



Public Hearing to Consider Advanced Clean Cars II Regulations

Final Statement of Reasons for Rulemaking, Including Summary of Comments and Agency Response

Appendix E Summary of Comments Out of Scope and Agency Response

*Public Hearing Date: August 25, 2022
Agenda Item No.: 22-10-1*

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Summary of Comments Out of Scope and Agency Responses

As noted in the main body of the Final Statement of Reasons (FSOR), CARB has summarized and responded to written and oral comments on the Advanced Clean Cars (ACC) II regulations and the process by which they were adopted. These comment summaries and responses are contained in multiple appendices to the FSOR, sorted by subject matter. This appendix contains the summaries of and responses to comments that are outside the scope of the ACC II regulations because, among other reasons, they may not directly bear on the substance or adoption process of the regulations or are not sufficiently clear. CARB is providing responses to these comments out of an abundance of transparency, even though they are beyond the scope of this proceeding.

The following notes about the comments and responses will help with understanding how the comments are structured and labeled:

- Each comment has a unique code, as identified in Tables 1-7 of the FSOR. Each code indicates the comment period or context of the submission, followed by a unique number for each comment submitted within that comment period or context. For example, comment "OP-1" indicates a comment received during the original (45-day) comment period ("OP" standing for "original period"), and 1 is the unique number identifying the specific comment. Certain lengthy or complex comments have been given additional code information identifying sections of the comment. For example, comment OP-155-1 would indicate a comment received during the original (45-day) comment period, unique comment identifier 155, and the first substantive portion of the comment. These additional sub-comment codes are shown in the copies of the comments included in the rulemaking file.
- Comments are grouped thematically by section and subsection. Repetitive comments are listed under the same comment number and responded to holistically. Each individual comment excerpt is preceded by "Comment:" and followed by its comment identification code, allowing readers to distinguish among repetitive individual comment excerpts that are bundled under the same comment number.
- Comments are excerpted verbatim unless otherwise noted. In some instances, comment excerpts are preceded by the statement, "Commenter says," with the comment excerpt in quotation marks. In other instances, the verbatim excerpt is presented without any preface or quotation marks. Comments that have been summarized, rather than quoted, are indicated by a preface such as "Commenter says that . . ." and are not followed by quotation marks.
- In verbatim comment excerpts, the California Air Resources Board (the Board or CARB) has not corrected or noted errors in the original (for example, by adding "[sic]"). Comment excerpts' formatting may differ from the formatting of the original comment.
- Footnotes in comments generally have been omitted, though the footnote numbers may remain in the text of the comment excerpt.
- In general, CARB has noted where it made changes in response to the comment. Where it is not noted, no changes were made in response to the comment.

A. Comments on the Resolution

1. Comment: We understand that CARB staff is interested in the benefits of bidirectional charging, but was not able to incorporate this into the ACC II Regulation. We respectfully ask that the draft ACC II Board Resolution be amended to ask CARB staff to conduct a technology review and return in about two years with recommendations on incentives and possible regulations that CARB could enact to promote or require bidirectional charging in ACC II and potentially in other CARB programs for cars, trucks, and buses. [T1-16]

Comment: Commenter asks that the progress review section of the resolution be slightly modified to include discussion of component costs and system cost reductions bidirectional charging and consumer protection. [T2-39].

Comment: Commenter asks that the resolution be slightly modified to mention bidirectional charging technology and the need to accelerate it. [T2-42].

Comment: Commenter urges CARB to adopt the Advanced Clean Cars and with the following edits to the Board resolution:

"Be it further resolved that the Board directs the Executive Officer to monitor the implementation of the ACC II Regulations and to continue monitoring [zero-emission vehicle] ZEV market conditions, and to report back to the Board starting in 2025 and no less frequently than triennially on the progress of the Regulations, compliance with them, and how the share of ZEVs and corresponding estimated [greenhouse gas] GHG and criteria pollutant reductions compares to ACC II requirements and the assumptions in CARB's comprehensive strategic plans, including the Scoping Plan, State [Implementation Plan] SIP Strategy, and Mobile Source Strategy, and to propose amendments to the Regulations as warranted to achieve reductions anticipated by the Regulations and to achieve other technology advancement and consumer goals including technology-neutral bidirectional charging, cybersecurity, and improving the consumer experience." [B2-11].

Comment: As a follow up and complement to this landmark regulation, we request that the Board in its June 9th resolution accompanying the Advanced Clean Cars II hearing direct staff to analyze how CARB can accelerate V2X adoption through regulation or incentives, not only in light duty vehicles but in medium- and heavy-duty vehicles and non-road equipment, trains, and vessels. [OP-105]

Comment: Our last recommendation is to direct staff in the Board Resolution to return in 2-3 years with a technical review and recommendations on the regulation for [battery electric vehicle] BEVs, strong plug-in hybrids and bidirectional charging in accordance with overall industry growth. [B1-40, B1-41]

Comment: Commenters states that regarding the recently posted board resolution, they very much appreciate that the Board resolution has been modified to have a report back to the board every three years on market conditions, progress in advancing ZEV adoption and meeting emission reduction goals. However, the Strong Plug in Hybrid EV coalition respectfully asks that the resolution in the progress review section of the resolution be slightly modified to mention cost reduction, bidirectional

charging and consumer protection and the needs to accelerate these goals. Specifically, commenter request the following edits to the Board resolution:

“Be it further resolved that the Board directs the Executive Officer to monitor the implementation of the ACC II Regulations and to continue monitoring ZEV market conditions, and to report back to the Board starting in 2025 and no less frequently than triennially on the progress of the Regulations, compliance with them, and how the share of ZEVs and corresponding estimated GHG and criteria pollutant reductions compares to ACC II requirements and the assumptions in CARB’s comprehensive strategic plans, including the Scoping Plan, State SIP Strategy, and Mobile Source Strategy, and to propose amendments to the Regulations as warranted to achieve reductions anticipated by the Regulations and to achieve other goals including improving the consumer experience, technology-neutral bidirectional charging, cost reductions, cybersecurity, and battery recycling.” [B2-4]

Agency Response: This comment is not directed at the ACC II regulations or the process by which they are adopted and therefore CARB is not required to respond. These comments request additional Board action subsequent to adoption of the proposed regulations and are therefore outside the scope of the rulemaking. However, the Board directed staff in Resolution 22-12 to monitor the implementation of the ACC II regulations and to continue monitoring ZEV market conditions. Staff is committed to monitoring the ACC II regulations as well as participating in technical meetings and working groups to monitor developments in technology moving forward. CARB staff, along with partner state agency staff, have been engaged in the continual development of standards for communication between the vehicle and infrastructure to facilitate charging, payment, and bi-directional power flow. Staff expects such standardization to have some initial sections finalized in the next few years with additional expansion to more features and higher capability happening in progressive updates. In discussions with vehicle manufacturers, staff expects most will likely voluntarily implement the finalized standards rapidly to competitively offer the most features and convenience to their consumers. As staff tracks this development, it will reassess the appropriate role for future CARB rulemakings with respect to bi-directional capability.

2. Comment: Considering the challenges mentioned above, we recommend the Board Resolution direct CARB staff to report back, starting in 2025 and every year thereafter, on the historical 5-year trend of specific key metrics. For example, metrics could include percent of equity community residential units with [level 2] L2 home charging, [electric vehicle] EV and [internal combustion engine] ICE vehicle model availability and pricing by segment, battery chemistries, critical minerals availability and cost, public infrastructure availability and cost. [15-24]

Comment: We ask that the draft board resolution be explicit in calling for a technology and a progress review in two or maybe three years that the Board resolution asks for five things. One, conduct a comparative analysis on [plug-in hybrid-electric vehicle] PHEV and the EV costs. Two, perform an analysis on how CARB can advance bidirectional charging in PHEVs and ZEVs. Three, determine whether the new ACC II needs to be adjusted for Class 1 or 2a PHEVs and ZEVs. Four, pursue the value

of PHEVs as a platform for low-carbon alternative fuels in the future. And five, conduct another analysis as determined by CARB staff. [T1-4]

Comment: And so we look to the resolution to -- to fix this problem [“the equity piece”], if you will, and the commitment to that, and to work forward on this rule and on keeping the accountability strong for this rule, both during the implementation years and prior to those, so we can get a better idea of how the charging infrastructure is rolling out. [T2-31].

Agency Response: These comments are not directed at the proposed regulation or the process by which they are adopted, and therefore CARB is not required to respond. These comments request additional Board action subsequent to adoption of the proposed regulations. However, staff is committed to monitoring the ACC II regulations and the ZEV market, including ZEV market expansion in low-income and frontline communities in California. The Board directed staff in Resolution 22-12 to monitor the implementation of the ACC II regulations and to continue monitoring ZEV market conditions, and to report back to the Board starting in 2025 and no less frequently than triennially on the progress of the ACC II regulations, compliance with them, and how the share of ZEVs and corresponding estimated GHG and criteria pollutant reductions compares to ACC II requirements and the assumptions in CARB’s comprehensive strategic plans, including the Scoping Plan, State SIP Strategy, and Mobile Source Strategy, and to propose amendments to the Regulations as warranted to achieve reductions anticipated by the ACC II regulations. Staff will also be working directly with environmental justice and equity groups, public interest and community-based groups, and manufacturers to promote participation in the EJ and equity provisions, including through Clean Cars 4 All and the Financing Assistance for Lower-Income Consumers Project (see Res. 22-12, p. 19).

3. Comment: CHAdeMO respectfully asks that the progress review section of the Board resolution be slightly modified to mention cost reduction, advanced technology [direct current fast charging] DCFC, bidirectional charging and consumer protection and the needs to accelerate these goals. Specifically, we request the following edits to the Board resolution:

“Be it further resolved that the Board directs the Executive Officer to monitor the implementation of the ACC II Regulations and to continue monitoring ZEV market conditions, and to report back to the Board starting in 2025 and no less frequently than triennially on the progress of the Regulations, compliance with them, and how the share of ZEVs and corresponding estimated GHG and criteria pollutant reductions compares to ACC II requirements and the assumptions in CARB’s comprehensive strategic plans, including the Scoping Plan, State SIP Strategy, and Mobile Source Strategy, and to propose amendments to the Regulations as warranted to achieve reductions anticipated by the Regulations and to achieve other goals including battery recycling, improving the consumer experience, advanced technology DCFC, technology-neutral bidirectional charging, and cost reductions.” [B2-9].

Comment: If failing to remove this requirement, CHAdeMO at requests the Board resolution to be modified by 2025 to study the advancement of DC fast charging

technology, especially bidirectional charging and third-party certification for consumer protection. [T2-45].

Agency Response: These comments are not directed at the proposed regulation or the process by which they are adopted, and therefore CARB is not required to respond. These comments request additional Board action subsequent to adoption of the proposed regulations. However, staff is committed to monitoring the ACC II regulations. The Board directed staff in Resolution 22-12 to monitor the implementation of the ACC II regulations and to continue monitoring ZEV market conditions, and to report back to the Board starting in 2025 and no less frequently than triennially on the progress of the Regulations, compliance with them, and how the share of ZEVs and corresponding estimated GHG and criteria pollutant reductions compares to ACC II requirements and the assumptions in CARB's comprehensive strategic plans, including the Scoping Plan, State SIP Strategy, and Mobile Source Strategy, and to propose amendments to the ACC II regulations as warranted to achieve reductions anticipated by the ACC II regulations.

4. Comment: We respectfully ask for the Board to include in the adoption resolution a request for a technology and progress review in two or maybe three years where staff provides analysis and recommendations on the following issues relevant to improving ACC II:
 - Conduct a new comparative analysis on PHEV and BEV costs (with recommendations).
 - Determine whether the new ACC II needs to be adjusted for class 1 or 2a PHEVs and ZEVs
 - Pursue the value of PHEVs as a platform for low-carbon alternative fuels including whether to allow PHEVs with 85% or more low carbon liquid biofuels blended with gasoline to be treated as zero-emission vehicles (ZEVs).
 - Conduct other analysis as determined by CARB staff. [OP-107]

Agency Response: These comments are not directed at the proposed regulation or the process by which they are adopted, and therefore CARB is not required to respond. These comments request additional Board action subsequent to adoption of the proposed regulations. However, staff is committed to monitoring the ACC II regulations. The Board directed staff in Resolution 22-12 to monitor the implementation of the ACC II regulations and to continue monitoring ZEV market conditions, and to report back to the Board starting in 2025 and no less frequently than triennially on the progress of the ACC II regulations, compliance with them, and how the share of ZEVs and corresponding estimated GHG and criteria pollutant reductions compares to ACC II requirements and the assumptions in CARB's comprehensive strategic plans, including the Scoping Plan, State SIP Strategy, and Mobile Source Strategy, and to propose amendments to the ACC II regulations as warranted to achieve reductions anticipated by the ACC II regulations.

5. Comment: Commenters requested additions and amendments to Board Resolution language directing staff to review and report on environmental justice outcomes.

Thus, in adopting the revised regulation, including the 15-day changes, we ask you to include in the resolution direction to staff to strengthen CARB's commitment to equity in all actions outside of this regulation, and to continue to work with OEMs and equity stakeholders to do so. Proposed language for inclusion in this resolution is provided below.

Include in the WHEREAS:

- Additional actions by CARB beyond the Advanced Clean Cars II rule will be necessary to achieve clean air, and net-zero emissions by 2045, including additional emission reductions from light-duty vehicles; and
- The highest priority must be placed on identifying all feasible actions CARB can take as soon as possible, regulatory and otherwise, and delivering environmental justice and equity in each action;

Include in the THEREFORE, BE IT RESOLVED that:

- CARB staff will work directly with automakers, NGOs, Community Based Organizations, environmental justice groups and equity groups to develop agreements whereby automakers commit to participate in the regulation's equity provisions including increasing the number of new and used ZEVs made available to Clean Cars for All (CC4A) and the Clean Vehicle Assistance Program (CVAP). CARB staff will also identify mechanisms to support NGO, Community Based Organizations, and small business participation in these programs and agreements;
- CARB will conduct an annual analysis of the impact of the ACC II equity program. The analysis will include but not be limited to: 1. Analysis of the ACC II equity programs undertaken by each OEM, the equity credits generated, and their source, 2. The number of new and used ZEVs placed in or benefiting low-income and disadvantaged communities, 3. The number of equity credits generated by early compliance with the equity provisions. Staff will present this analysis to the Board, as well as CARB's Environmental Justice Advisory Committee and other similar advisory groups with interest in increasing access and affordability of ZEVs for low-income and disadvantaged communities. The first analysis shall be issued at the end of 2026; and
- CARB staff shall provide by 2024 an analysis of which measures beyond ACC II will ensure that light-duty vehicles meet their proportional share of reductions under the Mobile Source Strategy; and
- CARB will work with environmental justice and equity groups to identify additional strategies to provide zero emission vehicles to low-income and disadvantaged communities. [15-25, 15-20]

Comment: Commenter states the Board should resolve that staff will identify the measures needed to ensure light-duty vehicles deliver an "equal share" of reductions. [15-32].

Comment: Building on the Chair's recommendations, we believe the stakeholder group should be comprised of interested parties including CARB, the auto industry, the Environmental Justice community, and others. We also believe this group should

establish metrics on the following, not only for California, but also in the Section 177 states that adopt ACC II:

- Infrastructure
- Vehicle cost including the upfront and the battery cost
- Health of the supply chain
- Consumer awareness and demand
- Environmental justice credits [15-17]

Comment: The Board should adopt language in a resolution that directs staff to develop complementary policies and programs to ensure benefits of zero-emission vehicles in disadvantaged communities. The California Clean Cars Coalition—which includes [Natural Resources Defense Council] NRDC and over 40 equity health, and environmental justice organizations—has also submitted comments on the 15-day changes. We support those comments—which highlight the lack of strong equity provisions in ACCII—as well as the recommendations outlined in the Coalition letter. We therefore urge the Board to adopt the Coalition’s proposed resolution language that directs Staff to strengthen ARB’s commitment to equity in all actions outside of the ACCII regulation. [15-20]

Comment: Commenter asks CARB to strengthen the resolution to provide increased accountability and transparency through additional staff analysis and reporting, specifically on the effectiveness of the ACC II equity provisions and other opportunities to improve equity, and on opportunities beyond ACC II to further reduce passenger vehicle emissions toward zero in order to meet air quality and climate goals. [T2-6].

Comment: Commenter wants to ensure resolution directs staff to identify strategies to further reduce emissions from the light-duty sector beyond the regulatory requirements that we need to meet our 2030 and our 2045 climate emission reductions. [T2-24]

Comment: Commenter proposes the following edits to Board resolution 22-12:

To further ensure disproportionate pollution burdens are mitigated and promote equitable access to clean transportation for disadvantaged and low-income communities, the proposed ACC II Regulations include three optional environmental justice vehicle values intended to incentivize manufacturers under the ZEV regulations to increase affordable access and exposure to ZEV technologies for priority communities: (1) Value for each new 2024 through 2031 model year ZEV or PHEV sold at a discount to a community-based clean mobility program, including grant recipients under the Sustainable Transportation Equity Project and the Clean Mobility Options Voucher Pilot Project and additional qualifying programs; (2) Value for ZEVs and PHEVs coming off-lease in California and delivered to a California dealership ~~for purposes of participating in a low-income ZEV financial assistance program (such as the Clean Cars 4 All and the Financing Assistance for Lower-Income Consumers Project)~~ and for placement with a low income financial assistance program participant;

and (3) Value for each new 2026 through 2028 model year ZEV or PHEV delivered for sale with an [manufacturers' suggested retail price] MSRP, adjusted for inflation, less than or equal to \$20,275 for passenger cars and less than or equal to \$26,670 for light-duty trucks;

Be it further resolved that the Board directs the Executive Officer, within 6 months after the completion of manufacturer reporting for the 2026 model year and no less frequently than ~~biennially~~ ~~triennially~~ thereafter, to monitor and report deployment of ZEVs in low-income and disadvantaged communities and the extent to which the environmental justice values are resulting in the intended benefits, with the expectation that CARB will revisit the environmental justice measures if they are not utilized or effectively providing the intended benefits. Staff's assessment shall include, but is not limited to: environmental justice vehicle values earned by each manufacturer, by model year, and value type; and geographic distribution of new and used ZEVs and PHEVs by registration.

Be it further resolved that the Board directs the Executive Officer, starting no later than July 1, 2023, to work directly with vehicle manufacturers, public interest organizations, community-based organizations, environmental justice groups and equity groups, and other interested entities and persons to promote manufacturer participation within and beyond the equity provisions of the ACC II regulation that results in more zero emission vehicles that will benefit residents of low-income and disadvantaged communities. This could be accomplished by manufacturers, including through agreements, if appropriate, in the ACC II Regulations' equity provisions, including by increasing the number of new and used ZEVs made available to Clean Cars 4 All and the Financing Assistance for Lower-Income Consumers Project, and to implement any identified measures no later than July 1, 2025.

Be it further resolved that the Board directs the Executive Officer, starting no later than July 1, 2023, to identify ~~or~~ and ~~or~~ seek public comment on actions, mechanisms, or strategies to support public interest organization, community-based organization, and small business participation in these programs, including Clean Cars 4 All and the Financing Assistance for Lower-Income Consumers Project, that promote equitable access to new and used ZEVs and, where appropriate and by July 1, 2025, begin to implement the identified actions, mechanisms or strategies.

Be it further resolved that the Board directs the Executive Officer to monitor the implementation of the ACC II Regulations and to continue monitoring ZEV market conditions, and to report back to the Board starting in 2025 and no less frequently than ~~biennially~~ ~~triennially~~ on the progress of the Regulations, compliance with them, and how the share of ZEVs and corresponding estimated GHG and criteria pollutant reductions compares to ACC II requirements and the assumptions in CARB's comprehensive strategic plans, ~~including the Scoping Plan, State SIP Strategy, and Mobile Source Strategy,~~ and to propose potential amendments to the Regulations as warranted to achieve the emission reductions anticipated by the Regulations.

Be it further resolved that the Board directs the Executive Officer to by 2024 and triennially thereafter identify, analyze, and report to the Board additional measures

that can further reduce [light-duty vehicle] LDV emissions to meet their proportional share of emission reductions needed to meet the [National Ambient Air Quality Standards] NAAQS and 2045 net-zero climate goal while assuring improvements in equity. [15b-8¹, T2-12, T2-23, T2-26, T2-27, T2-35, T2-36].

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. Nevertheless, CARB remains committed to equitably expanding the ZEV market in efforts to meet California's air quality and climate obligations. See the response to Comment C-15 below for additional information on some of CARB's ongoing outreach, community engagement, and incentive programs to support ZEV market expansion. Moreover, in adopting Resolution 22-12, the Board directed staff "to continue to work with vehicle manufacturers and equity and environmental justice advocates, starting no later than January 1, 2023, to develop and, where appropriate and by July 1, 2025, begin to implement strategies, including incentives, transportation-system-based, and regulatory strategies, to further expand low-income and disadvantaged communities' access to ZEVs and zero emission mobility." Staff will also be monitoring the implementation of the ACC II regulations and ZEV market conditions and reporting back to the Board at least triennially starting in 2025 on the progress of the ACC II regulations. Staff is committed to taking these commenters suggestions into account as it implements these Resolution 22-12 directives.

6. Comment: Commenter urges the Board to adopt the proposed regulation, and in the adopting resolution, include clear direction on the need for further action. [15-32]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. However, staff is committed to monitoring the ACC II regulations. The Board directed staff in Resolution 22-12 to monitor the implementation of the ACC II regulations and to continue monitoring ZEV market conditions, and to report back to the Board starting in 2025 and no less frequently than triennially on the progress of the Regulations, compliance with them, and how the share of ZEVs and corresponding estimated GHG and criteria pollutant reductions compares to ACC II requirements and the assumptions in CARB's comprehensive strategic plans, including the Scoping Plan, State SIP Strategy, and Mobile Source Strategy, and to propose amendments to the ACC II regulations as warranted to achieve reductions anticipated by the ACC II regulations. See also response to comment A-5, above, about Board direction to work with stakeholders, including environmental justice advocates, on strategies to expand access to zero-emission technologies.

¹ This comment was submitted during the second 15-day notice, the scope of which was solely additional documents relied upon being added to the record. As such, this comment is beyond the scope of the comment period and no response is required. Nevertheless, it is responded to here.

B. Requests for Post-Rulemaking Reviews

1. Comment: Commenter urge CARB to request that staff provide a detailed analysis of the suite of measures that will fill the gap left by the ACC II scenario to ensure light duty vehicles deliver an equal share of emission reductions. [15-32].

Comment: Commenter states it is very important that CARB direct staff to develop additional strategies for achieving the reductions needed for attainment by the 2037 Federal Clean Air Act deadline. [T2-52].

Comment: Commenter encourages CARB to ensure proper attention and reporting on the equity provisions and on the overall rule process on emissions as well as policies outside of this rule that can ensure greater benefits. [T2-18]

Comment: We suggest that within six (6) months of the effective date, CARB could convene a working group to develop additional details for OEM alternative proposals and subsequently issue corresponding guidance for implementation. Hyundai welcomes the opportunity to further discuss our proposed alternative [environmental justice] EJ value pathway with CARB and other stakeholders. [OP-124]

Agency Response: These comments are not directed at the proposed regulation or the process by which they are adopted. These comments request additional Board action subsequent to adoption of the proposed regulations and are therefore outside the scope of this rulemaking and CARB is not required to respond. However, staff is committed to monitoring the ACC II regulations. Resolution 22-12 directs staff to monitor and report back on deployment of ZEVs in low-income and disadvantaged communities. In recognition that the Advanced Clean Cars II regulations are limited in their reach, the Board also directed staff to identify or seek public comment on actions, mechanisms or strategies to support public interest organization, community-based organization, and small business participation in programs that promote equitable access to new and used ZEVs, and to work with automakers and equity and environmental justice advocates to implement strategies to increase low-income and disadvantaged communities' access to ZEVs and zero-emission mobility.

2. Comment: Commenter requests a DCFC technology and progress review within 3 years where CARB staff provides analysis and recommendations on the following issue relevant to improving ACC II:
 - conduct a new comparative analysis DCFC charging technology functionality and reliability;
 - conduct an analysis on how CARB can advance bidirectional charging in PHEVs and BEVs in light-, medium- and heavy-duty vehicles; and
 - conduct a detailed examination of future new technologies to ensure the best possible solution at the lowest cost and highest benefit to the consumer; and conduct other analysis as determined by CARB staff. [OP-173].

Comment: Commenter states that below are topics that they believe merit additional review as potential ways to improve the ACC II regulation:

- Conduct a new comparative analysis on PHEV and BEV costs (with recommendations).

- Conduct an analysis on how CARB can advance bidirectional charging in PHEVs and BEVs in light-, medium- and heavy-duty vehicles (with recommendations for incentives or regulations).
- Determine whether the new ACC II needs to be adjusted for class 1 or 2a PHEVs and ZEVs.
- Pursue the value of PHEVs as a platform for low-carbon alternative fuels including whether to allow PHEVs with 85% or more low carbon liquid biofuels blended with gasoline to be treated as zero-emission vehicles (ZEVs).
- Conduct other analysis as determined by CARB staff. [B2-4].

Comment: Conduct an analysis on how CARB can advance bidirectional charging in PHEVs and BEVs in all types of vehicles (with recommendations for incentives or regulations). Justification: The promise of bi-directional charging (AC or DC) to address air pollution, GHG and electric grid issues is very significant with BEVs and PHEVs in light, medium and heavy-duty vehicles, or off-road equipment. For example, a recent May 2022 presentation by the World Resources Institute using Bloomberg NEF and Energy Information Administration data found the power capacity in 2030 for EVs to be 10 to 20 times more than the 2030 power capacity of stationary storage.² CARB can and should play a role in helping to unlock this potential. For example, the internal combustion engine in a PHEV has a much lower emission signature than a stand-alone, backup generator. [OP-107]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. However, staff is committed to monitoring the ACC II regulations. The Board directed staff in Resolution 22-12 to monitor the implementation of the ACC II regulations and to continue monitoring ZEV market conditions, and to report back to the Board starting in 2025 and no less frequently than triennially on the progress of the ACC II regulations, compliance with them, and how the share of ZEVs and corresponding estimated GHG and criteria pollutant reductions compares to ACC II requirements and the assumptions in CARB's comprehensive strategic plans, including the Scoping Plan, State SIP Strategy, and Mobile Source Strategy, and to propose amendments to the ACC II regulations as warranted to achieve reductions anticipated by the ACC II regulations. CARB will monitor utility Integrated Resource Planning submittals and provide feedback when they do not adequately take into account growth in electrical demand in rural areas due to CARB's zero emission vehicle regulations to make sure that utilities are planning appropriately for load growth throughout the state including in rural areas. Also, see response to Comment A-1 for how CARB is engaging in specific infrastructure and vehicle issues related to bi-directional charging. And see response to Comment C-9 for other ways CARB and California is committed to infrastructure to support ZEVs.

3. Comment: Factories, labor, supply chain security, and critical minerals are not the purview of CARB, yet are influential in the ability to grow EV sales in the U.S. The proposed ACC II requirements, however, contemplate a complete transformation of light-duty transportation and doing so will either affect or be affected by these very

substantial issues. Thus, while these may not be CARB's domain, it is necessary for CARB to understand the importance of factories, labor, supply chain security, and critical minerals in relation to the proposed requirements. We encourage CARB to follow these developments and regularly report to the Board on the status of key developments, including but not limited to: refueling infrastructure, battery production capacity, critical mineral costs, efficiency improvements of battery technology, and affordability and equity considerations that include vehicle availability and price for both ICE and EVs. [OP-155, incorporated by reference into comments B1-20, OP-124, T1-8, T1-9, OP-57, OP-98, OP-150, OP-95, T2-34]

Comment: Given the monumental task before us, we encourage the Board to closely monitor EV market development in the coming years and consider establishing metrics to quantify its progress to be able to adapt accordingly. [B1-20]

Comment: We urge the Board to consider a formal and periodic review of the ZEV program, including both technology and market considerations. This will allow CARB to continue to adjust and allow for new considerations as the market, consumer demand, and innovation evolves. We believe this review should occur biannually, and that CARB should engage both market and technology experts to provide independent analysis. [OP-150]

Comment: Commenter encourages the Board to continue to review the proposal, in particular to direct and revisit the requirements on mandating manufacturers to provide charging adapters and cords. We think this mandate increases the cost of the vehicle. It will result in a lot of underutilized equipment and create an unnecessary burden in E-waste. There's a simple solution to this. Manufacturers can certainly be required to provide as an option for purchase at the point of sale this type of equipment, and in doing so will meet the goals that the Board lays out or the staff lays out too for charging, but not force that cost where it's not wanted or unwarranted on the consumer. [T2-12].

Comment: MECA members remain concerned about the rate of charging infrastructure build-out as well as short and medium-term availability of sufficient critical minerals to support their investments. In addition, unforeseen disruptions in power availability have occurred. As a result, we ask that the board request scheduled published progress updates on ZEV and infrastructure implementation rates as well as identification of potential challenges to ensure the availability of accurate public information regarding projected ZEV progress in California and the Section 177 states. [B1-1]

Comment: Commenter thinks it is extremely important for a stakeholder process to move forward that ensures that everything from regulatory requirements to market development is going in the right direction, and if not, to make adjustments if necessary. [T2-8, B2-6]

Comment: California could absolutely exceed the 2035 timeline and would perhaps even do so in absence of this regulation. So I hope that the regulation will continue to be strengthened from where it is now. And it's not just me that thinks that, but science, as we are currently in a climate crisis and we need to work collectively to end that as soon as possible, sooner than ACC II does. [T2-50].

Comment: Commenter urges CARB to commit to additional improvements to the program that will counter the current trend, whereby OEMs sell only luxury-EVs, and instead lead to the prioritization of affordable, accessible electric vehicles. [15-32].

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. However, staff is committed to monitoring the ACC II regulations. The Board directed staff in Resolution 22-12 to monitor the implementation of the ACC II regulations and to continue monitoring ZEV market conditions, and to report back to the Board starting in 2025 and no less frequently than triennially on the progress of the ACC II regulations, compliance with them, and how the share of ZEVs and corresponding estimated GHG and criteria pollutant reductions compares to ACC II requirements and the assumptions in CARB's comprehensive strategic plans, including the Scoping Plan, State SIP Strategy, and Mobile Source Strategy, and to propose amendments to the ACC II regulations as warranted to achieve reductions anticipated by the ACC II regulations.

C. Complementary ZEV Policies

General Complementary Policies

1. Comment: CARB received comments calling for the development and continued support for complementary policies for zero-emission vehicle deployment. [T2-25, T1-35, OP-134, T2-10, T1-11, OP-57, 15-32]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. However, staff is committed to monitoring the ACC II regulations, and participating with other agencies in the development of a market for vehicles pursuant to a zero-emission standard. Also, as noted on the Staff Report: Initial Statement of Reasons (ISOR), p. 25, CARB participates with 27 other California State agencies, and led the Governor's Office of Business and Economic Development (GO-Biz) to support the emerging ZEV market, including releasing a 2021 ZEV Market Development Strategy.² The strategy, and 2022 Agency ZEV Action Plans outline how those agencies and stakeholder groups key to the development of the ZEV market can move together with the scale and speed required to reach the state's ZEV targets.³

² GO-BIZ 2021. Governor's Office of Business and Economic Development. "California Zero-Emission Vehicle Market Development Strategy" https://static.business.ca.gov/wp-content/uploads/2021/02/ZEV_Strategy_Feb2021.pdf Published February 2021.

³ GO-BIZ 2022. California Governor's Office of Business and Economic Development. 2022. "Agency ZEV Action Plans." <https://business.ca.gov/industries/zero-emission-vehicles/zev-strategy/agency-zev-action-plans/>.

2. Comment: CARB received numerous calls for more complementary policies including but not limited to infrastructure, incentives, and building codes in the Section 177 States. [T1-8, T1-14, OP-176, OP-57, T2-37, T2-40 T1-23]

Comment: While the proposed ACC II regulations will advance equity, a whole-of-government approach is needed to maximize access, ensure affordability, and direct benefits to low-income and frontline communities. Thus, other policies and programs beyond ACC II will be needed in California and the Section 177 states to ensure these communities benefit from and have direct access to ZEVs. [OP-109]

Agency Response: While CARB agrees more work is needed to accelerate the California market to vehicles that meet a zero-emission standard, these comments are outside the scope of this rulemaking and therefore CARB is not required to respond. Comments about the development of other state markets for vehicles that meet a zero-emission standard are also outside the scope of this rulemaking. Per Resolution 22-12, staff will monitor the implementation of the ACC II regulations and to continue monitoring ZEV market conditions, and to report back to the Board starting in 2025 and no less frequently than triennially. Additionally in Resolution 22-12, CARB recognizes the ongoing need, in addition to the ACC II regulations, for statewide action to target incentives and infrastructure development to disadvantaged and low-income communities, advance policies and tools that reduce the need for personal vehicles and bolster public transit and walkability and encourage directed equity-enhancing actions from private industry.

CARB does not regulate outside California, nor does Resolution 22-12 apply to Section 177 states, which will each develop its own complementary policies.

3. Comment: Commenter urges CARB to recognize that this rule by itself does not do enough to ensure that ZEVs benefit the front-line, overburdened communities that need clean air the most. CARB should adopt this rule and also acknowledge that CARB has work to do in the implementation of this rule and in future actions to ensure that the transition to zero-emission, light-duty transportation is swift, equitable, and just. [T2-9]

Comment: Even with today's advent of more affordable models, widespread adoption of EVs is going to require government and community support. This includes requiring manufacturing and infrastructure corporations to focus on providing EVs in low-income neighborhoods that suffer the most from tailpipe emissions. [T1-18]

Comment: Commenter is concerned that this new proposal is too complex to ensure that automakers can be easily held accountable for their role in increasing access to ZEVs in low-income and disadvantaged communities. For these reasons, the commenter urges CARB to identify and outline alternative strategies to address transportation and climate equity in the light-duty vehicle market. [T2-19]

Comment: The Board needs to consider strategies outside this regulation to achieve further reductions from light-duty vehicles needed to meet the state's pollution reduction goals and to target the benefits to reach the people and communities most impacted by air pollution. [T2-26]

Comment: In the proposed rule, CARB establishes a voluntary equity component for manufacturers to participate in that seeks to increase accessibility to ZEVs in underserved communities. CR appreciates the time and effort that CARB has put into establishing this equity component to the ACC II rulemaking, but we worry that the proposed rule falls short of achieving assured and measurable outcomes necessary to increase ZEV deployment in low-income and disadvantaged communities. Considering the original ACC rulemaking did not provide components to further engage with equity communities, CARB members and staff have expressed the need to put a greater focus on achieving rapid emissions reductions and vehicle deployment in these communities, but the proposed rule does not go far enough to truly achieve this result. [OP-108]

Comment: Even with today's advent of more affordable models, widespread adoption of EVs is going to require government and community support. This includes requiring manufacturing and infrastructure corporations to focus on providing EVs in low-income neighborhoods that suffer the most from tailpipe emissions. For those living near poverty levels, larger rebates, manufacturer discounts, and low or no interest loans will be necessary. Home charging must be facilitated for apartment dwellers and those without a garage. [B1-21].

Comment: Commenter urges CARB to make a clear commitment to collaborating with community groups to identify, deploy, and scale projects to make new and used zero-emission vehicles accessible. [T2-14, T2-17]

Comment: Commenter states that this rule could help make the transition to clean air vehicles possible for low-income residents, but more needs to be done for those living in disadvantaged communities. [T2-16, T2-17]

Comment: Commenter states CARB must continue to work with stakeholders, including environmental justice advocates to identify and deploy projects to improve accessibility and affordability of ZEVs, and secure agreements from automakers to participate in the equity programs. We also ask that CARB annually assess the equity impacts of the rule. [T2-36].

Comment: Commenter states to please create regulations that encourage micromobility for the half of all trips that are less than 5 miles. Make bikeways safer and focus on [vehicle miles traveled] VMT not LOS. [OP-90]

Comment: We need more from this plan to support other forms of mobility. Indeed, we will probably need to replace cars as the primary mode of transport in Los Angeles. [T1-58]

Comment: Reduce car usage and moving people out of cars into cleaner transportation methods [T1-90].

Agency Response: Aspects of comment OP-108 concern the equity provisions of the ACC II regulations. For responses to this comment that are directed towards the ACC II regulations, see FSOR Appendix C, Summary of Comments to ZEV Regulation and Agency Response, responses to comments D-5, D-6, and D-8. With respect to the remaining comments, they are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the

regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking.

Staff engaged in an extensive public process in developing the ACC II regulations. Staff sought input from stakeholders through various outreach and engagement events, including public workshops, stakeholder working groups, informal meetings and phone calls, and a community listening session. The community listening session helped inform community members about what the State is doing to increase equitable access to clean transportation through the ACC II regulations and other programs, and to listen to community questions, thoughts, experiences, and suggestions. Public process allows for the participation of various experts and all input was considered.

CARB also directed staff in Resolution 22-12 to monitor the implementation of the ACC II regulations and to continue monitoring ZEV market conditions, and to report back to CARB starting in 2025 and no less frequently than triennially on the progress of the ACC II regulations, compliance with them, and how the share of ZEVs and corresponding estimated GHG and criteria pollutant reductions compares to ACC II requirements and the assumptions in CARB's comprehensive strategic plans, including the Scoping Plan, State SIP Strategy, and Mobile Source Strategy, and to propose amendments to the ACC II regulations as warranted to achieve reductions anticipated by the ACC II regulations.

In recognition that the Advanced Clean Cars II regulations are limited in their reach, the Board also directed staff (through Resolution 22-12) to identify or seek public comment on actions, mechanisms or strategies to support public interest organization, community-based organization, and small business participation in programs that promote equitable access to new and used ZEVs, and to work with automakers and equity and environmental justice advocates to implement strategies to increase low-income and disadvantaged communities' access to ZEVs and zero-emission mobility.

See also the responses to Comments C-9 and C-15 below for more information on State and federal investments in zero-emission infrastructure, with a prioritization in disadvantaged communities, as well as some of CARB's outreach, education, and incentive efforts for expanding the ZEV market.

4. Comment: Please allow funding to be available for programs like: helping people get their driver's licenses back, e-mobility hubs that include various zero emission types of transportation including e-bikes. And for these programs to allow community organizations to cover their admin costs to run successful programs including paying community residents to drive their neighbors to school, doctors, grocery store, job interviews and other important trips that address transportation barriers with a lean energy and equity based solutions. [OP-47].

Comment: We urge you to make an overall paradigm change. Double the amount the State gives to fund public union-built mass transit. That is a visionary answer. Decreasing our dependence on passenger vehicles by creating thorough and safe mass transit to supplement private vehicles. [T1-25]

Comment: This rule must also be accompanied by large investments in clean public transportation. This will lessen the demand on ZEV cars and parts, meeting the concern expressed by manufacturers being able to meet it. Our dependence on cars, whether ICE or ZEVs, is inequitable and lowers everyone's standard of life. [B1-32]

Comment: Instead of sending rebates to all drivers so they can drive more, that money could be invested in public (maybe free) transportation. [15-11]

Comment: A new cash for clunkers campaign along with additional funding for adequate public transit would not only accelerate achieving the climate/emissions reduction goals. It would also vastly improve AQI in Black and Brown communities. The only way we will achieve these critical emissions reduction goals is making sure the policy is accessible, inclusive and equitable for everyone. [OP-128]

Comment: We must also make sure that public services such as health care clinics are available in all parts of the state so nobody needs to drive two hours in an emergency, putting them at risk of a depleted EV battery. And we must increase investment in public transit and regional rail services, all across the state. [OP-50]

Comment: Finally, CARB should work with other state agencies to promote a transportation system that is less dependent on passenger cars. Strong investments in public transit and other clean mobility options like active transportation would also ease many of the burdens low-income communities of color face and are crucial to advance a more equitable transportation system. [OP-160]

Comment: I call on the Board to ...further work to reduce car usage in general and shift people from cars to cleaner transport methods. [T2-50]

Agency Response: These comments are not directed at the proposed ACC II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. Note that Resolution 22-12 acknowledges the ongoing need, in addition to the ACC II regulations, for statewide action to target incentives and infrastructure development to disadvantaged and low-income communities, advance policies and tools that reduce the need for personal vehicles and bolster public transit and walkability and encourage directed equity-enhancing actions from private industry.

5. Comment: Commenter urges the Board to commit to take on the responsibility to develop the necessary finance mechanisms to meet the revenue needs to adequately fund the future transportation safety, rehabilitation, maintenance, and mobility needs of California into the future. [15-29].

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. CARB further notes that pricing mechanisms are called for in the Scoping Plan and the SB 150 report, which would provide more stable revenue sources that could be invested in more sustainable transportation options.

Vehicle Purchase Incentives

6. Comment: CARB received numerous comments calling to make zero emission or electric vehicles affordable or for increased incentives, or an increased incentive amount, for electric vehicles, including for individuals in frontline or disadvantaged communities, for individuals, or for individuals who have high vehicle miles traveled on gasoline. [OP-90, OP-59, OP-71, 15-24, 15-27, T1-14, T1-9, T1-12, B1-5, OP-95, OP-169, T1-18, OP-60, T1-58, OP-164, OP-124, OP-176, OP-150, T2-10, T2-20 T2-34]

Comment: Commenter requests that CARB ensure that at least 50% of the existing budget allocations for incentives and other EV programs are invested in these front-line communities. Commenter requests that CARB ensures that these incentives are distributed in equitable form by proper vetting process during the application process. [T2-2].

Comment: Support individuals and companies in working from home, including subsidies for home offices or workspaces near home. 2020 showed that VMT could be seriously reduced if people work from home. [OP-71]

Comment: CARB received numerous comments calling for incentives or subsidies for electric vehicle infrastructure or home or multi-unit dwelling charger installation. [OP-71, OP-90, 15-24, T1-87, T1-9, OP-124]

Comment: Tesla encourages CARB and California policymakers to address a number of significant inequities that are present in the vehicle market, disproportionately harm communities of color, and lessen access to new vehicles. For example, studies show that African Americans and Hispanics and Latinos face higher car financing costs even when their credit scores, income, and other indicators of credit worthiness are just as good as Whites'.⁶⁰ A 2018 study detailed that 62.5 percent of the time, Non-White testers who were more qualified than their White counterparts received more costly pricing options when purchasing a vehicle. This is among the reasons Tesla has price transparency, does not mark up financing rates during purchase, and believes its direct sales model is the most equitable way for anyone to purchase a vehicle. While addressing these discriminatory sales practices may be outside the purview of the ACC II regulation, CARB should urge action to remove these barriers to facilitate greater access to EVs. [OP-78]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. However, CARB remains committed to working to develop maximum feasible and cost-effective regulations to reduce emissions in California equitably, as well as on the development of complementary policies outside of the ZEV regulation to provide consumers with incentives to purchase vehicles pursuant to the ACC II ZEV standard, and infrastructure necessary to support such vehicles. While CARB cannot provide financial incentives without authorization and appropriation resulting from California legislative action, CARB has a number of incentives available right now. The 2022 State budget included \$3.2 billion in incentive funds for various programs. This includes \$381 million for low-

income consumer vehicle purchases incentives and equity projects. This proposal builds upon the \$3.9 billion approved in the 2021 Budget Act to deliver a combined \$10 billion investment in the critical window between 2021 and 2026 to accelerate the equitable transition to zero-emission transportation for all Californians.⁴

7. Comment: Commenter asks what is the justification for the MSRP Caps for 'Cars Category' and 'Large Vehicles Category?' The MSRP Cap for 'Cars' and 'Large Vehicles' is \$45k and \$60k, respectively. Per a Lending Tree analysis, the CVRP MSRP Cap for the 'Cars' category is roughly 150% of the average price for eligible ICE equivalent vehicles. The CVRP MSRP Cap for the 'Large Vehicles' category is roughly equal to their equivalent ICE vehicles. The 'cost to produce' BEVs is much higher than ICE vehicles, and large vehicles produce significantly more emissions than smaller vehicles. Why is there a drastic difference in the ratio of MSRP cap to average price between the two categories in the CVRP? The very low MSRP cap for large vehicles discourages the replacement of high emission ICE vehicles with a BEV equivalent – this is contradictory to adopting more emission free vehicles to reduce air pollution and greenhouse gasses. Also, the high rebates and no caps for Fuel Cell vehicles reeks of obvious corruption. [OP-90]

Comment: Assuming the Fed BBB Act never passes...use some of CA state surplus to fund larger EV CARB rebates [limited to a cap on msrp <45k & qualified for lower income earners] Revive CARB's clean vehicle grant program. Also, consider higher CARB rebates for lower incomes for EV's <35k msrp A mandate to sell only EV [Zev] won't work well if it is not affordable to masses! New cars [any type] are not affordable to many, and not many used EV's yet....Note that currently many can only afford used cars <15k] Also, perhaps use a CARB approved mechanism for financing new EV's at highly reduced loan rates [like 1-2%] with loan approval for the higher prices of EV's since TCO is lower [ie. offsetting gas prices] so affordability is similar to a lower priced ICE, i.e., Beneficial Bank?? [OP-128]

Agency Response: These comments are directed at CARB's Clean Vehicle Rebate Program. These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. Also, see response to Comment C-6.

8. Comment: We also ask that when California subsidizes the sale, lease, and charging of ZEVs, that it only finance those that have been built union, in a union built facility. That is one big step toward keeping good union jobs in California. [T1-25]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the

⁴ GO 2022. 2022-2023 Governor's State Budget Summary pages 82-83, January 10, 2022. Accessed February 11, 2022. <https://www.ebudget.ca.gov/2022-23/pdf/BudgetSummary/FullBudgetSummary.pdf>.

scope of this rulemaking and CARB is not required to respond. Also, please see response to Comments C-6 and C-9.

Zero Emission Infrastructure

9. Comment: CARB received numerous comments calling for more or an advancement of charging infrastructure, or for better charging infrastructure. [T1-47, OP-150, OP-50, OP-59, OP-48, OP-71, OP-128, 15-24, T1-14, T1-9, T1-12, B1-5, T1-16, T1-69, T1-83, T1-97, OP-88, B1-39, B1-31, OP-68, T2-25, T2-28, T2-34, T2-48, T2-31, T2-48]

Comment: CARB received number comments requesting for electric vehicle charging infrastructure in rural communities or noting a lack of infrastructure in rural communities. [15-7, T1-57, OP-129, OP-140]

Comment: Commenter strongly encourages California to ensure EV support ecosystem that includes a comprehensive plan to provide reliable, convenient, and readily available charging infrastructure. [T2-10]

Comment: We need to continue doing more and more work to make sure that that charging infrastructure is deployed and put forward in the communities that need it the most and that need that access. More work needs to be done including with [California Energy Commission] CEC in partnership with the Public Utilities Commission, but we are on track, and that's the good news. [T2-28]

Comment: The investments include funding to increase access for frontline communities most burdened by tailpipe pollution. To date, about 40 percent of utility investments have been designated for disadvantaged communities. However, more can be done by the legislature to ensure that state investments in infrastructure prioritize build-out in frontline communities, often low-income communities and communities of color facing the largest pollution burdens in the state. [OP-99]

Comment: Continued Smart Investments and Policy Action by California Are Needed On Infrastructure California's agencies including the CEC, the Public Utilities Commission (CPUC), and CARB must continue working in partnership to establish infrastructure policies and goals, and to reduce all barriers to meeting the charging infrastructure needs. To stay on track, we recommend that:

- The CEC and the CPUC accelerate their investments in customer-side public and shared-private charging infrastructure at needed levels through 2035. We note, however, the CPUC in their Transportation Electrification Framework proceeding is considering scaling back their funding of customer side incentives for charging infrastructure which could harm progress after 2025 in particular. The recent Revised Staff Proposal in that proceeding has created significant regulatory and market uncertainty about future utility support.
- California state agencies fully implement: (1) Recommendations from the EV Infrastructure Strike Force, a public-private partnership between the state agencies, private industry, and the nonprofit organizations that have worked to identify the necessary investments to support charging infrastructure deployment over the next decade and beyond. (2) The principles of the broad-based, 36-member National EV Charging Initiative. (3) The 2022 Zero Emission

Vehicle Infrastructure Plan developed by the CEC with eight other state agencies (currently draft) including recommendations on streamlining of construction permits and utility interconnections, additional standardization and reliability of charging stations, and expanded minimum requirements in building codes for charging infrastructure.

- The Governor’s Office of Business and Economic Development (GO-BIZ) continue to support and cultivate opportunities to accelerate the ZEV market growth including through EV charging infrastructure deployment.
- CARB staff report back to its Board on its existing statutory authority regarding regulations to increase ZEV charging infrastructure as well as participating in research to further reduce the cost of charging.
- The California Legislature pass and the Governor sign AB 2700 which would expedite the build out of distribution infrastructure anticipated by California’s goals and regulations for ZEVs. [OP-99]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond.

CARB notes that the State and federal government are investing in zero-emission infrastructure, with a prioritization of investments in disadvantaged communities. See Section III.A.6 of the ISOR. In recent years, approximately \$710 million has been spent to install electric vehicle supply equipment (EVSEs) in California with an additional \$3.48 billion anticipated to be invested through various public investments. Of this amount, \$1.284 billion has only recently been committed or proposed in the federal Infrastructure Investment and Jobs Act and California’s 2022-23 fiscal year budget. For instance, Assembly Bill 211 (Stats. of 2022, ch. 574, § 36(b)(5)) provided \$215 million to support light-duty vehicle charging infrastructure, in addition to \$14,250,000 in Assembly Bill 179 (Stats. of 2022, ch. 249, § 64). Additionally, State and federal funding is typically offered as a matching grant, meaning that private investment will supplement the public investments and roughly double the total expenditures on infrastructure. Note that these investment estimates do not include private investments from EVSE providers or automakers like Tesla who do not leverage public funds.

Public support also includes \$900 million in State funding to expand affordable and convenient ZEV infrastructure access in low-income neighborhoods, and additional investments are expected from the federal Infrastructure Investment and Jobs Act. The CEC ZEV Infrastructure Plan (ZIP) provides additional details on how State infrastructure programs will expand access to lower income and disadvantaged communities, including the CEC’s investments. According to the 2021–2023 Investment Plan Update for the Clean Transportation Program, the CEC will seek to ensure that more than 50% of the funds from the Clean Transportation Program will benefit low-income and disadvantaged communities. Further, Electrify America has committed to spending at least 35% of their infrastructure investments in disadvantaged and low-income communities. Assembly Bill 2061 (Stats. of 2022, ch. 345), will require recordkeeping and reporting for charger uptime from facilities that

receive public or ratepayer funding to ensure that charging stations can provide reliable services to drivers who do not have access to home charging.

For more information on charging infrastructure, please refer to Master Response 1 on page 6 of the Response to Comments on the Draft Environmental Analysis for a discussion of charging infrastructure and to FSOR Appendix A, Comment A-20.

10. Comment: CARB received comments calling CARB to mandate electric vehicle infrastructure installation. [OP-90, 15-24]

Comment: CARB should work with other government entities to ensure that multi-user housing is required to install inexpensive non-networked EVSEs so that ALL Californians are able to charge at "home", where it is much less expensive and better for electricity uses when charging takes place at night. [OP-40]

Comment: The transition to electric cars should include not just a 2035 mandate for electric cars, but a more robust program of charging stations and aid for installation of electric charging in existing residential housing. [OP-147]

Comment: A feasibility study should be undertaken to assess the cost and tenability of installing the infrastructure necessary to support the amount of EVs by the proposed date of 2035. [T1-94, T2-30]

Comment: California's state and local governments, together with regional charging companies and utilities, need to establish a comprehensive charging infrastructure plan to meet these needs and provide confidence to potential EV consumers. [OP-95]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. CARB did not propose requirements concerning charging infrastructure. The ACC II rulemaking establishes requirements for auto manufacturers. However, CARB will continue to develop complementary policies, working with other State agencies and levels of government as appropriate, to increase the infrastructure necessary to support increased use of ZEVs. For more information on charging infrastructure, refer to Master Response 1 on page 6 of the Response to Comments on the Draft Environmental Analysis for a discussion of charging infrastructure and to FSOR Appendix A, Comment A-20.

11. Comment: I would suggest a major incentive for transportation would be to allow electric trucks to drive 65MPH instead of 55MPH. [OP-32]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. CARB did not propose incentives as part of the ACC II rulemaking such as the right to travel at speeds higher or lower than a posted speed limit.

12. Comment: CARB received comments calling for free charging or subsidized charging for electric vehicles. [OP-90]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. CARB does not determine electricity prices for zero emission charging, nor did it propose to subsidize charging in its ACC II rulemaking.

13. Comment: CARB received comments calling for better building codes to support the installation of electric vehicle charging. [15-27, B1-39, T2-25]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. As mentioned on ISOR, on page 28, CARB staff have recommended changes to the State's building code requirements for new construction of residential buildings, but this is not part of the ACC II regulations. CARB is committed to continue its work with the California Department of Housing and Community Development (HCD) to make updates as needed to the CALGreen code.

14. Comment: CARB received comments calling for more renewable energy or electricity to be made available for electric vehicles. [OP-90]

Agency Response: These comments are not directed at the proposed ACC II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. Still, the State continues to rapidly expand deployment of renewables and plan for greater electrification which, paired with Senate Bill (SB) 100's clean electricity grid target, is designed to help achieve carbon neutrality no later than 2045. As mentioned in Section 1 of SB 100, "The 100 Percent Clean Energy Act of 2018," California aims for 100% of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. Moreover, as mandated by SB 100, the State's electrical utilities are legislatively required to procure 60% and 100% of their total energy supply from eligible renewable energy sources (i.e., solar, wind, geothermal, small-scale hydroelectric, and biomass) by 2030 and 2045, respectively.

Outreach and Education

15. Comment: CARB received numerous comments calling for the public promotion, information, or outreach activities related to electric vehicles and zero emission vehicles. [OP-71, T1-14, T1-9, T1-12, B1-5, OP-95, OP-28, B1-31, OP-176, T2-34]

Comment: I strongly encourage CARB to create a liaison office to work directly with California's Electric Vehicle Associations in order to create electric vehicle promotion events throughout California. [B1-31]

Agency Response: These comments are not directed at the proposed ACC II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this

rulemaking and CARB is not required to respond. Still, CARB is committed to expanding the ZEV market in California. One example of this is through public-private partnerships as described on page 26 of the ISOR, such as CARB's participation in the Veloz "Electric For All" consumer awareness campaign, which combined media promotion of ZEVs with a consumer shopping tool and home charging advisor. CARB is committed to continuing efforts like this in addition to its active participation in the Governor's Office of Business and Economic Developing (Go-BIZ) ZEV Market Strategy. CARB also directly promotes ZEV acceptance and works to reduce consumer barriers through consumer websites such as DriveClean.ca.gov and Access Clean California, as well as a suite of incentives with corresponding community engagement efforts including the Clean Vehicle Rebate Program and Clean Cars 4 All.

Other Complementary Policies

16. Comment: We request that CARB support legislation that is technology neutral to support both battery and fuel cell electric vehicle and work with other stakeholder agencies to do the same. [T1-9, OP-124, T2-32]

Agency Response: These comments are not directed at the proposed ACC II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond.

17. Comment: CARB received numerous comments calling for a robust supply chain to provide battery and electric vehicle components. [T2-32, OP-155, incorporated by reference into comments B1-20, OP-124, T1-8, T1-9, OP-57, OP-98, OP-150, OP-95, T2-34]

Agency Response: These comments are not directed at the proposed ACC II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. California is committed to the expansion of supply chains in vehicles and EVSE and infrastructure, as noted in GO-BIZ 2021 ZEV Market Development Strategy. Additionally, the federal Inflation Reduction Act incentivizes expanded domestic production of batteries.

18. Comment: Please provide support for transitioning away from cars for people who rent and likely cannot access at-home charging [15-7].

Agency Response: These comments are not directed at the proposed ACC II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. See response to Comments C-9 and C-13 for information on how CARB is approaching the infrastructure build out in California as well as CARB's work with HCD to update the State's building code.

19. Comment: Please consider issuing an extension of HOV stickers for another year for those set to expire on Jan 1, 2023 (purple). Many of us are not in a position to buy or lease a new car at this time due to car shortage and dramatic increases in the cost of cars. Furthermore, we hardly drove these cars for the last 2 years. Now that so many of

us are back to commuting, an extension would provide relief to our family, by being able to keep and continue to drive our nearly new car for another year. [OP-17]

Agency Response: This comment is not directed at the proposed ACC II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. California Department of Motor Vehicle will issue high-occupancy vehicle (HOV) stickers through January 1, 2025, according to the California Vehicle Code sections 5205.5 and 21655.9.

D. GHG Comments

1. Comment: [Form Letter] California can't ignore the climate-damaging emissions from new gas cars. We need to take immediate action to make sure they emit less pollutants as they drive our roads for decades. This action is also critical to protect the health of communities hit hardest by tailpipe pollution. Cancer-causing vehicle exhaust harms people's health and particularly hurts low-income communities of color near congested freeways. California must lead the way with strong policy solutions to end tailpipe pollution and build an environmentally just transportation system. We urge you to adopt strong clean car rules that require... 7% annual pollution cuts from gas-powered cars. [OP-10, OP-11, OP-12, OP-14, OP-15, OP-58, OP-67]

Comment: Commenters urge CARB to adopt standards that include significant pollution reductions from all gas-powered cars and light trucks sold over the next decade — including a minimum 7% annual decrease in greenhouse gas emissions. [OP-68, OP-128, OP-158, OP-160, B1-32, 15-34, T1-84]

Comment: Commenters suggest that 7% annual pollution cuts from gas-powered cars are needed for the state to meet 2045 carbon neutrality goals and to slash climate pollution. [OP-102, OP-111, OP-180, OP-181, B1-30]

Comment: Commenter suggests that ACC II needs to be strengthened to lower GHG emissions for all internal combustion (IC) engines sold between 2026 and 2035, the PHEVs sold after 2035 and the remaining legacy fleet. [OP-152]

Comment: The failure to address GHGs in this rule is an unfortunate omission that CARB should rectify as soon as possible in a future rulemaking. [OP-180]

Agency Response: CARB considered the commenters' request to reduce pollution from gas-powered cars annually by 7%. Regarding GHG emissions, California is currently implementing the existing GHG Low-Emission Vehicle (LEV) III regulation. The commenters' request to reduce GHG standards for gas-powered cars is outside the scope of this rulemaking because CARB did not propose any changes to the GHG emission standards for light-duty vehicles in the 45-day or the 15-day packages. The ACC II rulemaking only addresses updates to criteria emission standards and test procedures for light-duty and medium-duty vehicles and zero-emission vehicle standards and test procedures for light-duty vehicles.

Regarding criteria emissions, CARB noted that the adopted regulations included new criteria emission provisions that will substantially reduce criteria emissions. The ACC II

rulemaking, through changes in the LEV criteria emission regulations and test procedures, along with the aggressive ZEV regulation stringency, will result in large reductions in oxides of nitrogen (NOx) emissions from passenger vehicles. The adopted ACC II rules will phase-out ZEVs from the non-methane organic gas (NMOG)+NOx fleet average and require gas-powered cars to meet a 0.030 g/mile NMOG+NOx fleet average on their own. The provision to phase-out ZEVs from the fleet average is significant because it will prevent gas-powered vehicles from backsliding on emissions as ZEV sales increase, and also, when coupled with the annual ZEV stringency, it will result in annual reductions of about 15% for NMOG+NOx emissions from the light-duty fleet, which far exceeds the 7% cuts suggested by the commenter.

Furthermore, CARB had considered lowering the NMOG+NOx fleet average requirement for gas-powered vehicles below 0.030 g/mile but found that it was not feasible since it had a negligible effect on emissions, as noted in the response to comment A-4 in FSOR Appendix B. Staff also considered setting particulate matter (PM) standards for gas-powered vehicles based on best-in-class technology, but found that it was not feasible since the impact was negligible and that the transition to ZEVs generated much larger PM reductions, as noted in CARB's response to comment A-12 in FSOR Appendix B.

Finally, the proposed stringency of the LEV IV and ZEV regulations in ACC II are a result of analysis to determine cost-effective strategies to reduce NOx and GHG emissions. The maximum ZEV regulation stringency also considered feasibility factors related to vehicle model redesign cycles, manufacturing scaleup, technology cost trajectories, and consumer demand. The ACC II regulations will result in reductions in ground level ozone, particularly important for communities in air basins struggling with air quality. The rulemaking analysis projects a 25% reduction of NOx emissions from the light-duty fleet in 2037, and a 50% reduction in GHG emissions in 2040, both relative to the baseline in those years.

Although U.S. EPA's greenhouse gas emission standards and related regulations have not yet been updated, CARB will continue to monitor and engage with U.S. EPA during its next greenhouse gas emission rulemaking process to ensure consistency where appropriate between California's greenhouse gas regulations and future federal regulations.

2. Comment: Although the commenter supports removing the ZEVs from the criteria emission fleet average calculations, the commenter suggests that this approach may not be appropriate for other regulations, such as GHG and fuel economy. [OP-94]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. CARB thanks the commenter for supporting the removal of ZEVs from the criteria emission fleet average. The commenter's request to keep ZEVs in the GHG fleet average and fuel economy standards is outside the scope of the ACC II rulemaking. CARB does not set standards for fuel economy and CARB did not propose any changes to the

greenhouse gas emission fleet average standards for light-duty vehicles in the 45-day or the 15-day packages. This rulemaking only addresses updates to criteria emission standards and test procedures for light-duty and medium-duty vehicles and zero-emission vehicle standards and test procedures for light-duty vehicles.

3. Comment: Commenter suggests that all manufacturers should be regulated to the same GHG emission standard because the existing California GHG standards for model years 2021-2025 require greater GHG reduction than the Settlement Agreements entered into between California and several manufacturers. [OP-98]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. CARB did not propose any changes to the greenhouse gas emission standards for light-duty vehicles in the 45-day or the 15-day packages. This rulemaking only addresses updates to criteria emission standards and test procedures for light-duty and medium-duty vehicles and zero-emission vehicle standards and test procedures for light-duty vehicles.

E. Other CARB Proceedings

1. Comment: Add strong language in the State Implementation Plan to require CARB to complete a new rulemaking that would require the retirement of combustion engine medium and heavy-duty vehicles once they reach the end of their minimum useful life. [OP-135, OP-136, OP-156]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond.

2. Comment: CARB received comments on the Scoping Plan and its development. [OP-29, OP-163, 15b-6⁵, 15-9]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond.

F. Other Out of Scope Comments

1. Comment: [V]ehicle miles travelled (“VMT”) mandates have not and will not work and it is a pipe dream to say that fixed route public transit serves the needs of the working poor. [15b-2-6]

⁵ This comment was submitted during the second 15-day notice, the scope of which was solely additional documents relied upon being added to the record. As such, this comment is beyond the scope of the comment period and no response is required. Nevertheless, it is responded to here.

Agency Response: This comment was submitted during the second 15-day notice, the scope of which was solely additional documents relied upon being added to the record. As such, this comment is beyond the scope of the comment period and no response is required. Nevertheless, the Advanced Clean Cars II regulations do not impose any limitations on vehicle miles travelled, and accordingly this comment is outside the scope of this rulemaking.

2. Comment: The state can achieve its federal air quality standards goals by reducing Vehicle Miles Traveled (VMT) by 50% from a 2014 baseline while implementing the motor vehicle emission and fuel economy standards proposed during the Trump Administration [OP-13].

Comment: First off, I'd like to say that staff refused to analyze alternatives to this regulation. Specifically, staff refused to analyze an alternative for reducing VMT in this state to reduce emissions. The reason why staff didn't analyze that is because staff knows that VMT will achieve even greater reductions in emissions than this regulation, but they don't want to jeopardize their pet project. [T2-55].

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. Furthermore, CARB disagrees with the efficacy and feasibility of reducing VMT that commenters suggest. CARB does not set or implement fuel economy standards, and CARB did not propose fuel economy or VMT standards as part of the ACC II regulations. In any event, reducing VMT and implementing the Trump Administration's fuel economy standards (which would have increased emissions) would not be sufficient to achieve the federal ambient air quality standards. They also would not achieve the goals of the ACC II regulations, namely achieving maximum emissions reductions from light-duty passenger vehicles.

With respect to alternatives generally, CARB met its obligations to analyze alternatives under CEQA and the APA. See, e.g., Section 6 of the SRIA (ISOR Appendix C-1), Section 7 of the Final Environmental Analysis, and responses to comments B-2, B-3, B-10, and B-12 in FSOR Appendix A.

3. Comment: Staff should work with the [Environmental Protection Agency] EPA on limiting test groups to only those vehicle features necessary to meet some other regulatory requirement. Test group should not be a reason in and of itself to drive more testing. Number of electric motors, vehicle class, and even battery configuration might not impact durability. Furthermore, EV range calculations, for the purposes of the EPA Fuel Economy Label, should be updated to allow greater EV range specificity without requiring strict test group limitations that will only increase unnecessary delay to market and costs. CARB should keep the test group definition as broad as possible for EVs, allowing CARB staff to approve multiple motors, vehicle classes, battery configurations, and other vehicle attributes in the same test group. [B1-10].

Comment: CARB received comments calling for the strengthening of the Low Carbon Fuel Standard regulation. [15-27, OP-95]

Comment: In the nearer term, CARB's upcoming rulemaking on the Low Carbon Fuel Standard should include credits for discharging EVs not just for charging. [T1-16]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond.

4. Comment: We call on our policymakers to hold original equipment manufacturers accountable for their dealers' actions on price gouging. Most who have – most who have some opposition towards this, it's due to affordability and the financial burdens, but you can help on this topic by securing funding to support higher grants for lower-middle-income consumers and small business owners. You can also establish a focus on making lower price trims a priority in production, and enacting an electric vehicle price gouging prevention act to ensure that California consumers can be part of the solution towards a cleaner, greener California, along with the increased funding supporting grants for low- to middle-income consumers and small business owners, who -- which would make the transition in a much more reasonable opportunity. [T2-44].

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. Nevertheless, see response to Comment C-6 above.

5. Comment: It is disturbing that farmers that are using anaerobic digestion to create their own low-NOx, carbon-negative fuels from agricultural waste would no longer be allowed to power their equipment using their own home grown fuels. CARB's response was that those farmers should be required to put their renewable natural gas into the pipeline. But permits to do so cost tens of thousands of dollars, making that solution prohibitive. [T2-54].

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. Nevertheless, see the response to comment B-22 in FSOR Appendix A.

6. Comment: Going forward, the state should also reconsider how much it wants to support hydrogen for use in the light-duty transportation sector. Green electrolytic hydrogen will play a role in our zero-emission future, but due to the cost of producing it, it will also be limited. Therefore, the state may want to encourage its use in maritime, aviation, long-distance transportation, and other difficult to decarbonize sectors rather than the light-duty sector. [OP-85]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the

scope of this rulemaking and CARB is not required to respond. Nevertheless, CARB appreciates the suggestion.

7. Comment: I've been working with the San Joaquin Valley Air Pollution Control District, Mack, Volvo, KCDF, Laird on build specs to meet CARB's regulatory statutes, especially when it comes to the Heavy-Duty Truck Rule. We have the want, but the reality is the technology and supply chain constraints are very daunting. And the price quotes that we're receiving are unbelievably outrageous. Real world example. These were provided to me on 6-2 of 2022. Prior to supply chain constraints, we were looking at Class 8 trucks that were \$130,000. Today, if you have a build slot, they're adding a \$59,000 premium for that build slot, which takes it to 189,000. Of course, we're making transportation fuels with renewable Cal gas. We are looking at CNG. That truck, \$236,000. We're also putting electrons on the grid with our fuel cell projects, \$491,000, difference of 302,000 between diesel and electric, diesel and CNG 47,000. [T1-57]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond.

8. Comment: Commenter states that more needs to be done to get polluting gasoline and diesel cars and trucks off the road. At the very least, an outright ban on non-commercial diesels effective in five years or less. [OP-90]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. The ACC II regulation scope is for new passenger vehicle sales only, and not for in-use vehicles. Several incentive programs exist in California to encourage the early retirement of conventional vehicles, but they are voluntary. In California's passenger vehicle population, diesel vehicles are a small proportion of the fleet.

9. Comment: Commenter is asking for more aggressive climate change emission reduction plan that includes fuel efficiency measures for cars and a reduction in per-capita driving. [OP-3]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. CARB did not propose any efficiency or VMT requirements or reductions.

10. Comment: CARB should acknowledge that reaching 20, 50, or 75 percent (or more) ZEVs requires substantial fleet participation and should agree to require fleet purchases at the same time, as the vehicle sales mandate programs. [OP-155, incorporated by reference into comments B1-20, OP-124, T1-8, T1-9, OP-57, OP-98, OP-150, OP-95, T2-34]

Comment: Implement Fleet Purchase Requirements - Over 8 million cars and trucks are owned by fleet operators in the U.S. today. Fleets are generally more suitable to early electrification because of consistent routes and centralized charging points – where it is easier to predict and plan for the total infrastructure needs. In the medium- and heavy- duty sectors, California is implementing the Advanced Clean Fleets rule, a fleet purchase requirement intended to help build this part of the market. This same approach should be considered in the light-duty segment for public and private fleets to further promote the needed transition to electrification. [OP-95]

Comment: In addition, government schools and rental vehicle fleets must be all ZEVs sooner than later. These vehicle tools are often some of the first to enter the secondary market and make them available for the lower wage working class who have normally purchased used cars. [T1-69]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. The ACC II ZEV regulations apply to manufacturers who produce new light-duty vehicles for sale in California and establish vehicle emission standards, and do not propose fleet purchase requirements or any requirements on fleet operators. These comments thus request additional Board action unrelated to adoption of the proposed regulations. Other regulations such as the Clean Miles Standards do apply fleet requirements for transportation network companies who operate fleets in California. Additionally, funding programs like the Community Air Protection Incentives help local companies to reduce or eliminate emissions from mobile sources, including fleets.

11. Comment: Air pollution is coming from...Trucks, cars, buses, refineries that supply the fossil fuel. And then we have fires, forest, grass and the occasional dump, dumpster, trash and of course the very important log fire to roast smores. Not to mention industry. If the CPUC did a better job of controlling the utilities it would help a lot for air quality in this state. PG&E is becoming a rogue corporation. Less advertising and more action would be great. And the natural gas leaks in the whole state are virtually criminal. People who would be a natural place for electric cars are mobile home parks, but they can't. [OP-90]

Agency Response: This comment is not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond.

12. Comment: I appreciate what you are doing for our future. I would like to point out an unintended side effect of what you are doing though. Car manufacturers are choosing to send some EVs and PHEVs only to states which have adopted CARB standards and not to other states, like where I live in Nevada. This is hurting my ability to afford buying a new PHEV in my city. After talking to a Toyota dealer in Las Vegas, they said only dealerships in CARB states are getting the Toyota Rav4 Prime. I could get one in California but the dealers have minimum \$5,000 mark ups and some have more. While

your policies are meant to do good for the environment, your policies are currently hurting my ability to buy a new PHEV outside of the state of California. [OP-90]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. CARB's regulations apply within California; other states may choose to adopt California's regulations under section 177 of the Clean Air Act. Nevada has adopted CARB's light-duty standards for model year 2025 and is expected to adopt these standards for 2026 and future model years. Regardless, manufacturers are responsible for decisions whether to deliver vehicles for sale that meet California's standards in states other than California and those that have adopted its standards.

13. Comment: Commenter indicates concern that the proposal will cost Central Valley school districts billions of dollars to purchase electric school buses when that money needs to go to educating children in the region [T1-103].

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. The ACC II ZEV regulations apply to manufacturers who produce new light-duty vehicles for sale in California and establish vehicle emission standards. School buses will not be impacted by this regulation. CARB supports low and zero emission school buses through its Hybrid and Zero-Emission Truck and Bus Voucher incentive project (HVIP), Lower-Emission School Bus Program and Carl Moyer programs.

14. Comment: I'm really for clean energy but a lot of experts as they pro-claim such as renewal energy are too weak to replaced fossil powered. As both; of power providers and companies and publics have to get ready as prepare to build up bunch of micro-grids. Needed batteries plus much larger batteries and hydrogen storages. As strong north wind under bright sunny days, California will really harness tons of energy for very long term of power storages. As we really extra power demands as; in winter, got, cloudy and rainy days plus sunset along with dyeing solar during calm 100 degrees evening time PLUS plug in to recharging electric cars. As larger EV such as SUV and large pickup trucks that will really gobble up more power than even Tesla Model X. Home solar will be very good help from over load power grid. When more than 50% of electric vehicles, I see; new MIDNIGHT power PEAK problem, as be more prepare for balance out power grid. If homes have 50kWh. solar storage battery for even out power. [OP-90]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. The ACC II ZEV regulations apply to manufacturers who produce new light-duty vehicles for sale in California and establish vehicle emission standards. This comment is calling for more renewable electricity power.

15. Comment: How about narrowing the 710 freeway near the ports and add a couple train tracks. Then transport most goods by electric train, cutting the massive truck pollution. If we can build all these red, green, blue, etc electric lines we can do it for the ports, helping everyone, especially those living near the ports. Maybe, take away money from the crazy train, to do this. [OP-90]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. The ACC II ZEV regulations apply to manufacturers who produce new light-duty vehicles for sale in California and establish vehicle emission standards. This comment is calling for changes to freeways and potential changes to funding for trains in the Los Angeles Region.

16. Comment: If the CPUC passes PG&E's bid to tax the sun based on the installation of solar panels that have been installed by many of us to charge our ELECTRIC CARS, others may elect to keep their gas guzzlers or buy new ones. That will not help air quality. Will the tax extend to FedEx and Walmart whose stinking delivery vans are poised to be replaced by electric drives? That would really hurt business development as well as air quality. Myself, I have an electric car that needs a new battery pack. I cannot 'turn it in' to get a break on a new electric car and had to give up my fathers gas guzzling buick because it passed smog inspection and didn't qualify for a small rebate from you. Your system needs improvement as well. Please join agencies in getting focused on the big prize: survival of the species. [OP-90]

Comment: I think majority of CA residents are not opposed to this push for environmental reasons. With all these goals and initiative when is CA going to put regulations/laws on PGE and hold them accountable? Clearly this pertains to Northern CA. Has CARB has done case studies on the costs that PGE puts on businesses to install electrical vaults that is necessary to supply the 480v to each DC fast charger? The second part to that is PGE will take up to 1 year to install after you sign on the dotted lines for a \$150k+ project. How do you expect small businesses to supply charging stations? Grants are great but they expire by the time PGE starts. A possible business strategy? I bet it is...PGE infrastructure can't even keep up with the current electrical demands now, how do they expect to keep up with the demand by 2035? Solar right? Well, again, PGE is able to charge astronomical transmission fees etc that does not justify going electric. This needs to end and is big reason why public will push back. [B2-2].

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. These comments are asking for improvements to programs administered by the Public Utilities Commission and various incentive and tax policies.

17. Comment: California can be the catalyst and forcing function for real change here with aggressive fuel-efficiency goals that deliver huge benefits to our state and the world. [OP-90]

Agency Response: This comment is not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. The ACC II regulations contain new criteria pollutant tailpipe standards, new ZEV regulation requirements, and new battery labeling, data standardization, warranty, service information, charging, and in-use enforcement procedures for ZEVs. Corporate average fuel economy standards that the commenter references are within the purview of the National Highway Traffic Safety Administration.

18. Comment: Probe Thorium Reactors to cut emissions Offshore solar wind farms Mag Lev HST Compare ICE Hybrid to EVs Mount sensors to monitor air. [OP-90]

Comment: Our ONLY hope is 5th gen Nuclear Power, to get us through these tough times while we build massive solar arrays and wind farms. Full scale, mass adoption of green energy. Sadly, the climate change activists are uninformed and think nuclear power is dangerous. No, it is not dangerous anymore. Its the ONLY chance we as a species have for survival. If we were smart, we would end democracy and choose someone like Elon Musk to be King. [OP-128]

Agency Response: These comments are not directed at the proposed ACC II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. The ACC II ZEV regulations apply to manufacturers who produce new light-duty vehicles for sale in California and establish vehicle emission standards. This comment is providing various ideas on how to curb societal emissions in other ways.

19. Comment: Commenter states that for the long term, now we need to accelerate the mining of minerals in the United States needed for the production of EV batteries. And more EV batteries need to be Made in the U.S.A. [OP-90]

Agency Response: This comment is not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. The ACC II regulations do not impose requirements on where minerals can be mined from to produce vehicles that comply with the standards proposed. The federal Inflation Reduction Act, though, does incentivize production of batteries within the U.S.

20. Comment: Vehicle manufacturers must lead the way without inflation. That is reasonable pricing for upgrades and changing to electric-powered vehicles. [OP-90]

Agency Response: This comment is not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, this comment is outside the scope of this rulemaking and CARB is not required to respond. The comment concerns

manufacturer decisions on prices they charge for their products or potential price controls, which are outside the scope of the proposed regulations.

21. Comment: Commenter states that by 2045 we should be carbon negative - not carbon neutral. [OP-90]

Agency Response: This comment is not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, this comment is outside the scope of this rulemaking and CARB is not required to respond.

22. Comment: And stop the USPS from going forward with the ridiculous plan for billions of dollars for gasoline fueled new trucks. No federally funded cars or trucks should be purchased that are gasoline fueled. [OP-90]

Agency Response: This comment is not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, this comment is outside the scope of this rulemaking and CARB is not required to respond.

23. Comment: Commenter states that convenient programs should be created to retire ICE vehicles by conversion to EV or hydrogen fuel cell. [OP-90]

Comment: Commenter states CARB's Clean Cars program seems to be limited in scope to new vehicles, but EV conversion kits could facilitate accelerated retirement of existing ICE engines. Moreover, EV conversion kits could enable low-income drivers, who cannot afford a new car, to share in the economic benefits of EV technology. Government subsidies and financing for EV vehicles might have a much bigger environmental impact, and could better serve less affluent drivers, if they are applied to EV conversions rather than being limited exclusively to new vehicle sales. [15-2].

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. ACC II does not force the retirement of existing vehicles, and converted ZEVs do not receive, nor were proposed to receive, any values under these regulations and accordingly are outside the scope of this rulemaking.

24. Comment: Commenter states to double the annual registration and sales tax for ICE vehicles. [OP-90]

Comment: Reduce the sales tax and registration fees on new EVs to promote EV ownership, since, "An EV can cost \$ 15-20 K more than a similar gas powered vehicle, and the added cost of taxes and registration makes the EV a bad choice for middle class residents." [OP-21]

Comment: This includes trucks. Eradicate sales tax and annual registration fee for EVs, while doubling these rates for ICE vehicles. [OP-128]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by

which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond.

25. Comment: There is potential to promote clean air and climate changes by encouraging locally generated electricity and from renewable sources (solar, geothermal, hydropower, wind turbines) & creating a better infrastructure (electricity, roads, WIFI) to connect everyone together. [OP-59]

Agency Response: This comment is not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, this comment is outside the scope of this rulemaking and CARB is not required to respond.

26. Comment: Commenter asks CARB to consider establishing limitations on the operation of ICEV that progressively reduce VMT by ICEV by 2035 in areas designated "severe" and "extreme" under the Clean Air Act [15-4].

Agency Response: This comment is not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, this comment is outside the scope of this rulemaking and CARB is not required to respond. This comment is directed toward controlling reducing VMT in certain areas, and accordingly is outside the scope of this rulemaking.

27. Comment: Commenter states going forward in the future, if CARB decides to eliminate diesel engines in the future, we may lose the opportunity to drill water wells, and let me be specific. There's approximately 24 million people in California that are dependent on groundwater and there are only 450 domestic water well drilling rigs in the entire State. That is less than a fraction of all the diesel trucks in California. So there's approximately one million heavy diesel trucks and the water well industry for domestic wells only has 450. That is a zero impact on California air quality. Commenter states the small group of water well drillers is the only industry allowed to bring water from the groundwater table to humanity, which is the lifeblood of California. So decision-making in the future is very important to consider what impact CARB will have, especially on the Department of Water Resources and where we're going into the future. [T2-49].

Agency Response: This comment is not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, this comment is outside the scope of this rulemaking and CARB is not required to respond. CARB notes the commenter's concern that unspecified future regulations eliminating diesel trucks will negatively impact water well drilling but these comments are not within the scope of this rulemaking. The ACC II regulations apply only to manufacturers of new light-duty (and in some cases medium-duty) vehicles; heavy-duty diesel trucks fall under the Advanced Clean Trucks regulation. To the extent that the commenter is referring to light- or medium-duty diesel trucks, the commenter misunderstands that CARB is eliminating diesel engines in the future. The ACC II regulations will not prohibit the continued operation of any existing vehicles and only requires that new light-duty vehicle sales be 100% ZEV or PHEV by 2035; 55% of medium-duty vehicle sales are required to be

ZEV by 2035 under the Advanced Clean Trucks regulation, meaning diesel engine sales for these vehicle classes can continue beyond 2035 if a ZEV alternative does not meet the needs of the water well drilling sector. Already, several auto manufacturers have released light-duty ZEV trucks, with more vehicle offerings expected in the future to meet the needs of an assortment of consumer segments.

28. Comment: Start supporting TESLA and all they are doing as the pioneer and REAL LEADER in the transition to sustainable energy rather than the fake news that GM is somehow the leader but who is actually not doing as it claims to be doing producing 30 new models 'by 2030'!? 2030 is way too late to the game, it's business as usual, making promises it won't keep. GM will end up going bankrupt again, costing the taxpayers billions more in unpaid loans. Stop this waste and get on the side of the doers and innovators in this country and make us all proud to be on the winning side to climate issues rather than throwing more good money at bad actors. [OP-90]

Agency Response: This comment is not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, this comment is outside the scope of this rulemaking and CARB is not required to respond. This comment is asking CARB to support one manufacturer above all other manufacturers. CARB is technology and company neutral.

29. Comment: Taxation without representation. given history of party politicians, despite our Constitutional Republic, we are denied to follow our Constitution to uphold We the People to govern. It is our fault and The People allowed this through ignorant voting encouraged through politicians. Former President Adams expressed that well. However, you pay no attention to any citizen who doesn't have a piece of paper to distinguish professionalism regardless of knowing such parchment is not defined to the owners intelligence. I decline to this states idealism. For illegals, as much as your words lack any backing, would hurt them. This action goes against your support for them. To include, working class, welfare government dependent class, and rich. Despite the rich denial, it must be true that no humans actually agrees with this stature. Unless I, their is another agenda, such as personal, political, and or corporate gain. [B2-5]

Agency Response: This comment is not directed at the proposed ACC II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, this comment is outside the scope of this rulemaking and CARB is not required to respond.

30. Comment: The only solution to our energy problem, at this time, is to use Natural Gas and Nuclear power. They are both, good, cheap and clean sources of electric power. [OP-16]

Agency Response: These comments are not directed at the proposed Advanced Clean Cars II regulations that establish requirements for manufacturers or the process by which the regulations were adopted. Accordingly, these comments are outside the scope of this rulemaking and CARB is not required to respond. Regulations of energy fuel production and its fuel sources, such as nuclear or feedstock types such as natural gas, are outside the scope of the proposal. However, CARB did evaluate the upstream

fuel production emissions associated with producing the gasoline, electricity, and hydrogen consumed by the passenger vehicle fleet. Both nuclear generation and natural-gas-fueled generators are part of the California electric grid mix, and natural gas is a source for hydrogen as well as a significant source of GHG and other air pollutant emissions. However, given strong California electric grid renewable requirements, separate from ACC II, the use of natural gas is projected to decline in future years for power production, as described in the ISOR Appendix D Section 3.