California New Car Dealers Association

May 27, 2022

Ms. Liane Randolph
Chair
California Air Resources Board
1001 I Street, Sacramento, California 95814

RE: Comments on Proposed Advanced Clean Cars II Regulation

Dear Chair Randolph:

The California New Car Dealers Association (CNCDA) is a statewide trade association that represents the interests of over 1,200 franchised new car and truck dealer members. CNCDA members are primarily engaged in the retail sale and lease of new and used motor vehicles, but also provide customers with parts, service, and automotive repair.

Thank you for the opportunity to submit written comments on the Proposed Advanced Clean Cars II (ACC II) regulations. We are providing comments to express our support of California's leadership in furthering the world's zero-emission vehicle (ZEV) transition. As new car dealers, our members are at the tip of the spear in helping consumers transition to ZEVs. We raise these important issues that must be considered to ensure the smoothest path possible for consumer adoption of ZEVs.

Toward that end, we recommend that the California Air Resources Board (CARB) follow its own precedent and incorporate a formal mid-term review to evaluate industry progress towards ACC II targets, as persistent shortages of key elements necessary to produce electric vehicles (e.g., lithium) may limit vehicle supply during the ACC II compliance period. Experience during the pandemic shows that vehicle supply constraints reduce affordability and undermine environmental goals by delaying the retirement of the oldest and most polluting vehicles on the road.

California Dealers Are "All-In" on EVs and CARB Deserves Credit for Facilitating the ZEV Transition.

California's franchised new car dealers are more excited than ever about our state's transition to zero emission vehicles. Dealers are making unprecedented investments in their workforce and facilities to successfully sell and service ZEVs. Dealers are demonstrating their commitment in many ways, such as constructing new service bays and charging stations, and training salespeople and staff on the unique needs of electric vehicles and their owners.[1] New car dealers are the place

[1] Innovative online salesperson training programs are particularly notable. The National Automobile Dealers Association (NADA) is developing a dealership EV training program in collaboration with the Center for

where California consumers primarily go to view and test drive vehicles, learn about models and options, incentives and rebates, and kick the proverbial tires before deciding whether or not to make the switch. Like the public at large, dealers and their employees are thrilled by exciting announcements from manufacturers on the development and release of new electric vehicles (EVs). To put it simply, California's dealers are "all in" on EVs.

Since CARB adopted the ZEV component of its original Advanced Clean Cars (ACC I) regulations in 2012, ZEV sales have increased dramatically in California. In 2021, EVs and plug-in hybrid EVs collectively enjoyed a 12.8% market share in California, exceeding the goals set forth in CARB in 2012.[2] And according to a newly released report from CNCDA, in the Q1 of 2022, electric vehicle and plug-in hybrid registrations accounted for over 17% of all cars sold.[3] Of course, CARB's role extends beyond simply the ACC I regulations; it has been instrumental in the administration of key ZEV incentive programs and the development of critical infrastructure necessary to facilitate the green energy transition.

History Has Shown That There will be Surprises in the Development of Automotive Industry and Technology in the Coming Decade.

Although California has made considerable progress on ZEV adoption since the ACC I regulations were adopted in 2012, key assumptions contained within CARB's ACC I staff report have not been realized. For example, when compared with what transpired, CARB projections in 2012 envisioned a slower development of EVs and a much faster development of hydrogen fuel cell vehicles.[4] Indeed, CARB projected that hydrogen fuel cell vehicles would be over half of the light-duty vehicles on the road in 2050. Based on industry and technological developments during the past 10 years, this projection seems virtually impossible to realize. In the first quarter of 2022, only 826 fuel cell vehicles were sold in California, compared with over 67,000 EVs and over 13,000 plug-in hybrid EVs.[5]

The dramatic underperformance of hydrogen fuel cell vehicles over the past decade relative to CARB's initial projections illustrates why caution is warranted when projecting developments of technologies and significant changes to the automotive industry. Further illustrating this is CARB's

Sustainable Energy and Plug In America. This online program will complement existing model-specific training provided by manufacturers and existing resources for California dealership employees, such as CNCDA's Auto Dealer Guide to EVs. *See* National Automobile Dealers Association. "NADA Teams Up with Powerhouse Electrification Organization to Enhance Dealership EV Education" April 18, 2022. (Accessed May 16, 2022) Available at: https://www.nada.org/nada/chairmans-column/nada-teams-powerhouse-electrification-organization-enhance-dealership-ev

[2] California New Car Dealers Association. "California Auto Outlook – Fourth Quarter 2021" February 2022. Available at: https://www.cncda.org/wp-content/uploads/Cal-Covering-4Q-21.pdf

[3] California New Car Dealers Association. "California Auto Outlook – First Quarter 2022" May 2022. Available at: https://www.cncda.org/wp-content/uploads/Cal-Covering-1Q-22-002.pdf

[4] California Air Resources Board. "Advanced Clean Cars Summary" (Accessed May 16, 2022) Available at: https://ww2.arb.ca.gov/sites/default/files/2019-12/acc%20summary-final_ac.pdf

[5] California Energy Commission. "New ZEV Sales in California (2022 Q1)" (Accessed May 16, 2022) Available at: https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics/new-zev-sales

first ZEV program in 1990, which originally mandated that 10 percent of new vehicle sales be ZEVs by 2003.[6] Like the projections on the development of hydrogen fuel cell vehicles in ACC I, CARB projections in the early 1990s on ZEV development varied dramatically from actual consumer purchasing behavior.

CARB Recognized Future Uncertainty by Including a Midterm Review in ACC I, Which Provided an Important Framework to Evaluate Industry Progress and Make Recommendations.

In adopting the ACC I regulations in 2012, CARB recognized the importance of monitoring industry and technological developments to ensure that adopted rules remained feasible. Towards this end, CARB included a formal 2017 midterm review to evaluate progress towards key elements of the ACC I regulations, including the ZEV requirement. Thankfully, CARB was able to reaffirm its 2012 goals in 2017, since growth in EV sales offset underwhelming sales of hydrogen fuel cell vehicles. However, the midterm review process nevertheless provided an important framework to evaluate industry developments and determine whether regulatory modifications were necessary. Important elements of the ACC II proposal were born out of the ACC I midterm review analysis, such as environmental justice (EJ) credits for off-lease vehicles and additional regulations on high-powered starts of plug-in EVs.[7]

Recent Unforeseen Shortages of New Vehicles Demonstrate the Devastating Impacts on Low- and Moderate-Income Consumers.

Recent developments in the automotive industry impacting the supply and affordability of vehicles underscore the unpredictable nature of industry evolution and demonstrate that it is critical for CARB to incorporate a formal midterm review in ACC II. Over the past two years, the automobile industry has been roiled by substantial shortages of key vehicle components (such as semiconductors), which have resulted in major vehicle production declines. Coupled with continued vigorous consumer demand, this decline in supply of new vehicles resulted in significant increases in new vehicle prices and an unprecedented explosion in used vehicle prices. Industry observers could not have predicted such developments prior to 2020, and yet they have radically reshaped the industry in a few short years.

The decline in production of new vehicles led to a cascading effect in the marketplace that has dramatically increased the cost of previously affordable used vehicles, which disproportionally hurts low- and moderate-income consumers. Put simply, customers with higher budgets that would have purchased a new vehicle (if it were available) are instead competing with lower budget customers in the used vehicle marketplace. This drives up prices.

[6] California Air Resources Board. “About the Zero-Emission Vehicle Program” (Accessed May 16, 2022) Available at: https://ww2.arb.ca.gov/our-work/programs/zero-emission-vehicle-program/about
[7] California Air Resources Board. “Advanced Clean Cars II Staff Report” April 12, 2022. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/accii/isor.pdf

The pandemic-era shortages of new vehicles demonstrate this dynamic. Before the pandemic, new vehicle sales averaged 17.3 million per year in the United States.[8] Despite incredible consumer demand, as of December 2021, dealers were selling new vehicles at a rate of 13 million per year.[9] This resulted in a substantial 13 percent increase in new vehicle prices. And used vehicle prices exploded, increasing 42 percent to an average of over $28,000.[10] Additionally, the decline in supply of new vehicles may keep used vehicle prices elevated for an extended time, as there will be fewer recent model year used vehicles (particularly off-lease vehicles) in the marketplace in the coming years.[11]

To put it bluntly, the decline in new vehicle sales has been a disaster for vehicle affordability and has most acutely harmed low- and moderate-income consumers. Whereas the supply of used vehicles below $10,000 was relatively plentiful before 2020, such vehicles have become increasingly difficult to find.[12] And the vehicles that are available are often older higher-mileage vehicles that were (prior to the pandemic) close to end-of-life.

Similar supply-demand imbalances could very likely drive pricing for EVs, making them harder to reach for low-income and the disadvantaged, diminishing the environmental and societal benefits and deepening inequities in our hardest hit communities.

A Decline in Supply of New Vehicles Delays the Retirement of Older More Polluting Vehicles, Adversely Impacting Air Quality in the Most Disadvantaged Areas of the State.

The scrapping of older more polluting used vehicles provides significant benefits to regional air quality a reasonable cost.[13] Indeed, the scrapping of older more polluting vehicles is a critical element of California's Clean Cars 4 All (CC4A) programs. The CC4A programs provide incentives to low- and moderate-income consumers to purchase efficient EVs, plug-in EVs, and hybrid

[8] The FRED Blog – St. Louis Federal Reserve. "New Vehicle Sales and Auto Price Inflation Since the Pandemic" April 4, 2022. Available at: https://fredblog.stlouisfed.org/2022/04/new-vehicle-sales-and-auto-price-inflation-since-the-pandemic/?utm_source=series_page&utm_medium=related_content&utm_term=related_resources&utm_campaign=fredblog

[9] *Id.*

[10] Kelley Blue Book. "Average Used Car Price Now Over $28,000" January 21, 2022. Available at: https://www.kbb.com/car-news/average-used-car-price-now-over-28000/

[11] The FRED Blog – St. Louis Federal Reserve. "New Vehicle Sales and Auto Price Inflation Since the Pandemic" April 4, 2022. Available at: https://fredblog.stlouisfed.org/2022/04/new-vehicle-sales-and-auto-price-inflation-since-the-pandemic/?utm_source=series_page&utm_medium=related_content&utm_term=related_resources&utm_campaign=fredblog

[12] Kelley Blue Book. "Average Used Car Price Now Over $28,000" January 21, 2022. Available at: https://www.kbb.com/car-news/average-used-car-price-now-over-28000/

[13] *See* Bay Area Air Quality Management District. "Air Direct offers $1200 to scrap old cars through the Vehicle Buy Back Program" September 15, 2021. Available at: https://www.baaqmd.gov/news-and-events/page-resources/2021-news/091521-vbb. *See also,* RAND Corporation. "Scrapping Old Vehicles Would Improve Southern California Air Quality at Reasonable Cost, RAND Corporation" 2001. Available at: https://www.rand.org/pubs/research_briefs/RB9033.html

vehicles from participating dealers. In exchange, consumers agree to scrap their older polluting vehicle.[14]

Unfortunately, the decline in new vehicle sales and the resulting explosion in used vehicle prices has delayed the retirement of the oldest and most polluting vehicles, as customers, unable to find affordable used vehicles, have been less willing to scrap 20-plus year-old vehicles that were previously nearing end-of-life.[15] This most adversely impacts the regional air-quality in the poorest communities within the state, as these vehicles are disproportionally located in such regions.

Data from the California Bureau of Automotive Repair's (BAR) Consumer Assistance Program (CAP), which incentives vehicle retirements throughout California, illustrates this recent decline. In fiscal year (FY) 2019-20, 53,000 vehicles were retired through this program, and retirements for the prior four years were stable at between 49,000 and 53,000 vehicles.[16] BAR staff projects the decline for FYI 2021-22 to be unprecedented and dramatic. According to Denise Cunningham, Program Manager II at BAR's Consumer Assistance Program, "total FY 2021-22 vehicle retirements will likely be fewer than 28,000." This represents almost 50% fewer retirements than two years earlier, and it directly corresponds to the dramatic increase in used vehicle prices noted above.

There Is Substantial Uncertainty on Whether Global Production of Lithium and Other Key EV Components Will be Sufficient to Facilitate a 100% Transition to ZEVs by the Mid-2030s.

The development of battery technology over the past couple decades has been remarkable. Energy density has increased substantially, and costs have greatly decreased. However, current battery technologies (and the technologies likely to be commercially available at scale during the near- and medium- term) are dependent on several key raw materials, most notably lithium.

Unfortunately, there are concerning signs that the current semiconductor-driven shortage of new vehicles may be a prelude to a massive lithium-driven shortage of EVs. Climate change is a global problem, and governments throughout the world (most notably the European Union and China) are aggressively moving towards the electrification of their vehicle fleets. The amount of lithium and other key raw materials necessary to facilitate the global EV transition is extraordinary, and industry leaders and experts are raising concerns that the materials and capacity necessary to produce EV batteries will be in catastrophically short supply in the coming decade.

[14] California Air Resources Board. "About Clean Cars 4 All" (Accessed May 17, 2022) Available at: https://ww2.arb.ca.gov/our-work/programs/clean-cars-4-all

[15] *See e.g.,* California Air Resources Board. "EFMP Scrap and Relace and CC4A Summary Report" (indicating that 4,449 vehicles were scrapped as part of the Enhanced Fleet Modernization Program in 2020, but only 2,018 were scrapped in calendar year 2021) (Accessed May 17, 2022) Available at: https://ww2.arb.ca.gov/our-work/programs/clean-cars-4-all/efmp-scrap-and-replace-and-cc4a-summary-report

[16] Bureau of Automotive Repair. "Memorandum to Honorable Nancy Skinner and Honorable Philip Ting – Supplemental Report – Consumer Assistance Program" May 24, 2021.

In an April 2022 interview with the Wall Street Journal, RJ Scaringe (CEO of Rivian, a prominent EV manufacturer) noted that "90% to 95% of the [EV] supply chain does not exist. […] Put very simply, all of the world's cell production combined represents well under 10% of what we will need in 10 years."[17] Mr. Scaringe further noted that the current vehicle supply constraints related to semiconductor shortages are "a small appetizer to what [the industry is] about to feel on battery cells over the next two decades."[18]

As a result of these supply constraints, lithium prices have surged over 400% over the past year.[19] Tesla CEO Elon Musk made a public appeal for more lithium mining in an April 2022 call with investors, noting that the lack of lithium is a "fundamental limiting factor" in EV production.[20]

Unfortunately, many experts are not predicting relief on lithium supplies soon. In a recent interview with Bloomberg, industry export Joe Lowry noted that a major problem is that it "takes up to a decade to bring on a lithium project."[21] This suggests that production may continue to lag demand for considerable time.

A Shortage of New Electric Vehicles in California Could Push Californians to Purchase Older and Non-EVs from Out of State, Undermining the State's Environmental Goals and Harming Local Businesses.

If the EV-supply concerns are realized, they could result in substantial interstate marketplace disruptions that could push consumers and wholesale dealers to purchase used vehicles from out of state. In its ACC II staff report, CARB recognizes how ZEV regulations can shift vehicle allocations within the United States when it discussed the need for environmental justice credits to encourage off-lease ZEVs to stay in California.[22]

It's easy to imagine, that if during the ACC II compliance period there are an insufficient number of EVs necessary to satisfy demand in California, used vehicle prices will disproportionally increase in California, which would draw additional used vehicles from out of state. These marketplace disruptions would undermine California's bold environmental goals and they would harm California consumers and local businesses.

[17] Wall Street Journal. "Rivian CEO Warns of Looming Electric-Vehicle Battery Shortage" April 18, 2022. Available at: https://www.wsj.com/articles/rivian-ceo-warns-of-looming-electric-vehicle-battery-shortage-11650276000

[18] *Id.*

[19] Fortune. "A top lithium expert agrees with Elon Musk that there's not enough of the crucial metal to meet booming demand" April 22, 2022. Available at: https://fortune.com/2022/04/22/lithium-expert-says-supply-is-not-enough-to-keep-up-with-demand/

[20] Bloomberg. "Musk Appeals for More Lithium Production to Meet Battery Demand" April 20, 2022. Available at: https://www.bloomberg.com/news/articles/2022-04-20/musk-appeals-for-more-lithium-production-to-meet-battery-demand?sref=PtTGk0nq

[21] Fortune. "A top lithium expert agrees with Elon Musk that there's not enough of the crucial metal to meet booming demand" April 22, 2022. Available at: https://fortune.com/2022/04/22/lithium-expert-says-supply-is-not-enough-to-keep-up-with-demand/

[22] California Air Resources Board. "Advanced Clean Cars II Staff Report" April 12, 2022. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/accii/isor.pdf

CARB Should Incorporate a Formal Midterm Review Process in ACC II to Ensure That Shortages of Key ZEV-Components Do Not Result in a Substantial Reduction of New Vehicle Supply, Which Would Most Harm Low- and Moderate-Income Californians and Undermine California's Environmental Goals.

The marketplace changes envisioned by ACC II are unprecedented and exciting. As the ACC II staff report points out, manufacturers continue to announce new EVs and an increasing number of consumers are interested making their next vehicle an EV. And dealers are doing their part, making enormous investments in their workforce and facilities to help accomplish the ZEV transition. However, dealers cannot sell vehicles that they do not have in inventory.

Hopefully, widespread concerns about the supply of lithium and other raw materials necessary to accomplish a massive global ramp up in EV production will not be realized. However, if these supply constraints happen, the number of new EVs sold to California customers may be woefully insufficient to satisfy vehicle demand during the ACC II compliance period. This would disproportionally harm low- and moderate-income Californians and negatively impact the environment by delaying the retirement of the oldest and most polluting vehicles.

Considering these significant issues, it is prudent for CARB follow its own example in ACC I and incorporate a formal midterm review process in ACC II as the best way to make any adjustments to protect consumers and ensure the success of this program.

California's new car dealers are all-in on EVs and will continue to serve on the front-line helping consumers adopt EVs. Dealers have decades of experience and understand the opportunities and challenges of such a dramatic shift in new vehicle development and adoption. We stand ready to help California meets its goals.

Should you have any questions or comments about this letter or CNCDA's position, do not hesitate to contact me.

Sincerely,

Director of Legal and Regulatory Affairs
California New Car Dealers Association