports staff's infrastructure-funding proposal. Fueling-infrastructure cost is one of the primary barriers to the adoption of advanced technologies and allowing for Carl Moyer funding to help with this barrier will have a positive impact on zero-emission technology adoption. We support staff's proposal to provide air districts with the ability to fund infrastructure projects where the greatest penetration of commercially-available advanced-technology vehicles and equipment exists. Specifically, we support the funding of battery charging stations for on-road and off-road vehicles and equipment, and continuation of funding for electrification of both marine-shore-power and stationary-agricultural projects.

Co-funding: CalETC supports staff's proposal for project co-funding. SB 513 allows for air districts to work with grant applicants to co-fund projects using non-Carl Moyer incentive programs, like

¹ Staff Report: 2017 Revisions to the Carl Moyer Memorial Air Quality Standards Attainment Program Guidelines, March 10, 2016, p. 14. Available online at https://www.arb.ca.gov/msprog/moyer/april2017_boarditem_moyerstaffreport.pdf.

² California Sustainable Freight Action Plan, July 2016, p. 8. Available online at <http://www.dot.ca.gov/casustainablefreight/>.

the Low Carbon Transportation and Air Quality Improvement investments, up to the cost of the project, without penalizing project cost-effectiveness. We agree that project cost sharing will support the deployment of the cleanest technologies statewide by reducing a project's Carl Moyer funding and making it more cost-effective. For example, utilities, in some cases, provide funding for the charging station or charging infrastructure make-ready. We believe that staff's safeguards proposal to ensure projects are funded cost-effectively, that there is no double counting, and that private sector applicants provide a 15% cost share, is reasonable.

On-road heavy-duty vehicles: CalETC supports staff's proposal to ensure there is sufficient incentive funding for new on-road heavy-duty vehicles, particularly zero-emission heavy-duty vehicles. We appreciate the recognition that California must make a fundamental shift in the heavy-duty diesel on-road sector, to zero- and near-zero-emission technologies, in order to reach the state's clean-air targets. CalETC generally agrees with staff's proposed funding caps for zero-emission replacements or conversions. However, it is unclear why transit buses would be eligible for less funding than medium-heavy or heavy-heavy duty trucks or buses. We recommend that staff fund transit buses at the same level as the category within which they fall. I.e., a medium-heavy duty transit bus would be eligible for up to \$150,000 in funding, instead of only \$80,000. In addition, we recommend that the maximum funding percentage for larger fleets be 75% of the equipment replacement cost, instead of 50%, to allow interested air districts to fund needed projects at a higher level and achieve turnover for larger fleets faster.

We also encourage staff to consider how to best turnover fleets to zero-emission technologies using the Voucher Incentive Program (VIP) and the Carl Moyer funds for zero-emission technologies, since staff are proposing to increase the maximum amount offered to conventional vehicles that comply with the Statewide Truck and Bus Regulation. We support staff's proposal to expand eligibility for this portion of the program to fleets of any size—while still prioritizing funding for smaller fleets—to increase the demand for and development of cleaner technologies, particularly zero-emission technologies.

Off-road technologies: We support staff's proposal to extend eligibility for large fleets subject to the off-road regulation, and the ability of these fleets to continue accessing funding after 2019 for zero-emission equipment projects. CalETC supports staff's other changes to the off-road portion of the program as well, specifically to provide an opportunity for zero-emission off-road projects. We recommend that zero-emission projects be prioritized for funding, as these projects will achieve the most emissions reductions in the near- and long-term.

Marine vessels and locomotives: Regarding marine vessels and locomotives, we encourage staff to ensure that plug-in electric technologies, like electric shore power for vessels, continue to be eligible and prioritized for funding. We agree with staff that the cleanest available technologies should be eligible for the highest maximum funding.

Agricultural-assistance program: We appreciate the recognition in the agricultural-assistance program section, that funding will be beneficial for new opportunities that arise to repower engines with zero-emission electric motors.

Light-duty cars and trucks, lawn and garden equipment: Finally, we support staff's recommendation to continue the light-duty cars and trucks scrap program, and the lawn and garden program, to ensure that polluting technologies are being replaced with cleaner and zero-emission options.

Thank you for your consideration. Please do not hesitate to contact me should you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Hannah Goldsmith". The signature is written in a cursive style with a large initial "H" and a long, sweeping underline.

Hannah Goldsmith, Project Manager
California Electric Transportation Coalition