Gas Car Ban Regulation Heads to Committee for Approval

The Department of Energy and Environmental Protection (DEEP) announced its intent to adopt California's regulation prohibiting the sale of new gas cars by 2035. According to a letter sent Tuesday (Oct. 3) to the Legislative Regulation and Review Committee (LRRC), the agency received feedback that "overwhelmingly favored adoption" with strong support from both the regulated community and environmental and public health advocacy groups.

Using the term "overwhelming" is a bold statement to make as DEEP said they received thousands of comments, however, they neglected to provide a breakdown indicating support and opposition. In an email request to supply this information, the department's response was: "DEEP reviewed all comments for both PR2023-020 and PR2023-023, as more than 4,000 comments were received, many of which applied to both rulemakings. All comments were considered in making the decision to move forward with the rulemaking."

During the regulation adoption procedure, DEEP conducted a four-hour public hearing on Aug. 22. The hearing featured input from special interests and profiteers in favor of the mandate, as well as members of the general public who expressed concerns about potential negative outcomes. More than 30 individuals, a staggering five times the number of supporters, expressed discontent with the proposed regulation.

After the hearing, DEEP published the written comments. Unfortunately, the feedback was not presented in a user-friendly format, making it challenging for decision-makers to efficiently sort through and confirm the "overwhelming" support. Additionally, DEEP failed to remove duplicate submissions, with numerous individuals submitting identical testimonies multiple times.

Adding to the confusion, the agency subsequently released a list containing 3,739 names of commenters, meaning they received fewer comments than they reported to the LRRC.

As required by law, DEEP also issued a report outlining the mandate, detailing the key arguments for and against it. The report also summarizes and addresses all comments made regarding the proposal.

Those in support cited public health benefits, air quality and the need to meet federal and state laws.

Vehicle manufacturers including Alliance for Automotive Innovation (Alliance), Tesla and Rivian expressed their support for the proposal. However, their endorsement was contingent on Connecticut's ability to back the regulations with policies and programs that will increase their profits. They want the state to continue expanding the electric vehicle (EV) charging infrastructure, continued vehicle incentive programs and support for grid upgrades to accommodate widespread vehicle electrification — all funded with taxpayer dollars.

Some commenters believed Connecticut should not be governed by California as the two states are distinct in terms of economy, geography and environment. In response, the department acknowledged the unique attributes of each state but emphasized their primary focus is to "adopt the best policies available to meet the public health needs of Connecticut."

Despite concerns voiced about the high cost associated with purchasing an EV, DEEP seemed unmoved. They highlighted a decade-long savings of $8,835 along with taxpayer-funded rebate programs. However, these savings don't negate the challenge faced by middle and low-income individuals who might struggle to finance the remaining purchase amount, especially if they have poor credit ratings.

DEEP also emphasized car prices may decline over time as the number of available EV models increases. But since consumers will be limited to only purchasing zero-carbon automobiles there is no guarantee prices will be the same as gas cars. Coupled with the government subsidies, car companies may feel they don't need to lower their prices.

In the recent United Auto Workers strike against General Motors, Ford and Stellantis, the union's latest wage offers include substantial raises and cost-of-living adjustments. Workers could potentially see 30% increases in their pay. If the strike leads to excessively high wage concessions it could pose challenges for these manufacturers in reducing their prices.

In response to those who believed the regulation should be decided by the Connecticut General Assembly, DEEP pointed out it was approved in 2004 almost unanimously by the House and Senate. But as previously reported, lawmakers were led to believe by then-Atty. Gen. Richard Blumenthal that the state is not "committed to follow California provision by provision" and that "we would not be bound by every change made by California.

DEEP also recognized concerns raised about battery performance in cold weather, charging times and instances of stranded vehicles during extreme weather events. The department recommended in its report that owners use strategies to mitigate temperature extremes such as keeping an EV plugged in or stored in a temperature-controlled garage during these events. Additionally, DEEP predicts, albeit without a guarantee, that EV battery performance is anticipated to improve in the coming years.

The Connecticut Business and Industry Association (CBIA) opposed the regulation expressing concerns about the potential impact on consumer choice, business costs, electric grid reliability and the aggressive phase-in schedule for electric vehicles. The association emphasized the financial burden on small businesses, the responsibilities and costs associated with electric charging infrastructure.

Although DEEP "values the CBIA's feedback" and understands their economic concerns, the department ensures that the total cost of ownership will be lower with EVs and that the state will use tax dollars to help curb upfront costs.

Lawmakers have also joined the discussion on the issue. More than 50 members of the House Republican caucus submitted a letter voicing their opposition. They emphasized that California's approach might not be suitable for Connecticut raising concerns about the state's electricity infrastructure, challenges in charging infrastructure, increased costs for EV drivers and environmental issues related to EV production and use.

In a show of support, 21 state legislators from both chambers submitted a letter endorsing the proposed regulation. They emphasized that the regulation's timeline, beginning in 2027 and finalizing in 2035, allows ample opportunity for the legislature to address any concerns that may arise, particularly in terms of the adequacy of the state's grid infrastructure.

The pro-or opposition is, unsurprisingly, split on party lines. Sen. Jan Hochadel (D-13th) strongly supports the regulation noting that "forest fires and other dangers relating to climate change have been on the rise."

Meanwhile, Sen. Lisa Seminara (R-8th) opposes the ban, citing concerns about potential restrictions on consumer freedom and the unforeseen consequences of the regulation. These concerns include the capability of Connecticut's electric grid and the state's already high electrical rates, potential fire

hazards, affordability issues and the viability and sufficiency of charging stations. Additionally, Sen. Seminara is apprehensive about the environmental impact of discarded lithium-ion batteries and expresses concern about the negative economic implications for lower-income communities in the state.

The regulation is now subject to review by the LRRC — a joint bipartisan committee made up of 14 members: six senators and eight representatives divided equally by party.

The committee can veto the regulation and allow the General Assembly to either uphold or reverse the committee's veto. However, if the committee takes no action the regulations will be deemed approved.

Connecticut eRegulations System — Tracking Number PR2023-023 — Posted 9/29/2023

HEARING OFFICER REPORT

**Prepared Pursuant to Section 4-168(a) of the
Connecticut General Statutes and
Section 22a-3a-3(d)(5) of the Department of Environmental Protection
Rules of Practice**

**Regarding
Adoption of Section 22a-174-36d of the
Regulations of Connecticut State Agencies**

Hearing Officer: Paul Kritzler

Hearing Date: August 22, 2023

On July 21, 2023, the Commissioner of the Department of Energy and Environmental Protection (the Commissioner and DEEP, respectively) published a notice of intent to adopt section 22a-174-36d of the Regulations of Connecticut State Agencies (RCSA). Pursuant to such notice, a public hearing was scheduled for August 22, 2023. The comment period initially ran until August 23, 2023, and was extended until 5pm on August 30, 2023. This rulemaking is identified as PR 2023-023 in the Connecticut eRegulations system.

Connecticut eRegulations System — Tracking Number PR2023-023 — Posted 9/29/2023

I. Hearing Report Content

As required by section 4-168(d) of the Connecticut General Statutes (CGS), this report describes the proposal, identifies principal reasons in support of and in opposition to the proposal, and summarizes and responds to all comments on the proposal. A final recommended version of the text is also provided.

II. Summary of Proposal

DEEP is proposing to adopt RCSA section 22a-174-36d (Proposed Regulations) including the Low Emission Vehicle (LEV IV) emission requirements, Advanced Clean Cars II (ACC II) program which includes the Zero Emission Vehicle (ZEV) requirements, and passenger vehicle greenhouse gas (GHG) provisions to comply with section 22a-174g of the CGS. That section requires DEEP to adopt the light duty motor vehicle emission standards of the state of California, commencing with the 2008 model year (MY), and to remain identical with them; DEEP is adopting the California standards in their entirety to comply with the federal Clean Air Act (CAA) section 177 "identicality" provisions. DEEP has previously adopted the LEV II and ACC I standards in 2004, and 2005 respectively, and the LEV III standards in 2013 in compliance with section 22a-174g of the CGS.

DEEP is adopting these emission standards to reduce air pollution and protect public health. The entire State of Connecticut is designated as nonattainment of both the 2008 and 2015 National Ambient Air Quality Standards for ozone (smog). In addition to the public health impacts of Connecticut's continued noncompliance with federal health-based air quality standards, redesignations under the federal CAA compel DEEP to place ever more stringent and costly emission reduction requirements on stationary source owners and operators.

The emissions standards will also help bring Connecticut in line with states across the region that are adopting the same standards and with the direction of future national and international automobile markets, in order to provide Connecticut consumers with the best vehicle options in the future. These regulations also will spur investment in the necessary infrastructure to be ready in time for these inevitable market changes. The regulations do not require the consumer to purchase these vehicles and do not apply to used cars.

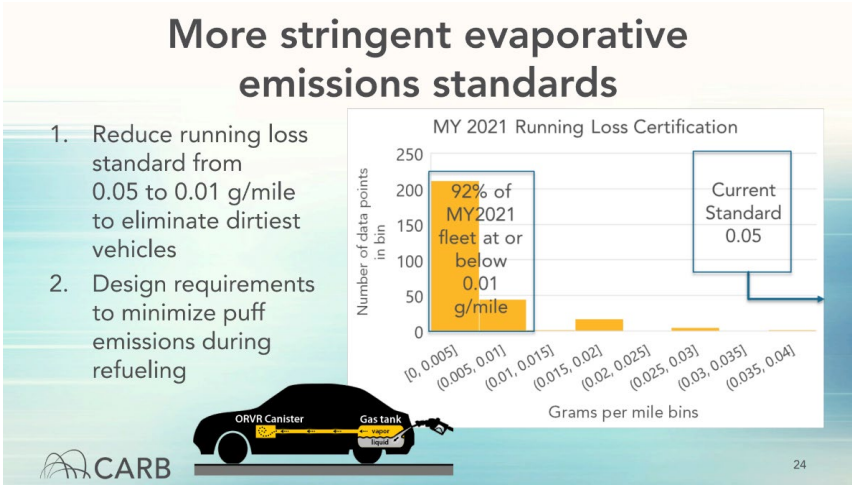
On November 30, 2022, California approved the final regulation amendments to adopt the LEV IV and ACC II regulations applicable to the 2026-2035 MYs. The California regulations included provisions for more stringent emission requirements for light-duty and medium-duty (LDV) internal combustion engines (ICE) in passenger vehicles and implement requirements for vehicle manufacturers to progressively increase the sale of advanced technology vehicles including battery electric vehicles.

DEEP is proposing to adopt these standards applicable to 2027 through 2035 MY LDVs, starting a year later than California to comply with the federal CAA two model-year lead-time requirement.

LEV IV: The Proposed Regulations include a set of vehicle tailpipe emission standards and other related requirements designed to reduce oxides of nitrogen (NOx) and fine particulate matter (PM2.5) emissions from on-road light- and medium-duty vehicles. The regulation will cut NOx emissions by roughly 90% below current standards once fully in effect in 2035.

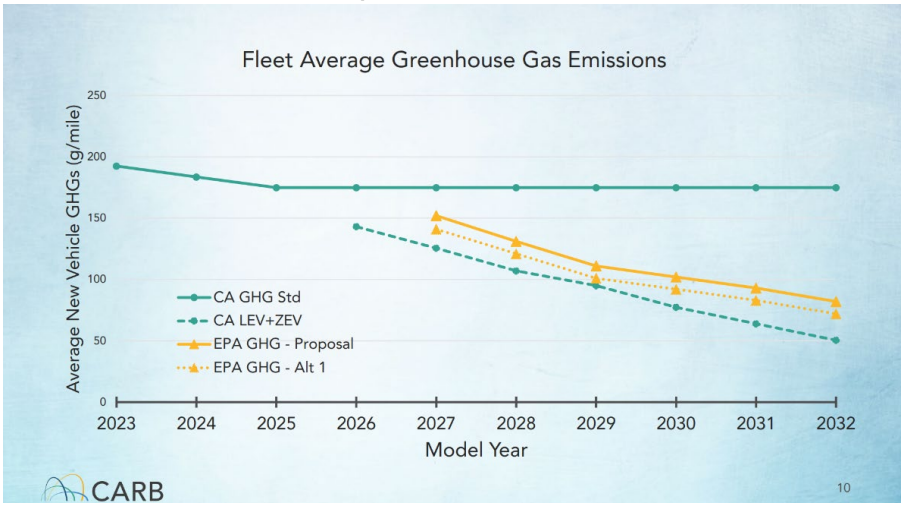
Some key elements of the LEV IV standard include:

- Application and Scope:
  - For the 2027 model year and subsequent years, vehicle original equipment manufacturers (OEMs) must meet emissions standards for Non-Methane Organic Gases (NMOG) and Nitrogen Oxides (NOx). OEMs must also meet fleet average emission values set forth for passenger cars, light-duty trucks, and medium-duty passenger vehicles when sold or offered for sale in Connecticut.
  - Exemptions - Vehicles weighing more than 8,500 pounds that are not medium-duty passenger vehicles are exempt from these standards. Test vehicles, manufacturer-owned vehicles, and certain military vehicles are also exempt.
- Emission Requirements:
  - Decreasing emission standards including lower evaporative emissions, running emissions and cold start emissions reductions that will lead to reduced NOx and PM emissions from new vehicles.



  - OEMs can earn and bank values (credits) through a credit, banking, and trading program consistent with the California Code of Regulations.

- Reporting & Compliance:
  - OEMs are required to submit annual reports to DEEP by March 1st of the calendar year succeeding the end of the model year, demonstrating compliance with fleet average emissions.
  - If the OEM's annual report demonstrates noncompliance, OEMs must file an enforcement report within 60 days, detailing the extent and nature of the noncompliance.
- Warranty Requirements & Recalls:
  - For all 2027 and subsequent model year vehicles, OEMs must offer an emissions control warranty that is more comprehensive than federal emission control system warranty standards.
- Greenhouse Gas (GHG) Standards:
  - OEMs must meet GHG emission standards and other requirements intended to reduce GHG emissions independent of the criteria pollutant emission standards above.
  - OEMs must include in the annual report to DEEP the average GHG emissions of their fleet sold in Connecticut. If an OEM chooses the multi-state voluntary compliance option, they must provide separate data for the multi-state pool and Connecticut's share of that pool.

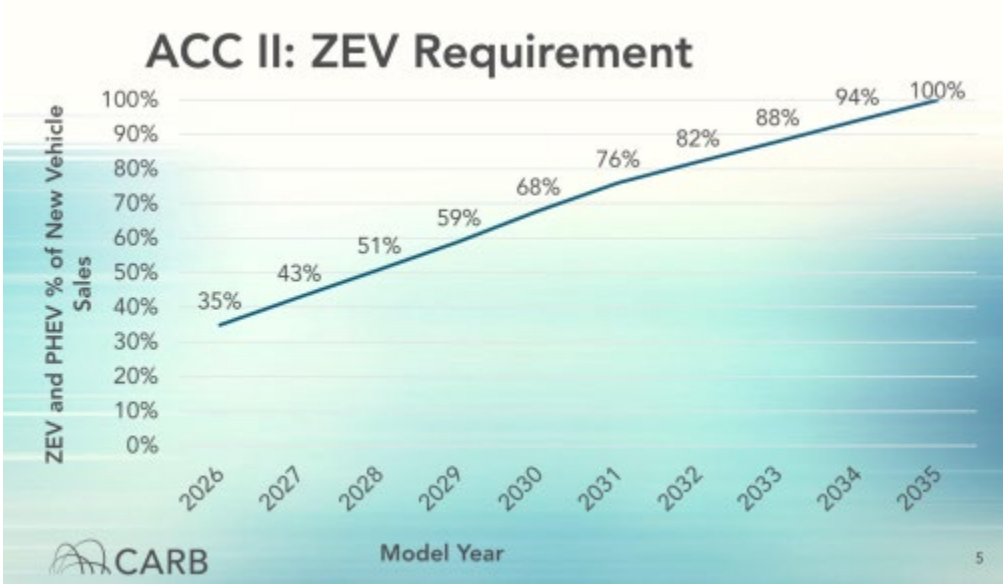


Note: EPA adopted their proposed standards and not Alternative 1

- Consumer Protections:
  - OEMs will be required to submit to new lifetime durability testing and provide greater warranty protections for both drive train and emissions systems. These requirements phase in on a two-tier basis, with the first set of requirements for MY 2027-2030 and a second set of requirements phasing in for MY 2031-2035.

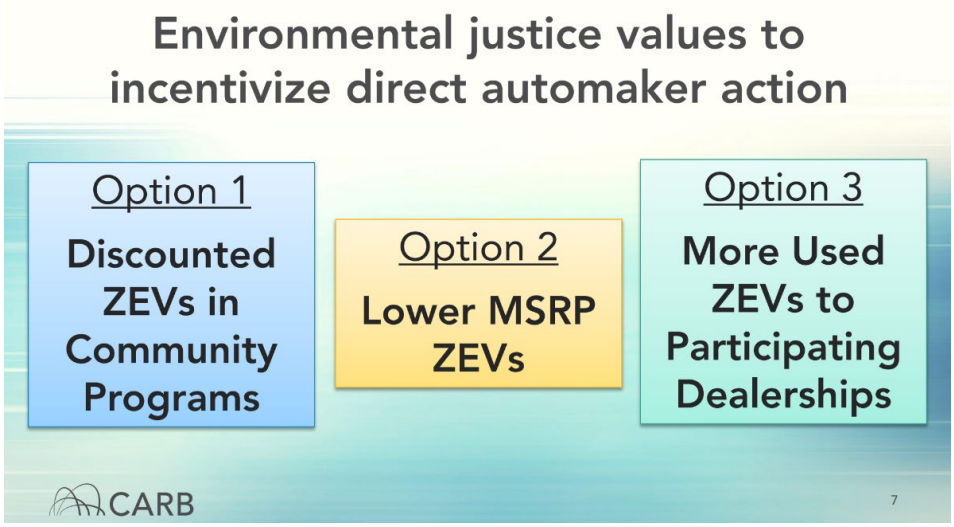
ZEV sales standard: The proposed regulations also require OEMs, as regulated entities, to meet a ZEV Standard. This standard requires the sale of a certain percentage of fully electric, plug-in hybrid or other advanced technology vehicles each year. Additional details include:

- Application and Scope:
  - For the 2027 model year and subsequent years, OEMs must ensure a certain percentage of sales of passenger cars, light-duty trucks, and medium-duty passenger vehicles sold or offered for sale in Connecticut comply with the ZEV requirement.



  - Exemptions - Vehicles weighing more than 8,500 pounds that are not medium-duty passenger vehicles are exempt from these standards. Test vehicles, manufacturer-owned vehicles, and certain military vehicles are also exempt.
- Emission Requirements:
  - Each OEM must meet specific ZEV percentages based on a credit system, which also includes allowances for transitional zero-emission vehicles (TZEV), commonly known as hybrids.
- Reporting & Compliance:
  - OEMs are required to submit to DEEP annual reports to demonstrate compliance with ZEV requirements.
    - By April 1st, a Projected Sales Report
    - By May 1st, a ZEV Requirement Performance Report
    - By September 1st, a ZEV Compliance Report

  - An early compliance report is also required before the first year these regulations take effect, including data on any early compliance credits earned under the regulation, which may be used to meet future compliance requirements.
  - Upon request, OEMs must provide DEEP any documentation, such as Vehicle Identification Numbers and production data, for effective administration and enforcement of ZEV regulations.
- Warranty Requirements & Recalls:
  - For 2027 model year vehicles, and for each vehicle from a subsequent model year, OEMs must offer a warranty that is superior to federal emission control system warranty standards.
- GHG Standards:
  - OEMs must meet GHG emissions standards and other requirements intended to reduce GHG emissions.
  - OEMs must report to DEEP the average GHG emissions of their fleet sold in Connecticut, by May 1st of each reporting year. If an OEM chooses the multi-state voluntary compliance option, they must provide separate data for the multi-state pool and Connecticut's share of that pool.
- Environmental Justice (EJ) credits to incentivize more affordable vehicles in EJ neighborhoods.



Adopting these new emission standards will reduce air pollutant emissions from covered vehicles, the largest contributor to Connecticut emissions of GHG and NOx, a precursor pollutant to ground level ozone. They will move Connecticut closer towards meeting its GHG reduction targets set forth in CGS section 22a-200a.

III. Comments in Opposition and Support to the Proposal

DEEP received approximately 4,000 comments sent to the DEEP Mobile Source Group email address that addressed both this proposal and the DEEP medium and heavy-duty vehicle proposal (PR2023-020) and are accounted for in both comment response documents. DEEP received an additional 1,065 comments through the Secretary of State eRegulations system for this proposal. DEEP received many comments that expressed general opposition and support of the proposal. These comments covered a wide variety of topics summarized below.

Principal opposition to the proposal, received from the American Petroleum Institute, American Fuel & Petrochemical Manufacturers, Yankee Institute, Northeastern Retail Lumber Association (NRLA), Gasoline and Automotive Service Dealers of America (GASDA) and members of the public, fell into the following categories:

- Questions about the feasibility of the technology, including but not limited to the availability of charging, limited vehicle range, vehicle recharging availability, cold weather performance and safety concerns.
- Concerns of cost, including but not limited to perceived higher vehicle sticker prices, cost of charging infrastructure, higher maintenance costs and electric rate concerns for charging.
- Questions of legal authority to adopt the regulations or about federal preemption, including but not limited to preemption by the Energy Policy and Conservation Act (EPCA) and the Renewable Portfolio Standard, about the authority to adopt final California standards for which California has not yet received a waiver of preemption by the United States Environmental Protection Agency (EPA) and about authority in light of ongoing litigation.
- Questions of economic impacts from decreased sales of gasoline expressed by the fossil fuels industry and their Connecticut-based retailers association.

Principal support for the proposal included comments from health and environmental organizations such as the Connecticut Chapter of the American Lung Association (ALA), Connecticut Chapter of the Sierra Club, Save the Sound, the Union of Concerned Scientists, and technology research groups, as well as members of the public. The Auto Innovators Alliance, who represent major auto manufacturers, also commented in support of the proposal and provided an outline for promoting electric vehicle adoption in Connecticut.

Principal reasons in support included:

- Public health benefits, citing models showing that adopting the emission standards will reduce air pollution and avoid premature deaths; and recover

billions of dollars in revenue loss by avoiding adverse health effects associated with poor air quality. Commenters noted the emission reduction benefits of the regulation while also pointing out that Connecticut remains in non-attainment for the 2008 and 2015 federal health-based National Ambient Air Quality Standards (NAAQS) for ozone (smog).

- Benefits for Environmental Justice (EJ) and Low and Moderate Income (LMI) citizens of Connecticut as fossil fuel emissions from highways create poorer air quality conditions for communities that abut them.

- The need to meet federal and state laws including the Global Warming Solutions Act (GWSA) through the reduction of GHG emissions. These statements tie into many concerns expressed over climate change and its adverse effects on Connecticut.

- Comments were received from vehicle manufacturers, including the Alliance for Automotive Innovation (Alliance), Tesla and Rivian in support of the proposal provided that Connecticut can support the regulations with policies and program that support EV integration including: continue expansion of electric vehicle infrastructure equipment (EVSE), vehicle incentive programs (VIP), and support of grid upgrades to support widescale vehicle electrification.

- Finally, comments in support cite the financial benefits of the proposed regulation due to the lower total cost of ownership (TCO) of electric vehicles.

There was also support and opposition for the proposal submitted by members of the Connecticut General Assembly.

IV. Summary of Comments

All commentors are identified in Attachment A - List of Commenters. A summary of the comments and the Department's responses are below. Several commenters made similar or identical statements, which will be grouped together .

Public and Environmental Health

Comment 1. Several commenters, identified as residents of Connecticut, emphasized their fundamental right to breathe clean air. Expressing robust support for DEEP's proposed clean car standards, these residents point to the entire state's

classification as an ozone nonattainment zone, signifying compromised air quality. The commenters praise the projected benefits of the proposed ACC II standards for 2027-2035 for cars, encompassing facets like climate change, environmental justice, health, and the economy. Attention is drawn to the disproportionate pollution from trucks and buses and the substantial emissions they generate. Citing several surrounding states who have adopted these regulations, the commenters argue that Connecticut residents should receive the same protections. The state's previous adoption of Clean Cars I standards is applauded, with a push for the adoption of updated standards to further diminish pollution. The comments urge DEEP to act without delay to safeguard both the climate and public health by ratifying the proposed vehicle standards, underlining the matter's urgency.

Response. DEEP values the perspective of Connecticut residents and acknowledges the importance of achieving the health-based standards for air quality and the need for regulations that ensure the safety and health of all and the public health impact of Connecticut's ozone nonattainment on our communities.

DEEP works closely with our surrounding states to coordinate the development and implementation of informed policies that support Connecticut's clean air goals. The legacy of the Clean Cars I standards provides a solid foundation for the state to build upon. The commenter's advocacy for the immediate adoption of the proposed standards is consistent with DEEP's mission to reduce emissions and combat climate change effectively. Connecticut can meet neither its federal NAAQS obligations nor state climate change goals without significant reductions from the mobile source sector, and, as noted, the federal government imposes consequences for being out of attainment.

Comment 2. Health organizations, including the Connecticut Chapter of the American Lung Association (ALA) and the Connecticut Department of Public Health (DPH), voiced support for the proposed regulation. DPH emphasized the detrimental health impacts of NOx and PM2.5 emissions, especially for those with chronic conditions. IALA and DPH also highlighted the public health risks posed by climate change, such as the exacerbation of air quality problems due to prevalent heatwaves. Poor air quality elevates the risk factors for conditions like asthma, heart attacks, lung cancer, and premature death.

Response. DEEP thanks the ALA and DPH for providing comments on this proposal. DEEP acknowledges the various extreme public health impacts that motor vehicle pollution can cause. The state is committed to protecting the health of the public and the environment.

Additionally, the noted adverse effects of climate change on public health, such as the exacerbation of air quality during heat waves, align with the State's commitment to proactively address climate-related health challenges. Mitigating the severe health risks associated with poor air quality, like increased chances of asthma attacks, heart issues, and lung cancer, strongly supports the adoption of the proposed emission standards and demonstrates the potential long-term benefits for the residents of Connecticut.

Regulation & Policy

Comment 1. Some commenters, identified as Connecticut residents, commented that the state should not align its laws with those of California. The commenters emphasize that the two states are distinct in terms of economy, geography, and environment. Moreover, they point out that California's regulations are frequently revised due to technologically unattainable emission requirements on OEMs.

Response. DEEP appreciates the concerns regarding Connecticut's regulatory direction in relation to California's policies. DEEP understands the distinct characteristics of each state, and while some regulations might have their origins in other jurisdictions, the DEEP's intent is to adopt the best policies available to meet the public health needs of Connecticut. To that end it is important to understand the national structure for regulating vehicle emissions.

DEEP and the other section 177 states work closely with CARB on program development and implementation. When CARB seeks to amend their standards, the section 177 states are active participants in the rule development process in California. Previous changes made in the mid-term of the LEV II, LEV III and Advance Clean Cars I regulations were incorporated into the Connecticut regulations without disruption in the regulatory structure and have not caused concerns for the OEMs.

Under the federal CAA, the authority to set vehicle emission standards is reserved to the federal government, acting through the Environmental Protection Agency (EPA). California's regulation of vehicle emissions predates the federal CAA and Congress made special provision for California to continue to set emissions standards for new vehicles under section 209 of the CAA. In addition to this section, section 177 of the CAA allows other states to adopt California standards as an alternative to EPA emissions standards. The California Air Resources Board (CARB), since adopting the original ACC rule in 1990, has made unique considerations in its rulemaking

process to include the concerns of many stakeholders, including OEMs and section 177 states such as Connecticut.

New York, Vermont, Massachusetts, Colorado, Washington, and Oregon have already adopted the emission standards that Connecticut is proposing. In addition, Rhode Island, Maine, Delaware, Maryland, North Carolina, New Mexico, New Jersey and Minnesota are in the process of adopting these standards.

DEEP and the other section 177 states work closely with CARB on program development and implementation. When CARB seeks to amend their standards, the section 177 states are active participants in the rule development process in California. Previous changes made in the mid-term of the LEV II, LEV III and Advance Clean Cars I regulations were incorporated into the Connecticut regulations without disruption in the regulatory structure and have not caused concerns for the OEMs.

Comment 2. Some comments suggest that potential legal conflicts exist between ACC II standards and federal statutes such as EPCA, CAA, and Energy Independence and Security Act (EISA). These comments argue that California is preempted from adopting these rules because authority to regulate fuel economy is expressly given to NHTSA and not EPA.

Response. There is no legal conflict. For example, California adopted its emission standards following its own administrative requirements. The state concluded that there is no conflict with federal statutes concerning the regulation of fuel economy, which is an authority reserved to NHTSA.

The GHG provisions of the proposed emission standards expressly apply to parts of the vehicle that both EPA and California have well established authority to regulate and for which EPA has previously granted waivers under section 209(b) of the CAA for California's LEV II and LEV III standards.

Comment 3. Some commenters stated that Connecticut cannot legally adopt the California standards, pursuant to section 177 of the Clean Air Act, until California has received a waiver of preemption from EPA.

Response. Rule adoption is distinct from rule implementation. DEEP seeks to adopt these emissions standards, pursuant to CAA section 177 and CGA section 22a-174g, this year, but not to implement such standards until 2027, which is anticipated to be after California receives its CAA section 209b waiver of preemption from EPA. This is in keeping with a long established and legally vetted administrative process. If EPA does not grant a waiver, neither

California nor any state that has adopted the emission standards may enforce them.

Comment 4. Some commenters, identified as Connecticut residents, express concerns about the potential high costs associated with electric cars, both to purchase the vehicles and the anticipated increase in electricity bills.

Response. DEEP appreciates that many share the commenters' concerns, particularly around the financial implications of transitioning to electric vehicles. While electric vehicles may have higher upfront costs, there are potential long-term savings on fuel and maintenance when considering total cost of ownership (TCO), a measure that includes not just purchase price, but maintenance and fuel costs. Economic modeling of TCO for EVs shows net cost savings. Results of California economic modeling show that battery electric vehicle (BEV) owners will save $3,216 over ten years in the most conservative case evaluated and will realize savings within the first year of ownership. Ten-year savings are much larger, at $8,835, with the lower cost 2035 model year BEV coupled with access to a home charger. Notably these projections do not take into account federal tax credits or Connecticut Hydrogen and Electric Automobile Purchase Rebate (CHEAPR) incentives. The proposed regulations also increase battery state of health and transparency requirements, ensuring that batteries will be more durable and reliable in used car markets. Lastly, the lack of emission control equipment, such as catalytic converters, removes the option this equipment will fail or be stolen thereby further decreasing maintenance costs for older vehicles.

Additionally, economies of scale and technological advances may drive down these costs over time. As the number of available EV models increases, economies of scale and a wider variety of offerings, including smaller sedans, will bring EVs into price parity with comparable ICE vehicles. Analysis by Bloomberg estimates price parity by 2025 for many models. California's analysis predicts parity with conventional internal combustion engines (ICEs) in most vehicle segments by model years 2031-34.

Further, incentive programs will continue to be a central policy to reduce higher upfront costs and minimize the cost differential between ZEV and ICE vehicles. DEEP will continue to implement incentives, such as the CHEAPR program, to make EVs more affordable for residents, especially those who are low and moderate income (LMI). Additional incentives available through utility programs and federal tax credits will serve to further decrease overall vehicle costs.

Comment 5. Some commenters, identified as residents of Connecticut, have expressed strong reservations regarding the push for an electric vehicle regulatory

proposal. The residents argue that Connecticut's air quality challenges cannot solely be addressed by local measures due to significant external factors, including but not limited to activities and air quality conditions from areas to the north, south and west of Connecticut. The influence of external events, such as Canadian wildfires on local air quality, was cited as a demonstrative example.

Response. DEEP values the feedback shared by the commenters. DEEP acknowledges that external factors play a role in Connecticut's air quality and regional action can also be critical to addressing the interstate transport of air pollution. It is important to note that in addition to Connecticut seeking to adopt the California emission standards for light-duty vehicles, upwind states such as MD, and NY are in the process of adopting this regulation as well and can be an important strategy to improving air quality in Connecticut. In addition, local emission reductions can still make a positive impact on air quality in the state as a whole and on local air quality events. DEEP needs to pursue a variety of strategies to attain the State's air quality goals. Additionally, emissions inventory data show that the transportation sector is responsible for the majority of NOx emissions in the state (67%) and is the largest single contributor of GHG emissions in the state (40%).

Comment 6. Many commenters oppose a ban on gas-powered cars in Connecticut.

Response. DEEP appreciates these concerns. The proposed regulation does not ban gasoline or ICE vehicles. Car owners will not be required to sell their ICE vehicles. All 50 state compliant ICE vehicles may still be registered in the state. The regulation does not apply to used ICE vehicles. Moreover, this regulation still allows for the sale of new ICE vehicles through 2034, and hybrid vehicles in 2035.

Comment 7. Some comments suggest that the Small Business Impact Statement - a part of the package of materials prepared with the Proposed Regulations - does not contain a sufficient level of analysis and that the effects on Connecticut businesses are underrepresented. Comments additionally note that DEEP measured possible impacts based on a scaling of CARB's analysis and did not include an analysis using Connecticut specific data.

Response. DEEP appreciates the concerns regarding accurately measuring the effect on state businesses and the economy. DEEP notes that significant steps were taken to analyze the impact on Connecticut of adopting the proposed rule, and further that those analyses use Connecticut specific inputs. DEEP has utilized industry-standard modeling platforms, including MOVES, COBRA, and AFLEET, to help determine these impacts. Those models, as shown in the impact assessment included with the notice for this regulation, show significant economy wide effects. The economic effects of

increased vehicle costs and TCO impacts are noted in the impact assessment as well. Furthermore, the regulatory package is reviewed by the office of the Attorney General as to its legal sufficiency. As such, DEEP will work with the Attorney General's Office to ensure the regulatory analyses meet the requirements of the Connecticut Administrative Procedures Act.

Comment 8. Several commenters, identified as Connecticut residents, stated concerns that the implementation of this proposal would simply shift emissions from motor vehicles to the energy sector because electricity will need to be generated by fossil fuels.

Response. DEEP acknowledges that the transition to ZEVs does not represent a complete elimination of emissions caused by motor vehicles in a well-to-wheels analysis. ZEVs are, however, lower emitting than ICE vehicles for several reasons. According to the U.S. Department of Transportation's Bureau of Transportation statistics, ICE vehicles produce many more criteria pollutants such as ozone, created by NOx emissions, hydrocarbons, carbon monoxide, and particulate matter (PM).

According to EIAs Fuel economy resource, GHG emissions associated with BEVs, as a national average, produce a third of the GHG emissions of a comparable ICE vehicle. Additionally, Connecticut's electric grid is considerably cleaner than the national average. According to the EIA profile analysis of Connecticut, Connecticut's energy production comes primarily from natural gas, nuclear, various emission-free renewables, and biofuels. Connecticut BEVs are estimated to produce a fourth of the CO2 emission compared to their ICE equivalents. This figure is predicted to lower as more Class 1 renewable sources are added to the grid.

Comment 9. Several commenters made statements that were outside the scope of this rulemaking regarding world affairs or political motivations for the proposal of the regulation.

Response. While DEEP is restricted in its ability to respond to comments that are outside the scope of the proposed regulation, DEEP thanks these commenters for sharing their thoughts and opinions on this proposal.

Comment 10. One commenter noted that implementation of this regulation could reduce gas tax revenue and questioned whether there would be an EV fee to address the loss of revenue for the state or other fee to make up for lost transportation fund tax revenue.

Response. DEEP appreciates the commenters' consideration of the issue. The discussion of EV fees to offset gasoline tax revenue is outside the scope of this rulemaking, as state revenue generation falls under the cognizance of the Connecticut General Assembly and the Department of Revenue Services and transportation funding falls under the authority of the Connecticut Department of Transportation. However, the Department did provide an estimate of lost revenue in the fiscal note.

Comment 11. Some commenters identified as residents of Connecticut stated that they believed the regulation should be decided by the Connecticut General Assembly and not through a regulation of a Connecticut State Agency.

Response. DEEP notes that the Connecticut General Assembly did reach a decision on the topic of this regulation. The General Assembly directed the Commissioner of Energy and Environmental Protection to adopt the California light-duty motor vehicle standards in Public Act 04-84, which was approved almost unanimously, 143-1. The language codified in 22a-174g further requires the Department to remain consistent with the California program.-

Technology & Infrastructure

Comment 1. Some commenters, identified as concerned citizens, stress that regulations should not narrow consumer choices to a singular technology, highlighting the potential of hydrogen-powered internal combustion engines (ICE) which currently exist and are operational. They question the necessity of new laws when emissions could be controlled through revising acceptable emission levels for internal combustion engines without requirements for advanced technology vehicles, allowing any technology that meets these criteria to be used.

Response. DEEP acknowledges and appreciates the perspective of citizens who advocate for a broader technological landscape in vehicle emissions regulations. We understand the importance of not limiting options to just one technological solution, and hydrogen-powered electric vehicles (HEVs) are a certifiable technology under the ACT regulation, which grants full credits for HEV vehicles. The goal of introducing new regulations is not to replace the existing emissions controls but to further refine and enhance them in light of recent technological advancements and environmental insights as well as in recognition of manufacturers' intentions to shift away from producing ICEs in the coming years. The regulation leaves open the possibility of additional technologies qualifying for ZEV credit and allows OEMs to provide testing and apply for certification for those vehicles. This regulation is

technologically agnostic, and leaves open the possibility that many technologies may fill the need for ZEVs.

Comment 2. Some commenters expressed concerns about the proposed ban on gas-powered vehicles, specifically questioning the adequacy of the existing electric vehicle (EV) charging infrastructure. Elements of concern include the scarcity of charging stations, especially in rural areas, and range anxiety due to limited battery life. The commenter suggests a more balanced approach that prioritizes the development of charging infrastructure and provides incentives for adopting EVs.

Response. DEEP appreciates the feedback provided on the ACC II regulations regarding vehicle range and infrastructure readiness. The improvement of battery technology is expected to mitigate range concerns is the near future, and DEEP's phased approach, beginning with the 2027 model year, offers a measured transition to electric vehicles to allow for infrastructure build-out in rural areas. The suggested emphasis on infrastructure and incentives aligns with the State's ongoing initiatives to support a cleaner, efficient, and accessible transportation future for all residents.

In the near term, the New England grid has approximately 32,800MW of generating capacity. Under an extended heat wave condition, the regional grid operator currently expects a summer peak of approximately 26,421 MW. The distribution grid is constantly evolving to meet energy demands, as it has throughout time to absorb new loads from refrigeration, air conditioning, heating, trains, and large-scale commercial and industrial development to name a few. In recent years, that evolution has included additional renewable resources like solar and energy storage which also help stabilize the distribution grid and reduce impacts from peak demand. We expect continued growth in distributed resources, like solar and energy storage, which will help offset the increase in electrical demand from EVs.

DEEP continuously communicates with ISO-NE, the regional grid operator, and communicates with partners across the region to ensure electricity demands are met with sufficient resources. We also expect the local electric distribution companies to meet their responsibilities to maintain and upgrade the local distribution system as necessary to avoid any negative impacts resulting from increasing electric demand.

Moreover, as vehicle fleets gradually electrify, there are additional strategies that can be deployed to minimize the impacts of this new electric vehicle load, including off-peak charging incentives, utility managed charging, and even vehicle-to-grid capabilities--where batteries, like those found on

electric school buses, can be utilized for grid relief during summer when school is generally not in session.

1. **Continue Energy/Clean Transportation Planning Efforts** Utilize existing energy modeling efforts such as DEEP's Integrated Resource Planning to project anticipated load increases based on anticipated EV adoption rates.

2. **Focus on the Role Smart Charging Can Play in Managing Demand** Invest in smart charging infrastructure that supports bi-directional energy flow (Vehicle-to-Grid or V2G) and load management. This enables grid operators to control charging times and rates, reducing stress during peak demand periods.

3. **Integrate Energy Storage Efforts** Current programs supported by DEEP, the Connecticut Green Bank and approved by PURA will support the deployment of energy storage systems, such as batteries, at key points in the grid. These systems can store excess renewable energy during low demand periods and release it during peak times, supporting both the grid and EV charging.

4. **Demand Response Programs** Demand response programs supported through ISO-NE and through other programs can encourage incentivize EV owners to charge during off-peak hours. Connecticut's EV Charging Program, established by PURA and administered by the Utilities, incentivizes participants to charge their EVs during off-peak hours and to participate in peak demand events. The impacts of EV charging will be further reduced by continuing to promote variable electricity pricing to encourage charging when the grid has surplus capacity, ensuring grid stability.

5. **Renewable Energy Integration** Integrate renewable energy sources like solar and wind into the grid. Coordinating EV charging with renewable energy generation can help manage load.

6. **Host Capacity Mapping and Transparency** CT's utilities have been developing detailed Host Capacity Maps that depict the existing grid conditions and operations that the utilities infrastructure can accommodate, with limited system upgrades, while still reliably and safely delivering electricity. The information found on these maps details the hosting capacity by circuit and direct clicks on circuits will also bring up more detail about the circuit, its remaining capacity and related substation. These maps are a helpful tool in determining the scope of upgrades needed to install EV charging at a particular facility.

7. **Public Private Partnerships** Foster partnerships with private sector companies, municipalities, and public transportation authorities to develop

charging networks. Coordinated efforts can lead to a more cohesive and reliable charging infrastructure.

8. **Education and Outreach** Educate consumers, EV owners, and local communities about the benefits of managed charging, grid reliability concerns, and the role they can play in supporting a stable grid by adopting certain charging behaviors.

Comment 3. Some commenters, identified as Connecticut residents, express significant concerns regarding the proposed adoption of California's ACC II rule, acknowledging the importance of reducing emissions but emphasizing the automotive industry's progress in embracing diverse cleaner technologies, including hydrogen, synthetic fuels, alternative fuels, and improvements to traditional engines. The commenters argue for a broader approach that allows the market to innovate in various emission-reducing technologies and not "pick winners," rather than focusing solely on electric vehicles. Given these concerns, the commenters urge DEEP not to adopt the proposed rule, suggesting instead that a more inclusive, collaborative effort with various stakeholders might yield better outcomes for the state's environment, economy, and residents.

Response. DEEP appreciates the concerns expressed regarding the proposed adoption of new emission standards. DEEP appreciates the value of diverse technologies within the automotive sector, such as hydrogen, synthetic fuels, and improvements to traditional engines. The proposed emission standards encourage a holistic approach to reduce emissions, while also taking note of innovations in the market.

The regulation allows for certain hybrid vehicles to be sold through 2035 and consumers may choose to buy new clean conventional vehicles (ICE) through 2034. After 2035 consumers can still buy a plug-in hybrid electric vehicle that has multiple fueling sources to serve a wide range of uses.

The regulation has compliance flexibilities for OEMs, including a credit banking system, that allows OEMs to comply with a vehicle fleet with mixed technologies. The regulation doesn't choose the winning technology. Existing technologies, such as hybridization, developing technologies such as hydrogen, and yet to be commercialized technologies will all be able to meet the requirements.

Comment 4. Several commenters strongly opposed the proposed regulations due to cost considerations. Identified concerns include the initial higher costs of electric vehicles (EVs) which could be burdensome for certain demographics and the high costs of battery replacements for used EVs.

Response. DEEP values the comprehensive feedback presented. DEEP acknowledges the initial higher acquisition costs of EVs but is also aware of their decreasing costs as technology and the market mature. It's essential to note that the cost to own and operate EVs over time, as determined by a TCO analysis, shows a lower cost than conventional vehicles due to reduced fuel and maintenance expenses. The proposed regulations' provisions for warranty, durability, and battery labeling are intended to ensure consumers, including those purchasing used EVs, are not burdened with unexpected battery replacement costs. See the response to Comment 7 in the Economics & Social Comments section for additional information.

Comment 5. Several comments expressed opposition to a complete transition from new cars powered by internal combustion engines by 2035. The commenters reference a previous regulatory proposal by the California Air Resources Board from the 1990s, suggesting that the board might be ahead of available technology. They express concerns about the feasibility of meeting the proposed regulations. The commenters acknowledge the merits of electric vehicles but highlight their limitations in certain situations, such as towing trailers and long-distance driving. The suggestion to focus on cleaning vehicle emissions and targeting gross polluters is made.

Response. DEEP appreciates the historical context provided by the commenter, specifically referencing the early vehicle electrification efforts from the California Air Resources Board in the 1990s. DEEP recognizes that technology and infrastructure readiness play a critical role in the successful transition to zero-emission vehicles. The proposed regulations are grounded in extensive research and analysis and reflect public statements of many OEM electrification targets.

DEEP acknowledges that EV market is still maturing within the context of certain use cases such as towing. The proposed regulations, by providing regulatory certainty to 2035, are structured to provide OEMs time to develop vehicles that meet all consumer use cases with either fully electric or plug-in hybrid drive systems. As technology evolves, it is expected that these limitations will be addressed, leading to electric vehicles that can suit various needs.

California has done an extensive feasibility study of regulated entities' ability to meet the regulations in the Standardized Regulatory Impact Statement (SRIA) and has undertaken extensive coordination with the OEMs to ensure their ability to deliver products that both meet regulatory requirements and consumer needs.

DEEP agrees that it must also look at in-use vehicle emissions. The State's inspection and maintenance program is designed to identify vehicles that are causing excess air pollution due to malfunctioning emissions control systems. The testing program identifies high-emitting vehicles and ensures that such vehicle's emission control systems are repaired.

Comment 6. Commenters expressed concerns about the proposed shift to electric vehicles (EVs). They highlighted the state's needs due to its harsh winters, longer driving distances, and reliance on dependable vehicles. Concerns were raised about electricity demand straining the grid, high electricity costs, battery performance in cold weather, charging times, and historical instances of stranded vehicles during extreme weather events.

Response. DEEP acknowledges the concerns raised about the transition to electric vehicles (EVs) in Connecticut, specifically regarding grid reliability, electricity costs, vehicle dependability, and adverse weather conditions. Please see the response provided in Comment #2 in the Technology and Infrastructure section regarding infrastructure reliability. The State, in partnership with the Regional ISO, is continually assessing its ability to produce and deliver electricity to meet demand in Connecticut.

DEEP acknowledges the concerns about Connecticut's transition to electric vehicles (EVs) and temperature extremes are an issue that can be mitigated. According to the NOAA state climate summary for CT, Connecticut's average yearly temperature is 49.9°F, with monthly temperature averages being 27.2°F in January and 72.4°F in July. Yearly temperature high extremes of above 90°F occur generally less than ten days out of the year, depending on location, and extreme cold days below 0°F are infrequent, with temperatures being this cold only one or two days a year. Based on these temperature measures, an acceptable BEV performance of 80% or above can be expected for most of the year. Owner strategies to mitigate temperature extremes, such as keeping an EV plugged in or stored in a temperature-controlled garage during these events, can be one solution to addressing this concern. OEM advancements in EV battery performance are also expected to improve BEV performance in various temperatures in the coming years.

Comment 7. The commenter opposes the transition away from gas-powered cars in Connecticut, expressing concerns about the electric grid's capacity to support widespread EV usage. They cite current energy source limitations and potential rolling blackouts as main issues.

Response. DEEP appreciates the commenter's concerns about the electric grid's capability. Please see the response provided in Comment #2 in the Technology and Infrastructure section. There are frequent and

comprehensive planning efforts at various levels to ensure the electric grid remains robust and adaptable. Integrated Resource Plans, which guide infrastructure upgrades based on current trends and future projections, take into account additional EV charging needs, as a flexible load that typically occurs during off-peak hours, which mitigates grid stress and promotes cost-effectiveness. Furthermore, it's essential to recognize that power outages also hinder gas stations, preventing gasoline access.

See also the responses to Comments #2 and #6 above.

Comment 8. Some commenters point out that BEVs present a unique safety hazard due to battery fire unpredictability, the difficulty in extinguishing battery fires, and the difficulty of disposing of a BEV after a fire.

Response. DEEP appreciates these concerns and notes EVs must comply with the National Highway and Transit Safety Administration (NHTSA) safety standards regardless of drivetrain technology and NHTSA has established a Battery Safety Initiative for Electric Vehicles to address safety risks related to EV batteries. NHTSA has studied and compared EV battery fires to gasoline vehicles and state in their report, Lithium-ion Battery Safety Issues for Electric and Plug-in Hybrid Vehicles, that "Regarding the risk of electrochemical failure, the report concludes that the propensity and severity of fires and explosions from the accidental ignition of flammable electrolytic solvents used in Li-ion battery systems are anticipated to be somewhat comparable to or perhaps slightly less than those for gasoline or diesel vehicular fuels. The overall consequences for Li-ion batteries are expected to be less because of the much smaller amounts of flammable solvent released and burning in a catastrophic failure situation."

Comment 9. A commenter, identified as a professional engineer with experience in electric power plants and manufacturing, commented that the proposed transition to electric vehicles by 2035 is impractical due to insufficient electricity generation. The commenter details the nationwide electricity needs up to 2040, emphasizing the challenge of meeting the demands of electric vehicle expansion. The recent energy-related legislation in Connecticut is examined, along with the state's reliance on natural gas, which will be eliminated by 2040. The comment concludes with concerns about the lifespan of nuclear reactors in the state and the urge to delay any decisions until a comprehensive analysis by professional engineering firms is undertaken.

Response. DEEP appreciates the detailed feedback provided and the Department acknowledges the complexities surrounding energy production, distribution and consumption, particularly in relation to the projected

increase in electric vehicle use. T The Department, however, believes the energy planning processes are in place to support this proposal in Connecticut and refers this commenter to the response to comment 2 in the Technology and Infrastructure section above.

Comment 10. Some commenters identified as residents of Connecticut expressed concerns that EVs produce more PM emissions which are known to cause severe health issues and that implementation of this regulation was trading CO2 emission reductions for increased PM emissions.

Response. DEEP acknowledges that BEV technology is not emissions-free. Emissions models show increased brake and tire wear emissions from BEVs; however, these PM emissions do not exceed PM emissions from fossil fuel exhaust, and EPA models show a net reduction in PM emissions overall from BEVs compared to their ICE equivalents. For more detail regarding PM emission reductions, see DEEP's response to Comment No. 3 in the Public Health and Environmental Health section of this report.

Comment 11. Some commenters, including GASDA, raise concerns about batteries, from sourcing of raw materials, and operational issues like charge life and duration, to the disposal of batteries at their end-of-life.

Response. DEEP shares your concerns about the battery lifecycle, from raw material sourcing to end-of-life disposal and will continue to be involved in policy making that ensures positive environmental outcomes. DEEP understands that the proposal may increase demand for various metals including lithium to produce compliant vehicles. DEEP notes that OEMs are responsible for sourcing materials for their vehicles and must meet all applicable federal standards regarding trade and material sourcing. Passage of the Inflation Reduction Act provides significant support for ZEVs that include credits for production of critical minerals used in ZEV batteries that must be extracted or processed in the U.S. Additionally, the proposal includes durability requirements that will reduce the need for battery replacements.

Mining of virgin materials for battery production currently requires the use of fossil fuels. Recycling of lithium-ion batteries will decrease the need for intensive increases in mining, and the proposed regulations require ZEV batteries to have a label to enable second use and recycling processes to conserve metals used in the manufacturing process of ZEV batteries. Overall, the use of batteries and electric vehicles reduces emissions of criteria pollutants and GHGs when compared to conventional gasoline extraction and combustion.

Comment 12. Several commenters identified as residents of Connecticut and as Gasoline and Automotive Service Dealers of America (GASDA) stated concerns this regulation will require emergency responders to utilize BEVs. They stated this has potential ramifications for emergency personnel responsiveness in the event of a power outage.

Response. Please note emergency response vehicles are not subject to this proposed regulation and are exempted under subsection (d)(2)(D) of the proposed regulation.

Comment 13. One comment from GASDA notes that adoption of the regulation will lead to the decrease of grassland and forests due to the increased need for renewable energy generation, and argued that such lands sequester carbon emissions, resulting in more emissions from the manufacturing of EVs.

Response. While not directly related to the provisions proposed in these regulations, Connecticut's clean energy deployment efforts include a diversity of zero-carbon resources, which includes a wide variety of technologies. DEEP has affirmed in both the Comprehensive Energy Strategy issued in the 2020 Integrated Resources Plan that the development and deployment of a diverse set of renewable resources (i.e., solar, wind, hydropower, etc.) will be needed to meet Connecticut's decarbonization and climate change goals. DEEP also has led an ongoing for a stakeholder engagement process to improve and refine solar siting and permitting practices called the Sustainable, Transparent, and Efficient Practices (STEPs) for Solar Development. This was initiated in June 2021, and it is still underway. More information can be found on the Steps for Solar Development (ct.gov) webpage.

Comment 14. Some comments from members of Connecticut businesses are concerned with the life of an electric vehicle, specifically that they may only last 7 years as compared to ICE vehicles, which can last 10+ years.

Response. DEEP appreciates the concerns of these businesses regarding the assumed useful life of an EV truck, however no data was submitted to support the assumed vehicle life. Studies supported by research institutes, such as the MIT Technology Review, indicate EV batteries should last 10 to 20 years. DEEP notes that the proposal includes durability requirements for vehicles drivetrains of at least 8 years or 100,000 miles at least 80% state of charge. Additionally, many OEMs are providing warranties that exceed CARBs minimum warranty and durability requirements. DEEP notes the proposed regulation does not impose a purchase requirement on Connecticut businesses and those entities that decide to purchase an EV truck will need

to assess a variety of costs and benefits, including warranties and OEM useful life estimates.

Comment 15. Some remarks from fleet owners questioned their ability to install Direct Current Fast Chargers (DCFC) necessary to charge their vehicles in fleet depots without enormous expense for electrical facility upgrades to accommodate DCFC.

Response. DEEP recognizes additional costs will be incurred for infrastructure deployment and is engaged with PURA on developing a path forward to minimize the costs to fleet owners. DEEP and state agencies are also active in leveraging funding from federal programs for charging that may help in this area such as the National Electric Vehicle Infrastructure (NEVI) program, the Clean Fuels Infrastructure Program (CFI) and the Diesel Emission Reduction Act (DERA). DEEP also reiterates that the proposed rule is not a fleet mandate and does not require fleet owners, especially tractor-trailer long haul fleets, to purchase ZEV vehicles.

Economic & Social Comments

Comment 1. Some commenters, concerned about environmental justice (EJ) communities, emphasize the negative health impacts and environmental burdens these communities face due to vehicular pollution and other sources. They express strong support for DEEP's proposed clean car and truck standards, citing the significance of ozone nonattainment across the state and the disproportionate emission contributions from trucks and buses. The commenters laud Connecticut's historical leadership in adopting clean transportation standards and push for the adoption of both Medium and Heavy-duty Emission Standards and the Light Duty Vehicle Emission Standards for 2027-2035, as other states have done. They underscore the urgency of action and the health, economic, and environmental benefits of these standards.

Response. DEEP values the support expressed for the proposed clean car and truck standards. DEEP is acutely aware of the negative health impacts associated with exposure to unhealthy air quality and the disproportionate impacts of polluted air on vulnerable communities as well as the economic implications of ozone nonattainment for the state's business community. The statistics provided on the pollution from trucks and buses highlight a crucial area of concern, and DEEP is encouraged to note the cleaner truck regulations adopted by other states.

Comment 2. Some commenters, identified as Connecticut residents highlighted the urgent need to adopt California-type air quality regulations, emphasizing the potential health impacts on vulnerable populations, such as children and seniors.

Concerns were raised about the increased risks of flooding, droughts, and wildfires in the absence of these regulations. They further stress the severity of Connecticut being an ozone nonattainment area and the need for swift implementation of the proposed Medium and Heavy-duty Emission Standards and the California Light Duty Vehicle Emission Standards for 2027-2035. The commenters note that despite trucks and buses constituting only 6% of all vehicles, they are responsible for 53% of nitrogen oxide emissions and 57% of PM 2.5. These substances are tied to several health issues like asthma, lung cancer, and premature death. The effective application of clean truck regulations in other states is presented as a compelling argument for Connecticut to follow suit. The residents applaud Connecticut's past leadership in clean transportation and advocate for the continuation of these efforts.

Response. DEEP appreciates the comprehensive feedback provided on the urgent need for enhanced vehicle emission standards. The State acknowledges the profound health impacts on vulnerable populations and the escalating environmental concerns of climate change support adoption of the proposed emission standards to protect public health in Connecticut.

Comment 3. Some commenters, identified as concerned citizens of Connecticut, oppose the proposed adoption of California's ACC II rule, slated for 2035, highlight the potential negative consequences on the state's economy, emphasizing the detrimental effects on the less affluent due to increased vehicle prices and lack of accessible charging infrastructure. They stress the potential economic repercussions on the automotive industry, foreseeing possible job losses and financial challenges. Additionally, there is skepticism about environmental goals derived solely from computer simulations, viewing them as disconnected from on-the-ground realities. These individuals perceive the regulation as an overreach by the government into the free market, fearing an overarching control of the economy.

Response. DEEP appreciates the concerns raised regarding the proposed regulations and recognizes the importance of affordable transportation. It is projected that zero-emission vehicle buyers could experience substantial savings over a decade, making EVs a more cost-effective choice, especially once price parity is reached with ICE vehicles.

The shift towards electric vehicles will provide potential for growth in jobs related to EVs and infrastructure development including mechanics, electricians, and other supporting industries, including companies like EVSE, LLC in Enfield Connecticut which manufacturers electric vehicle supply equipment (EVSE) equipment. Shifts towards hydrogen fueled vehicles will support the very strong hydrogen economy and businesses that exist in Connecticut such as Doosan and Proton On-site.

The computer models that were used for this analysis integrate a wide variety of Connecticut specific inputs, including but not limited to electricity prices, Connecticut- specific VMT estimates, local healthcare costs and other real-world data to provide expected outcomes.

Comment 4. Some commenters, identified as representing local churches, advocate in favor of the Advanced Clean Cars II regulations and the Medium and Heavy-Duty Emission Standards and Heavy-Duty Omnibus Regulations. They emphasize the urgency of addressing climate change due to its detrimental effects on the environment and its impact on health, particularly in Black, Latino, and Asian-American communities. The commenters advocate for the adoption of these regulations by 2023 for implementation by 2027, based on a moral obligation to protect the environment and ensure clean resources for all.

Response. DEEP appreciates the feedback and notes the support of Connecticut's faith communities for this proposal.

Comment 5. A commenter identified as representing the Connecticut Coalition for Economic and Environmental Justice (CCEEJ), strongly advocates for the proposed regulations due to their potential benefits for EJ communities in Connecticut. CCEEJ highlights impacts that low-wealth neighborhoods, particularly those predominantly composed of people of color, suffer from elevated traffic-related pollution and asthma rates. Such neighborhoods have high exposure to automotive emissions due to proximity to highways and significant traffic from outside commuters. The regulations, particularly the transition to electric vehicles, can mitigate these health risks. The comment emphasizes the need for more electric trucks, buses, and fleets, and state incentives to facilitate EV purchases by lower-income residents. The comment anticipates the outcome of adopting the ACCII/ACT, combined with additional incentives like the CHEAPR program, to be improved health and more accessible healthy transportation for Connecticut residents, especially those in marginalized communities.

Response. DEEP appreciates the insights and expertise shared by the CCEEJ. DEEP acknowledges the disproportionate impact of traffic-related pollution on lower-wealth neighborhoods and notes the proposed emissions standards are intended to protect public health in Connecticut with an emphasis on areas overburdened by transportation related air pollution. DEEP further notes the proposed emission standards include additional credit generation for a variety of actions in EJ communities, including providing vehicles for rideshares, selling vehicles for a lower cost in EJ communities and placing more vehicles for sale in EJ communities, emphasizing the focus on EJ benefits. Transitioning to electric vehicles, not just for personal cars but also for trucks, buses, and fleets, is seen as a

pivotal step in this direction. The commenter's mention of the CHEAPR program and the need for further incentives to aid lower-income residents in accessing electric vehicles aligns with ongoing efforts by DEEP to ensure the benefits of these proposed regulations reach all communities.

Comment 6. The commenter opposes the proposal to ban gasoline vehicles, expressing concerns about safety concerns, referencing the current lack of training for firefighters regarding EV fires, the challenge of extinguishing such fires due to thermal runaway, and the significantly higher water requirement for dousing EV fires compared to conventional vehicle fires. The commenter contends that the proposal might increase risks to life, property, and natural resources**.**

Response. While DEEP appreciates the concerns expressed regarding fires, training of emergency personnel with regard to EV fires, while not directly related to this rulemaking, other programs within DEEP specifically, the Emergency Response Unit, have been working with other agencies on preparedness and best practices in responding to battery fires. Training of emergency personnel is the express authority of the Connecticut Department of Emergency Services and Public Protection. Further, national organizations such as the National Fire Protection Association (NFPA) provide training on EV fires.

Comment 7. Some commenters, identified as Connecticut residents, express concerns about the potential high costs associated with electric cars, both in terms of purchasing the vehicles and the anticipated increase in electricity bills. The commenters believe that electric utility companies stand to benefit the most from a transition to electric vehicles.

Response. DEEP appreciates the commenters' concerns, particularly around the financial implications of transitioning to electric vehicles, are understood and shared by many.

While electric vehicles may have higher upfront costs, there are potential long-term savings in terms of fuel and maintenance when considering total cost of ownership (TCO) which includes not just purchase price, but maintenance and fuel costs. Economic modeling of TCO for EVs shows net cost savings. Results of California economic modeling show that BEV owners will save $3,216 over ten years in the most conservative case evaluated and will realize savings within the first year of ownership. Ten-year savings are much larger, at $8,835, with the lower cost 2035 model year BEV coupled with access to a home charger. Additionally, the regulations increase battery state of health and transparency requirements, ensuring that batteries will be more durable and reliable in used car markets. The lack of emission equipment failures will decrease maintenance costs for older vehicles.

Additionally, economies of scale and technological advancements may drive down these costs over time. As the number of available EV models increases, economies of scale and a wider variety of offerings, including smaller sedans will bring EVs into price parity with ICE vehicles. Analysis by Bloomberg estimates price parity by 2025 for many models. California's analysis predicts parity with conventional internal combustion engines (ICEs) in most vehicle segments by model years 2031-34.

Further, incentive programs will continue to be a central policy to defer higher upfront costs. DEEP will continue to implement incentives, such as the CHEAPR program to make EVs more affordable for residents, especially those who are low and moderate income (LMI). Additional incentives are available through utility programs and federal tax credits will decrease overall vehicle costs. See the response to Comment 4 in the Technology & Infrastructure section for additional information.

Environmental Concerns and Solutions

Comment 1. The Connecticut League of Conservation Voters (CLCV) voiced strong support for the Advanced Clean Trucks (ACT) and Heavy-Duty Low Nitrogen Oxide (NOx) Omnibus regulations. It emphasized the poor air quality in Connecticut and attributed nearly 40% of greenhouse gas emissions to transportation pollution. It advocates for the rapid adoption of these rules to combat this issue and meet the emission reduction goals of Connecticut's Global Warming Solutions Act (GWSA). The CLCV highlights the health risks associated with diesel exhaust, emphasizing its impact on vulnerable urban populations. CLCV referenced the Union of Concerned Scientists' (UCS) fact sheet detailing the benefits of the standards and points out Connecticut's alignment with other states in seeking stronger emissions standards. The comment emphasized that the younger generation desires swifter action against climate change. It also notes that the necessary technology for these stronger rules is well-established and becoming more affordable, and that the main barriers are political will and the fossil fuel industry.

Response. DEEP appreciates the CLCV for expressing their support and highlighting the environmental and health benefits of the proposed regulations.

Comment 2. Some commenters, identified as being associated with automobile and fleet leasing businesses, have concerns about the proposed regulation making all new vehicle sales EVs by 2035. They acknowledge the commendable goals of environmentally friendly vehicles but have concerns about prolonged charge times of EVs, the higher costs involved both in purchasing EVs and installing appropriate

charging infrastructure, and the dilemmas surrounding the availability of chargers for renters and those living in condos. Additional comments received in this comment letter include: the inadequacy of the current charging infrastructure and the potential strain on the grid, range limitations of EVs, and cold weather performance. They suggest incentivizing the shift to EVs rather than enforcing it and call for a review of the 2004 decision to adopt California's emission standards, emphasizing that Connecticut's unique challenges and needs should be considered separately.

Response. DEEP appreciates the feedback from the fleet management sector in Connecticut. DEEP and the state legislature recognize the challenge that fleets face in transitioning to advanced technology vehicles. Because of that, in 2022 the legislature in the Connecticut Clean Air Act (P.A. 22-25) authorized the expansion of the very successful CHEAPR incentive program to provide access through eligibility to municipalities, businesses, non-Government entities and tribes. DEEP has been working with the program administrator and will provide access to ameliorate cost concerns for state fleets in 2024.

Additionally, it should be noted that sales of ICE vehicles is allowed until 2034 and that hybrid sales will be allowed in 2035 and beyond.

While the commenter's recommendation that the Connecticut General Legislature reconsider their 2004 decision to adopt the California standards is outside the scope of this rulemaking, the commenter's remaining concerns are addressed in DEEP's responses to comments 2, 4, and 6 in the Technological and Infrastructural Aspects section.

Comment 3. The commenter emphasizes the pivotal role vehicles play as Connecticut's primary source of greenhouse gas emissions, which subsequently leads to numerous health problems such as asthma, cancer, and heart issues. The comment urges aligning with California's emission regulations, a vital step to combat these concerns. The commenter identifies the reason behind adopting California's standards as its recognized leadership in the Clean Air Act, allowing it to enforce more stringent emissions standards than the federal mandate. Connecticut had previously adopted these standards in 2005, and there's a strong call to modernize them. The comments cite a study by EBP, an international climate change consulting firm, that stresses the importance of adopting these updated standards, which not only promise significant environmental improvements but also substantial economic benefits for Connecticut. Such benefits include increased GDP, business income, job creation, massive CO2 emissions reduction, and a significant reduction in harmful air pollutants. Another report by the American Lung Association underscores the potential health advantages of adopting the

regulations, quantifying billions in health benefits, prevented premature deaths, averted asthma cases, and reduced workdays lost due to illness.

Response. DEEP acknowledges and appreciates the comprehensive information shared regarding the immense environmental, health, and economic benefits of aligning Connecticut's vehicle emission regulations with California's. Motor vehicles undeniably represent a significant source of criteria and greenhouse gas air pollution in our state, and the adverse health effects resulting from this pollution are well documented.

Comment 4. Several commenters had concerns about the environmental footprint of electric vehicles (EVs), specifically related to battery disposal.

Response. DEEP acknowledges that waste product management is a concern as new motor vehicle technologies enter service. There are several efforts underway to address this concern. Effective policies for EV battery recycling play a crucial role in ensuring the sustainability of the EV industry by managing the end-of-life disposal and recycling of lithium-ion batteries.

The landscape of EV battery recycling is evolving, and new companies and initiatives continue to emerge. Companies and policymakers are increasingly recognizing the importance of responsible battery disposal and recycling to reduce environmental impacts, conserve resources, and support the growth of the EV industry.

Some key policies may include Extended Producer Responsibility (EPR), battery collection and recycling companies, battery passport and tracking, material recovery and reuse, public-private research partnerships, consumer education and awareness, and federal recycling standards and or incentives.

Comment 5. The commenter expresses significant concerns about transitioning to electric vehicles (EVs) in Connecticut. These concerns span the entire life cycle of EVs, including their environmental impact during production, implications for the power grid from increased charging demand, potential end-of-life hazards, and safety and insurance challenges. The commenter highlights the importance of a free-market economy and believes EVs should become dominant when they are demonstrably safe, reliable, and affordable without subsidies.

Response. DEEP appreciates the feedback shared about the proposed shift to electric vehicles. Environmental concerns surrounding battery production are acknowledged, and there is a drive towards sustainable and ethical sourcing cited elsewhere in this document. Please see the response to comment 4 in this section.

The proposed emissions standards are first and foremost needed to protect public health and the environment from air pollution in Connecticut. Because Connecticut continues to fail to meet federal health base air quality standards for ozone (smog), the federal Clean Air Act requires the state to take additional steps to reduce air pollution, regardless of the impacts of interstate air pollution transport.

While market forces are important and support the adoption of the proposed emission standards, Connecticut must make the emissions standards enforceable for purposes of the federal Clean Air Act. An additional benefit of this action, however, is regulatory certainty for the OEMS, who are the only groups regulated by the proposed emission standards. This certainty provides industry with adequate notice to allow product planning cycles that will take into account future federal compliance requirements with respect to sourcing critical minerals.

Comment 6. Several commenters raised concerns about batteries, from sourcing of raw materials, operational issues like charge life and duration, to the disposal of batteries at their end-of-life.

Response. DEEP shares concerns about the battery lifecycle, from raw material sourcing to end-of-life disposal and will continue to be involved in policy making that ensures positive environmental outcomes. DEEP understands that the proposal may increase demand for various metals including lithium to produce batteries for compliant vehicles. DEEP notes that OEMs are responsible for sourcing materials for their vehicles and must meet all applicable federal standards regarding trade and material sourcing. Passage of the Inflation Reduction Act provides significant support for ZEVs that include credits for production of critical minerals used in ZEV batteries that must be extracted or processed in the U.S. Additionally, the proposal includes durability requirements that will reduce the need for battery replacements.

Recycling of lithium-ion batteries will decrease the need for intensive increases in mining and the proposal requires ZEV batteries have a label to enable second use and recycling processes to conserve metals used in the manufacturing process of ZEV batteries. Mining of virgin materials for battery production currently requires the use of fossil fuels. Overall, the use of batteries and electric vehicles reduces emissions of criteria pollutants and GHGs when compared to conventional gasoline extraction and combustion.

Comment 7 and 8.

Comment 7. The commenter suggests that by 2035, Connecticut may not be prepared to ban gas cars due to potential electricity price hikes. They propose banning gas-powered lawn equipment by 2025, especially leaf blowers, as an alternative to achieve cleaner air at a reduced cost. The commenter offers data indicating the significant pollution caused by lawn equipment, especially when compared to cars.

Comment 8. The commenter, who identified as operating a golf course in Connecticut, emphasizes the need for stricter emissions standards to prompt suppliers to offer clean energy options for diesel and gas landscaping equipment and vehicles. The high initial costs of these products are expected to level out due to increased competition once more suppliers enter the market. They also advocate for the phasing out of gas-powered two-cycle engines like handheld blowers and weed whackers.

Response. DEEP values the detailed insights on the pollution from gas-powered lawn equipment and other off-road engines. While DEEP recognizes the air pollution impacts of non-road engines, such as lawn mowers and leaf blowers, this comment is outside the scope of this proposed rulemaking.

Comment 9. The commenter, who identified as the president of the EV Club of Connecticut, expresses support for the Advanced Clean Cars II, Advanced Clean Truck, and HD Low NOx Omnibus Regulations. The comment highlights the high air pollution levels in Connecticut, with the state being out of compliance regarding air quality and indicates that transportation sector contributes to a significant proportion of GHG emissions. The commenter identifies the state's goal of 500,000 registered EVs by 2030 as ambitious, especially considering the current count as of July 2023 is approximately 36,000. To reach this target, a 42% compounded annual growth rate in net registrations is required.

Response. DEEP appreciates these comments and recognizes the air quality challenges and the pressing need to expedite the adoption of EVs to meet air quality and GHG reduction goals. DEEP notes the regulatory target of 500,000 EVs by 2030 would require the growth rate stated in by the commenter, however the proposed regulation is credit-based and allows OEMs to meet their compliance obligations through 2031 by both providing EVs into the Connecticut and the regional markets and using offsetting vehicle-based credits to meet compliance obligations.

Comment 10. Members of Connecticut's public health community advocate for Connecticut to adopt the ACC II and Advanced Clean Trucks (ACT) rules due to concerns about transportation emissions. The American Lung Association's 2023 State of the Air Report indicates Connecticut's struggles with high ozone levels, which especially impacts a significant number of residents living with asthma. The

state has disparities in clean air access, with communities of color and low-income areas most affected. Transitioning to zero-emission transportation can lead to notable public health benefits, as well as support the climate goals set by Connecticut's Global Warming Solutions Act.

Response. DEEP values the insights from Connecticut's public health community. The Department recognizes the highlighted health concerns and disparities. The American Lung Association's findings emphasize the need to adopt these proposed emission standards.

Comment 11. The Connecticut Audubon Society (Audubon Society) strongly supports the new Emissions Standards, emphasizing the ongoing air quality crisis in Connecticut primarily caused by vehicular emissions. The Audubon Society urges prompt action, stating that these plans could reduce greenhouse gas emissions by 1.48 million metric tons by 2040. The Audubon Society also discussed the health and environmental benefits of transitioning to zero-emission vehicles, mentioning both human and avian impacts. The Audubon Society highlights regional collaboration and the legislative steps already taken in Connecticut to support these regulations.

Response. DEEP appreciates the strong support from the Connecticut Audubon Society for the proposed emission standards. The Audubon Society's emphasis on the urgency of addressing the air quality crisis aligns with the public health protection objectives of the proposed emission standards. The data cited concerning potential reductions in greenhouse gas emissions corroborates the goals of these regulations.

The commenter's point about the negative impact of increased ozone rates on avian life is noteworthy and included in the DEEP's goals to adopt the proposed emission standards to protect both public health *and the environment*, which is intended to include avian life.

Legislator Comments & Feedback

Comment 1. Fifty-three members of the House Republican caucus submitted a comment letter in opposition to proposed regulations PR 2023-023 and PR 2023-020, emphasizing that California's approach might not be suitable for Connecticut. House Republicans highlight potential strains on the state's electricity infrastructure, challenges in charging infrastructure, increased costs for EV drivers, and environmental issues related to EV production and use. The comment concludes by urging a reconsideration of the regulations due to the multifaceted concerns raised.

Response. DEEP appreciates detailed feedback on the proposed regulations. The ACCII regulations are designed with considerations for the electric grid's reliability, road infrastructure resilience, and the complete life-cycle environmental implications of vehicles. The ACC II emissions standards framework provides a flexible and effective air pollution reduction program that suits Connecticut's unique air quality challenges, and more importantly is one of few tools available to meet federal NAAQS, climate change and GHG obligations without putting further burden on stationary sources. Furthermore, planned state and federal incentives will help to ensure equity and affordability. Feedback is vital for refining this approach to ensure optimal outcomes for Connecticut.

Comment 2. Twenty-one state legislators from both chambers submitted a comment letter in support of the proposed regulations. The letter noted that the timing of the regulation is uniquely ideal as the state is able to leverage active programs and federal money to support the regulation through infrastructure investments. The comments also stated the proposed timeline of the regulation beginning in 2027 and finalizing in 2035 should give the Legislature ample opportunity to address issues that may arise due to adequacy of the state's grid infrastructure.

Response. DEEP appreciates detailed feedback from legislators on the proposed regulation and notes that the roll out and success of the regulation will go hand in hand with legislative initiatives.

Comment 3. Connecticut State Senator Christine Cohen wholeheartedly supports the adoption of California's LEV IV and ACC II regulations. The commenter emphasizes that these regulations are crucial for reducing emissions, decreasing reliance on fossil fuels, and fostering sustainability. The commenter also points out the effectiveness of California's emission standards in spurring innovation and reducing pollution. The commenter urges that Connecticut should take a leadership role in environmental challenges, aligning with other states and incentivizing clean technologies.

Response. DEEP appreciates the strong support from Senator Cohen including the support provided to expand the CHEAPR program, adopt MHD standards and help DEEP meet the state's federal clean air obligations.

Comment 4. State Senator Jan Hochadel indicated strong support of the regulation. She noted in written comments that forest fires and other dangers relating to climate change have been on the rise. She also notes the proximity of many of her constituents to busy highway corridors and resulting air quality concerns.

Response. DEEP appreciates the strong support from Senator Hochadel and appreciates in insight into the effect of mobile source pollution on air quality near transportation corridors as well as her call for the state to do its part to address climate change.

Comment 5. State Senator Rob Sampson submitted comments in opposition to the proposed regulation. The Senator objected to potential restriction on consumer freedoms, as well as the potential for an undue burden to vehicle manufacturers who will be required to change their business model. The Senator also stated that human caused climate change has not been conclusively proven and thus there is no need for this regulation. The senator noted other concerns including the ability of state's grid to support EVs, environmental concerns regarding EV production and disposal, and the upfront costs of EV when compared to their ICE counterparts.

Response. DEEP acknowledges the concerns expressed by Senator Sampson and notes the proposed emissions standards were designed to not just to reduce Green House Gas emissions but also ozone forming air pollution to protect public health and the environment. The Senator's other concerns are addressed in other responses in this document. For example, please see the responses to comment 4 of the regulation & policy section, comment 2 of the technological & infrastructural aspects section, and comment 4 of the environmental concerns & solutions section.

Comment 6. State Senator Seminara expresses strong reservations about Connecticut's proposal to ban sales of new gasoline or diesel-powered cars by 2035. The primary concerns identified were potential restrictions on consumer freedom and the potential unforeseen consequences of the regulation. These concerns include the capability of Connecticut's electrical grid, the state's already high electrical rates, potential fire hazards, affordability issues, sourcing and impact of EV battery materials, the viability and sufficiency of charging stations, and the larger geopolitical implications of relying on adversary nations for materials. Additionally, Senator Seminar is apprehensive about the environmental impact of discarded lithium-ion batteries and is concerned about the negative economic implications for lower-income communities in the state.

Response. DEEP acknowledges the concerns expressed by Senator Seminara and notes the proposed emissions standards don't ban ICE vehicles, are designed to provide flexibility for OEMs to bring vehicles that meet Connecticut's demand, and are designed to not just to reduce ozone forming air pollution GHG emissions to protect public health and the environment, benefiting all residents, including lower-income communities.

DEEP is steadfast in its commitment consider the economic, social, and environmental facets of the transition to electric vehicles. This ensures a balanced approach to clean transportation, keeping in mind the best interests of all Connecticut residents. DEEP is aware of the concerns regarding vehicle costs, especially with regard to low and moderate income individuals as evidenced by the expansion of incentives to LMI residents in the CHEAPR program earlier this year. Regarding the Senator's concerns about battery and material sourcing please see Comment 11 on page 21 of this document.

Comment 7. State Senator Kelly highlights perceived privileges associated with the proposed regulations, suggesting they favor those who can afford EVs and the necessary infrastructure. Data is presented that state subsidies tend to benefit the affluent, leaving the working class and poor at a disadvantage. Concerns are also raised about the potential adverse effects on small businesses, especially those associated with gas-powered vehicles. Criticism extends to the fiscal note, calling it misleading and emphasizing unaccounted revenue losses. The commenter calls for a comprehensive reevaluation, legislative intervention, and adequate consideration of grid capacity and infrastructure. Claimed potential negative implications for vulnerable citizens and the economic burden of EV costs are underscored.

Response. DEEP appreciates Senator Kelly's comments and notes the proposed emission standards establish a framework to support a range of vehicles, not just luxury ones, and promotes the development of cost-effective electric vehicle options. Specifically, the proposed ACC II regulation contains provisions to incentivize the placement of affordable electric vehicles in EJ neighborhoods. Additionally, the CHEAPR program contains a notable LMI incentive that has expanded eligibility this year to reach additional LMI families across the state.

Comment 8. State Senator Gordon expressed strong opposition to the proposed 2035 regulation on gas-powered vehicles in Connecticut. Senator Gordon commented that the regulation infringes on the freedom of choice for both consumers and automakers and highlighted his skepticism regarding the scientific evidence connecting manmade CO_2 emissions to global climate change. Additionally, Senator Gordon questioned the effectiveness of the shift to electric vehicles in reducing fossil fuel consumption, especially considering the state's reliance on natural gas for its electric grid and emphasized the global nature of climate issues, suggesting that Connecticut's efforts might be too small to matter. Economic concerns and the high costs associated with electric vehicles, which might deter consumers and result in the prolonged use of older gas vehicles, were highlighted as were ethical and environmental concerns surrounding electric vehicle production, including the sourcing of essential materials from countries with questionable human rights and environmental records. Lastly, Senator Gordon

raised concerns about Connecticut's electric grid's capacity to cater to the increased demand posed by electric vehicles.

> **Response.** DEEP appreciates the comments and concerns provided by Senator Gordon. It is a priority of DEEP to balance individual freedoms with the broader environmental and health benefits for its residents. As for the relationship between CO_2 emissions and climate change, DEEP draws upon the prevailing scientific consensus that highlights the role of manmade emissions in global warming. The Senator's additional concerns regarding price and technological challenges are answered elsewhere in this document see the department responses to Comment 2 in the Technological & Infrastructural Aspects section and comment 4 of the Regulation and Policy section.

Comment 9. State Senator Ceci Maher points to recent extreme weather events as evidence of the urgent need to address climate change. Recalling Connecticut's decision in 2004 to adopt light-duty emissions standards like California's, the commenter emphasizes the state's history of leadership in environmental matters. The rapid adoption and growth of electric vehicles (EVs), both in the U.S. and globally, is highlighted, with sales figures noting significant increases. Major auto manufacturers are recognized for transitioning to more sustainable vehicle models. The commitment of neighboring states to phasing out gas-powered vehicles is presented as a direction Connecticut should follow. The overarching message is that Connecticut should not backtrack but rather progress with stricter emission requirements to safeguard the future for subsequent generations.

> **Response.** DEEP appreciates the support expressed by Senator Maher and the significance of addressing climate change and its relation to vehicle emissions. DEEP acknowledges the rapid growth of the electric vehicle industry and the commitments of major automobile manufacturers towards cleaner vehicles. It's also recognized that Connecticut has set a precedent in the past and should strive to maintain its leadership position. The increasing frequency of extreme weather events emphasizes the urgent need to take robust action. DEEP agrees that there's a necessity to evaluate and enhance emission requirements, ensuring they cater to all residents and guide the state towards a sustainable future.

Comment 10. Representative Joe Gresko expressed strong support for the proposed emission standards. The representative highlighted Connecticut's historical commitment to strict emissions standards, and further stated that the new LEV standards represent the auto industry's commitment to reduce pollution and address environmental challenges. The representative further noted that other states like New York, Massachusetts, and Vermont have recently adopted similar

standards. The representative highlighted the auto industry's shift away from internal combustion engines and emphasizes the importance of battling "bad air days" through improved technology to spur green economic growth.

> **Response.** DEEP appreciates the comments in support of the proposed emission standards. DEEP acknowledges the rapid growth of the electric vehicle industry and the commitments of major automobile manufacturers towards cleaner vehicles. It's also recognized that Connecticut has set a precedent in the past to provide stringent emissions standards and should strive to maintain its leadership position. As the representative accurately notes Connecticut's surrounding states have adopted this regulation as well and the frequency of state "bad air days" underscores the need to address the issue.

Comment 11. The Connecticut General Assembly Climate Caucus fully supports the ACC II regulations, viewing them as crucial for reducing greenhouse gas emissions and improving air quality. They argue that Connecticut has been an environmental leader and that these regulations align with the state's climate goals. The caucus acknowledges concerns like range anxiety but sees the planned expansion of charging infrastructure and financial incentives through the CHEAPR program as solutions. They believe the timeline until 2035 provides ample opportunity to address any remaining issues, including grid capacity.

> **Response.** DEEP appreciates the strong endorsement from the Connecticut General Assembly Climate Caucus for the proposed emission standards. Based on the General Assembly's leadership, DEEP is committed to establishing emission standards to protect public health and the environment of Connecticut consistent with its legislative authority.

Stakeholder Engagement & Feedback.

Comment 1. The Union of Concerned Scientists (UCS), representing over 4,900 supporters and members in Connecticut, strongly supports the adoption of the Advanced Clean Cars II (ACC II) standards. It emphasizes the role of the transportation sector as a leading contributor to the state's greenhouse gas emissions, with 40% of these emissions in 2021 coming from light-duty vehicles. UCS stresses that to achieve the state's climate goals, adopting the ACC II standards is vital. UCS points out the economic benefits of electric vehicles (EVs), especially in rural areas, and mentions significant federal funding for vehicles and charging infrastructure. Citing its own analysis, the UCS note that an average EV in Connecticut achieves an equivalent of 111 miles per gallon. UCS highlights the

benefits to the electric grid, including potential for rate reductions and improved grid resiliency. The recent surge in EV registrations in the state, a 42% increase over the past year, underscores a growing demand. UCS acknowledges the flexibility the proposed regulation offers manufacturers through compliance credits. UCS concludes by emphasizing the need to lead from frontline communities and support equitable mining practices.

Response. DEEP appreciates the in-depth insights shared by the UCS. DEEP recognizes the transportation sector's contribution to greenhouse gas emissions, and the highlighted benefits of electric vehicles, both environmental and economic, underscore the potential positive impacts of adopting the proposed emission standards.

Comment 2. The Conservation Law Foundation (CLF) strongly supports the adoption of the ACC II regulations in Connecticut by presenting an array of benefits ranging from environmental protection to economic prosperity. CLF points to the ever-decreasing costs of EVs and battery technology as evidence for the imminent economic viability of this transition. Citing numerous studies and reports, the commenters argue that Connecticut will witness a significant reduction in total car ownership costs, an influx in clean energy jobs, and an overall boost to the state's economy. CLF underscores the importance of aligning with statutory obligations and emphasizes the health benefits, especially to environmental justice communities, while highlighting potential financial incentives for Connecticut residents. Its call to action is for DEEP to prioritize ACC II's adoption in 2023 to harness these benefits as swiftly as possible.

Response. DEEP appreciates the commenter's comprehensive insights regarding the proposed regulations. DEEP recognizes the importance of sustainable transportation and the potential benefits it will bring to Connecticut's economy, public health, and environment.

Comment 3. The Connecticut Sierra Club Chapter (Chapter) strongly supports the adoption of the ACC II regulation, emphasizing its considerable economic, societal, and grid benefits. The Chapter cited a study predicting significant economic growth for Connecticut, including a rise in GDP, increased business income, and new job creation. Furthermore, the wider adoption of EVs will reduce electricity costs for all residents, regardless of EV ownership. The Chapter notes that the benefits also extend to the grid, as EVs can supply power back to the grid, reducing the need for extensive battery storage. The Chapter comments that as Connecticut transitions to cleaner energy sources, EVs will play an indispensable role, aligning their charging patterns with clean energy production. The Chapter concluded by urging the adoption of ACC II to ensure a sustainable, economically thriving, and environmentally safe future for the state.

Response. DEEP appreciates the detailed feedback provided by the Connecticut Sierra Club Chapter. The benefits of EV adoption and their integration within a broader clean energy strategy, are well recognized. Economic advantages, coupled with societal and grid contributions, underscore the potential benefits to the state of Connecticut of the proposed regulations.

The data concerning the impact of EVs on electricity costs and the grid is particularly notable. The potential of EVs to supply power back to the grid, especially during peak demand, aligns with the vision of a sustainable energy ecosystem for Connecticut. Aligning EV charging with sustainable energy from sources such as wind and solar further strengthens the case for adopting the proposed emission standards.

Comment 4. Tesla advocates for Connecticut's adoption of ACC II to ensure compliance with U.S. EPA requirements, notably the Sections 110 (a) (1) and (2) of the Clean Air Act for the 2015 NAAQS for ozone. The automaker emphasizes the detrimental health and environmental effects of traditional transportation emissions, supported by various scientific studies and reports. The effectiveness of electric vehicles (EVs) over internal combustion engine-based vehicles in mitigating these emissions is highlighted. Federal policies are noted for their role in facilitating EV adoption by deploying charging infrastructure. Connecticut's potential funding and incentives for EV infrastructure are also detailed. The industry's move towards a standardized EV charging protocol, as initiated by Tesla and supported by other automakers, is underscored.

Response. DEEP appreciates Tesla's insights and the emphasis on the importance of these emission standards in complying with the Clean Air Act's attainment planning provisions. The Department acknowledges the proven adverse health and environmental consequences of emissions from traditional vehicles and recognizes the benefits of transitioning to electric vehicles. DEEP values the information provided regarding federal initiatives that can guide Connecticut's own efforts. The move towards a standardized EV charging protocol is outside the scope of this rulemaking.

Comment 5. The Nature Conservancy (TNC) expresses strong support for federal and state efforts promoting clean transportation policies, highlighting their support for Connecticut's PA 22-25, which led the state towards reducing its transportation emissions. The commenter appreciates the Lamont Administration's efforts to support the ACCII standards, which TNC argues will aid in the large-scale transition to zero-emission vehicles. TNC emphasizes that ACC II standards can help states improve air quality, health, and reduce the overall cost of car ownership. It underlines the flexibility provided by the ACC II standards that allow states to adopt and adjust to their own circumstances. Furthermore, TNC provides a

comprehensive history of steps that make the adoption of ACC II both timely and viable for Connecticut, which include federal funds for charging stations, increased incentives for hybrids and EVs, and Connecticut's own initiatives, such as the EV Roadmap and agreements promoting electric vehicles. Finally, TNC urges a swift regulatory review process.

Response. DEEP appreciates the detailed feedback provided by TNC and that TNC recognizes the proposed emission standards value in fostering a sustainable transportation ecosystem, and it is encouraging to see alignment with organizations that prioritize environmental conservation. DEEP notes that the next step, after review by the legal sufficiency review by the Attorney General pursuant to CGS section 4-169, will be review by Connecticut's Legislative Regulation Review Committee, which functions to ensure "regulations do not contravene the legislative intent, or conflict with current state or federal laws, or state or federal constitutions."

Comment 6. The American Fuel & Petrochemical Manufacturers (AFPM) has expressed significant concerns regarding Connecticut's ACC II rule. Its comments encompass a variety of factors including EV efficiency during extreme temperatures, potential adverse effects on low-income car buyers, considerable business implications, the necessity for a comprehensive environmental impact assessment, and the question of legal jurisdiction. Furthermore, the AFPM uses California's experience as a cautionary tale, implying that Connecticut could face similar challenges if the ACC II is adopted.

Response. DEEP appreciates the perspectives of AFPM concerning the proposed ACC II regulation for Connecticut. A thorough understanding of varied viewpoints is essential for a well-rounded policy-making process. DEEP does note that the wide-ranging concerns expressed in the comments are answered elsewhere in this response document. Please see the response to comment 4 of the Environmental Concerns & Solution section, the responses to comments 2, 4, and 7 of Regulation & Policy and the response to comment 6 of Technological & Infrastructure Aspects.

With regard to the technological concerns expressed in these comments, answers to each can be found in the Technology & Infrastructure section of this report. With regard to the legal takings argument presented in these comments, DEEP notes the Connecticut Attorney General's Office must determine the proposed regulations are "legally sufficient" pursuant to CGS section 4a-169. As such, the proposed regulations must be found to not conflict with state or federal statutes or constitutional law prior to submittal to Connecticut's Legislative Regulations Review Committee. DEEP will note the legal foundation of ACC II Rule has undergone extensive review ensuring

that the rule aligns with state and federal law. Ongoing lawsuits in other jurisdictions do not pose a preemption issue with the current rulemaking. A more extensive answer to the additional EPCA and RPS comments is presented above. Finally, regarding the recommendation that DEEP should conduct technical working groups to ensure the viability of the regulation, as noted above, DEEP participated extensively in the California rule development process, including stakeholder meetings in which the regulated entities, who have presented support for the current proposal, also participated.

Comment 7. The Western States Petroleum Association (WSPA) asserts that CARB's proposed ACC II ZEV regulation is inadequate on various fronts including: that California Air Resources Board's draft lacks technology neutrality, emphasizing ZEVs over other potentially viable technologies, that the ACC II proposal doesn't align with California State law, particularly Executive Order N-79-20, due to deficiencies in its analysis, which don't satisfy the Administrative Procedures Act (APA) and the Health & Safety Code (HSC) requirements. The comments additionally state that CARB hasn't provided a complete life cycle emissions analysis for ZEVs, hence neglecting a holistic understanding of their environmental impact, that CARB should include provisions for periodic reviews and cost containment measures, like its other regulations, and that CARB should undergo a thorough public review and feedback process for the ACC II ZEV mandate, rectifying any deficiencies and considering multi-technology pathways.

Response. DEEP appreciates the input provided by WSPA on the ACC II regulatory proposal. Regarding the concern of technology neutrality in the ACC II regulation, while the regulation promotes ZEVs, it does not preclude the consideration of other technologies such as hybrids.

DEEP finds the comments regarding California state laws, particularly Executive Order N-79-20, and the California Administrative Procedures Act (APA) and the Health & Safety Code (HSC), are outside the scope of a rulemaking in Connecticut.

Comment 8. The commenter, representing a small energy distribution company, opposes the proposed regulations. The commenter expresses concerns which highlight the insufficient charging infrastructure in Connecticut, especially for less affluent residents. The commenter stresses that current EV owners are affluent individuals with home charging capabilities, leaving many others reliant on costly public charging stations. The commenter also emphasizes the need for extensive electrical grid upgrades, which face public resistance. Another point of contention is the perceived monopolistic tendencies in the EV charging market, which could

sideline small businesses and favor larger corporations. The overarching sentiment is that the shift to EVs should be organically market-driven, inclusive, and equitable.

Response. DEEP thanks the commenter and notes that the concerns regarding cost and charging are addressed elsewhere in this response document. See response to Comment 4 of Regulation & Policy.

Regarding the concern that EV charging is monopolistic in nature, those comments are outside the scope of this rulemaking.

Comment 9. The Chairperson of Hamden's Solid Waste and Recycling Commission, describing being driven by Jewish faith and environmental activism, expresses support for the ACC II regulations. While waste management practices contribute to 5% of greenhouse gas emissions, transportation accounts for a significant 39%. Emphasizing the strong reliance of our built culture on transportation, the commenter believes that the state possesses the technological capabilities to transition to an emission-free economy, pending the necessary political will. The Chairperson urges Connecticut to adopt these regulations by 2023 for a 2027 implementation, citing a moral obligation to protect the planet and ensure clean air for all.

Response. DEEP appreciates the Chairperson of Hamden's Solid Waste and Recycling Commission for sharing a perspective rooted in religious commitment and environmental stewardship.

Comment 10. One commenter, on behalf of the Connecticut Business and Industry Association (CBIA), opposes the proposed regulations. CBIA is concerned about adopting rules still under review in California, the impact on consumer choice and business costs, challenges in the electric grid's reliability, and the aggressive phase-in schedule for electric vehicles. CBIA emphasized the financial strain on small businesses, the responsibility and costs tied to electric charging infrastructure, and Connecticut's unique economic landscape. Despite these concerns, CBIA acknowledges the significance of environmental conservation.

Response. DEEP values the CBIA's detailed feedback. The State recognizes the importance of thoroughly reviewing any proposed regulations from other states and notes the response to many of CBIA's concerns are addressed previously in this response document. DEEP understands the highlighted economic concerns, particularly for smaller businesses, and the implications of charging infrastructure costs and has extensively reviewed modeling to ensure that TCO costs will be lower with EVs, and further that the state has provided significant incentives to curb initial upfront costs such as the CHEAPR program.

DEEP also notes that to meet federal NAAQS the state needs emission reductions from either the mobile source sector or the stationary sector. Given the relative contributions of the two sectors, DEEP believes that the proposed regulations are the best way to achieve those reductions without putting significant additional emission control requirements on stationary sources.

Comment 11. One comment received from a group of 23 Connecticut scientists, researchers, health professionals, economists, engineers, and planners is strongly in support of the adoption of the ACCII, ACT, and Heavy-Duty Low-NOx Omnibus rules in Connecticut. The group notes that transportation contributes significantly to Connecticut's annual greenhouse gas emissions. The commenters view the proposed rules as vital for compliance with Connecticut's Global Warming Solutions Act and state that these proposed rules could drastically reduce emissions and bring substantial economic benefits. They also highlight the health risks associated with diesel pollution, particularly in certain corridors of the state. According to their analysis, zero-emission vehicles can reduce emissions considerably, presenting an immediate solution to a long-standing problem.

Response. DEEP appreciates the comprehensive input provided by this group of multidisciplinary professionals and recognizes the urgency of reducing greenhouse gas emissions from the transportation sector to meet the goals of the Global Warming Solutions Act.

Comment 12. Consumer Reports, an independent nonprofit organization dedicated to consumer welfare, advocates for Connecticut's adoption of the ACC II regulation. It emphasizes the financial benefits of EVs for consumers. Their analysis indicates notable savings for EV owners compared to gas-powered vehicle owners, both in fueling and maintenance. Consumer Reports expects the ACC II rules to boost the availability and diversity of Zero-Emission Vehicle (ZEV) and Plug-In Hybrid Electric Vehicle (PHEV) models. IT suggests that delaying the ACC II adoption would hinder the growth of ZEVs in Connecticut, affecting residents' ability to access them. It also notes the ACC II's consumer protection aspect, ensuring vehicle manufacturers produce reliable ZEVs and PHEVs, critical for the used vehicle market. Given the regulation's benefits, the commenter advocates for its prompt adoption in 2023.

Response. DEEP appreciates the detailed feedback provided by Consumer Reports and acknowledges the economic advantages of electric vehicles for consumers and recognizes the role the proposed emission standards will have on expanding ZEV and PHEV options in Connecticut's market. DEEP also acknowledges Consumer Report's perspective on the consumer protection benefits of the rule, especially regarding the secondary vehicle market.

Comment 13. The Corporate Electric Vehicle Alliance (Alliance), representing thirty-one major companies and fleet operators with over 2.7 million fleet or networked vehicles in the U.S., expresses strong support for the state adoption of both ACT and ACC II regulations. The Alliance notes that its members share the goal of electrifying their on-road fleet for cost savings, climate goals, and community health. Despite growing demand for ZEVs among Alliance members, challenges persist in the procurement of ZEVs to meet climate and sustainability objectives. The Alliance believes policies like ACC II and ACT are essential for bridging the gap between ZEV supply and demand. The Alliance emphasizes the long-term savings, climate, and clean air benefits of fleet electrification, and argues that widespread adoption of ACT and ACC II regulations will enhance these benefits. By adopting these regulations, states can aid fleets in accessing a diverse range of ZEV models, unlocking economic, health, and climate advantages. The Alliance is advocating for ambitious state action given the absence of an equivalent federal policy, and it supports state-level adoptions of ACC II and ACT rules for increased ZEV availability.

> **Response.** DEEP appreciates the detailed feedback from the Corporate Electric Vehicle Alliance and recognizes the challenges faced by major fleet operators in procuring ZEVs and acknowledges the role of the proposed emission standards in facilitating the growth of the ZEV market. DEEP will take the commenter's suggestion to establish a forum between businesses and vehicle manufacturers under consideration.

Comment 14. The American Petroleum Institute (API) expresses concerns about Connecticut's intention to adopt California's ACC II regulations. API emphasizes the significance of state sovereignty, suggesting that Connecticut should independently determine its policies rather than adopting those of another state. API advocates for market-driven, technology-neutral policies for the passenger vehicle evolution, arguing they are best positioned to address cost concerns. API argues that all technologies should compete on an equal footing, ranging from traditional fuel vehicles to battery electric vehicles. Additionally, API emphasizes the importance of a full lifecycle analysis for vehicles, asserting that solely focusing on tailpipe emissions is not comprehensive. API identifies concerns about adopting California's policies without tailoring them to Connecticut's unique needs, considering the potential effects on energy security, infrastructure, and taxation.

> **Response.** DEEP appreciates the perspective of the API on Connecticut's intention to adopt the proposed emission standards. Regarding the technology-neutral, market-driven approach emphasized by API, the proposed emission standards were crafted to promote all available, promising low-emission and zero-emission vehicle technologies, without "picking winners." The goal is to reduce ozone forming air pollution and

greenhouse gas emissions from the transportation sector, not to promote a specific type of technology.

Regarding the adoption of California's policies, API certainly understands the framework of the federal Clean Air Act concerning vehicle emissions regulation allows states only two choices –to adopt either the California or the federal standards — not to go down a third path. Analysis undertaken by DEEP and presented in the fiscal note and regulatory flexibility analysis and in this report shows that adoption of the California standards provides Connecticut with the best opportunity to meet its climate change and air quality goals.

DEEP appreciates the concerns regarding accurately measuring the effect on state businesses and the economy. DEEP notes that significant steps were taken to analyze the impact on Connecticut as a result of the adoption of the ACC II rule, and further that those analysis use Connecticut specific inputs. DEEP has utilized industry-standard modeling platforms, including MOVES, COBRA, and AFLEET, to help determine Connecticut's impacts due to the adoption of this regulation. Those models, as shown in the impact assessment included with the notice for this regulation, show significant and positive economy wide effects as a result of adoption of the regulation. The economic effects of increased vehicle costs and TCO impacts are noted in the impact assessment as well. DEEP continues to invite input from Connecticut's businesses and residents to continue working to create regulations that are economically viable and environmentally friendly.

The proposed emission standards were developed to protect public health and the environment in Connecticut while keeping in mind the diverse range of concerns and feedback from stakeholders, ensuring a balanced approach that supports both environmental goals and economic considerations.

Comment 15. Auto Innovators Alliance (AIA) provided comments in support of the proposal with a detailed outline for promoting EV adoption in Connecticut. The AIA stress the potential reduced impact of federal EV tax credits and highlights the role state incentives could play. It suggests state and local government fleets could serve as role models by adopting EVs, thus setting an example and raising public awareness. The need for robust charging infrastructure, including an increase in public charging stations, is emphasized. AIA also advocates for updating building codes to facilitate less expensive and more efficient installation of charging stations in new constructions and retrofits. There is a call to ensure equitable access to charging infrastructure, especially for low-income and multi-family housing residents. AIA also recommended a thorough review of Connecticut's

electric grid for long-term viability and suggests steps to take during the "gap period" for smooth ACC II implementation that include:

- ZEV and NMOG+NOx ACC I credit banks retained and converted as necessary.
- ZEV Sales:
  - Per ACC II, ZEV sales >7% receive banked ACC II Early Compliance Values (ECVs) available two model years prior to implementation (e.g., 2027 implementation, 2025-26MY)
  - ZEV sales < 7% receive credits under ACC I and those credits are then converted per the ACC II regulations.
- EJ Vehicle Values available per ACC II regulation in the following model years
  - Community Clean Mobility – 2024MY
  - Low MSRP – 2026MY+
  - Off-lease EV – 2026MY+
- NMOG+NOx credits earned and banked using ACC I (= Tier 3) avg.
- OEMs continue reporting per ACC I/II.
- OEMs would also report to EPA as required for Tier 3.
- CA GHG regulations (1961.3) are unchanged in ACC II and would continue.

Response. DEEP welcomes the perspective of AIA as representatives of the OEMs. The feedback provided aligns well with ACC II's objectives. Emphasizing the role of state and local government fleets in driving awareness and the need for robust charging infrastructure is a central part of Connecticut's EV policy framework, policies and ongoing incentive programs and coordination with other state entities. DEEP understands the challenges of meeting the requirements in 2027 and welcomes the support of the Alliance in fostering policies that will make that a successful transition.

DEEP recognizes potential challenges presented during the "gap period" of 2026 and should commit to evaluating the Alliance's proposal and coordinating with its member companies to make sure early compliance and EJ credits can be banked prior to the implementation of the regulation. DEEP agrees that these requests are well within the scope and understanding of the regulation and are consistent with the actions of the other section 177 states with "gap year" considerations.

DEEP notes the comments related to the building codes are outside of the scope of this rulemaking.

Comment 16. The Interreligious Eco-Justice Network, representing various faith communities in Connecticut, advocates for the proposed ACC II regulations for 2027-2035. From a spiritual and ethical perspective, it stresses the importance of caring for the planet and justice for oppressed groups. The Network emphasizes the alarming health consequences of transportation-based pollution, noting the detrimental impacts on Black, Latino, and Asian-American communities due to discriminatory practices. The comments emphasize the benefits of the regulations include significant health and economic savings and addressing the increasing threats of climate change and also highlight the job creation potential in the zero-emission vehicle sector. The urgency to act is emphasized from both an environmental and moral standpoint.

Response. DEEP appreciates the perspective of the Interreligious Eco-Justice Network and the broader Connecticut faith community and recognizes the profound health implications of transportation-based air pollution and its disproportionate impact on marginalized communities.

Comment 17. The Lumber Dealers Association of Connecticut highlights concerns over infrastructure readiness for EV adoption, the higher costs of electric vehicles compared to conventional ones, potential loss in fuel tax revenues, and issues surrounding EV battery recycling. The Association also emphasizes the significant emissions from vehicles that idle extensively, such as state-owned cars, buses, and other equipment, suggesting that the state should lead by example in addressing these concerns.

Response. DEEP acknowledges the comprehensive feedback provided by the Lumber Dealers Association of Connecticut and recognizes the Association's concerns about infrastructure readiness. The regulatory certainty the proposed rules provide to OEMs will likewise send market signals to EVSE businesses.

As a result, the proposed emissions standards anticipate the growth of electric vehicle infrastructure across the state, ensuring that commercial entities and residents have adequate access. The discrepancy in the costs of EVs compared to conventional vehicles is understood, and as EV technology evolves and economies of scale are realized, these prices are expected to become more competitive.

Comments regarding the implications regarding the loss of fuel tax revenue and vehicle idling are outside the scope of this rulemaking.

The concerns raised about EV batteries are addressed elsewhere in this response document. See the Department's response to comment 4 of the Environmental Concerns & Solution section.

DEEP acknowledges the importance of demonstrating the feasibility and benefits of transitioning to cleaner transportation solutions and has adopted numerous state requirements to transition the state fleet to EVs, including the state's transit bus fleet, and all agency fleet vehicles by 2030.

Comment 18. The National Federation of Independent Business (NFIB), a major small business association, has expressed concerns regarding the LEV IV & ACC II regulation. NFIB highlights that the small business impact statements are lacking, as they do not sufficiently cover the potential cost and compliance ramifications of the proposed regulation on the small business sector. The comments point out that small businesses across various sectors rely on affordable and reliable transportation, both for personal and business purposes. The comments question whether introduction of California's vehicle emissions standards by 2035 for light-duty vehicles might raise the cost of new cars, and will force retailers to adapt to new requirements regardless of market demand and align the state with decisions made by an unelected California board. Additionally, NFIB states that the push towards electric vehicle adoption could make the state overly dependent on electricity, leading to significant investments in the state's grid and end-user infrastructure and increase vulnerability concerns during electric power failures. While small businesses support clean air and environmental initiatives, the commenters worry about the unintended consequences and costs of these regulations.

Response. DEEP appreciates the detailed feedback from the National Federation of Independent Business (NFIB). . DEEP prepared the necessary analysis pursuant to CGS section 4-168a. As raised elsewhere in this document, the TCO benefits of EV ownership have been demonstrated. See the Department response to comment 7 of the Regulation & Policy section for further explanation. The proposed rule goes into effect in 2027, two years after the project point of price parity between EVs and ICE vehicles.

Comment 19. One commenter representing the People's Action for Clean Energy strongly supports the proposed ACC II regulation and attended a public comment session to gauge others' opinions. The commenter has been driving an electric vehicle since 2017 and points out that the cost has dropped significantly since then, challenging the argument that price is an issue. The commenter argues that the "free market" does not account for environmental or health externalities and that the "freedom" of choice does not equate to "freedom" to pollute. They also mention ongoing efforts to bring the supply chain to the U.S. and to countries more aligned with U.S. interests. The commenter acknowledges concerns about charging

infrastructure and grid capacity but believes that long-term plans are in place to address these issues. They suggest that the restrictiveness of the ban is overstated and recommend planning for lost tax revenue.

> **Response.** DEEP appreciates the comments in support of the proposed emission standards and acknowledges the points made about the decline in electric vehicle costs, which aligns with ongoing observations. Regarding comments on environmental externalities, DEEP is committed to accounting for environmental and health impacts in its decision-making process. Comments relative to supply chain and fuel tax revenue are outside the scope of this rulemaking.

Comment 20. The commenter, representing the nonprofit Save the Sound that has has a mission of protecting and improving the land, air, and water of Connecticut and Long Island Sound, supports the adoption of electric vehicles, citing the financial incentives at both the federal and state levels. Save the Sound notes the economic boost from domestic EV manufacturing, the health benefits in cities like New Haven and Hartford, and the potential for meeting clean air goals. The commenter believes the ACC II and ACT rule can bring about significant benefits for Connecticut. Save the Sound emphasizes the urgency to act by pointing out the state's vulnerability to climate change impacts and commends Connecticut for aligning with other states' regulatory requirements.

> **Response.** DEEP appreciates the comments in support of the proposed emission standards and the emphasis on the numerous advantages of transitioning to electric vehicles, not just from an environmental perspective but also in terms of health and economic benefits. The vulnerability of Connecticut to the impacts of climate change, including sea level rise, extreme heat, and increased storm intensity further underscores the importance of swift and effective action climate change. Additionally, the recognition that Connecticut is part of a larger collaborative effort, with several states either adopting or in the process of adopting similar regulations, indicates a broader regional commitment to addressing emissions and mitigating climate change impacts.

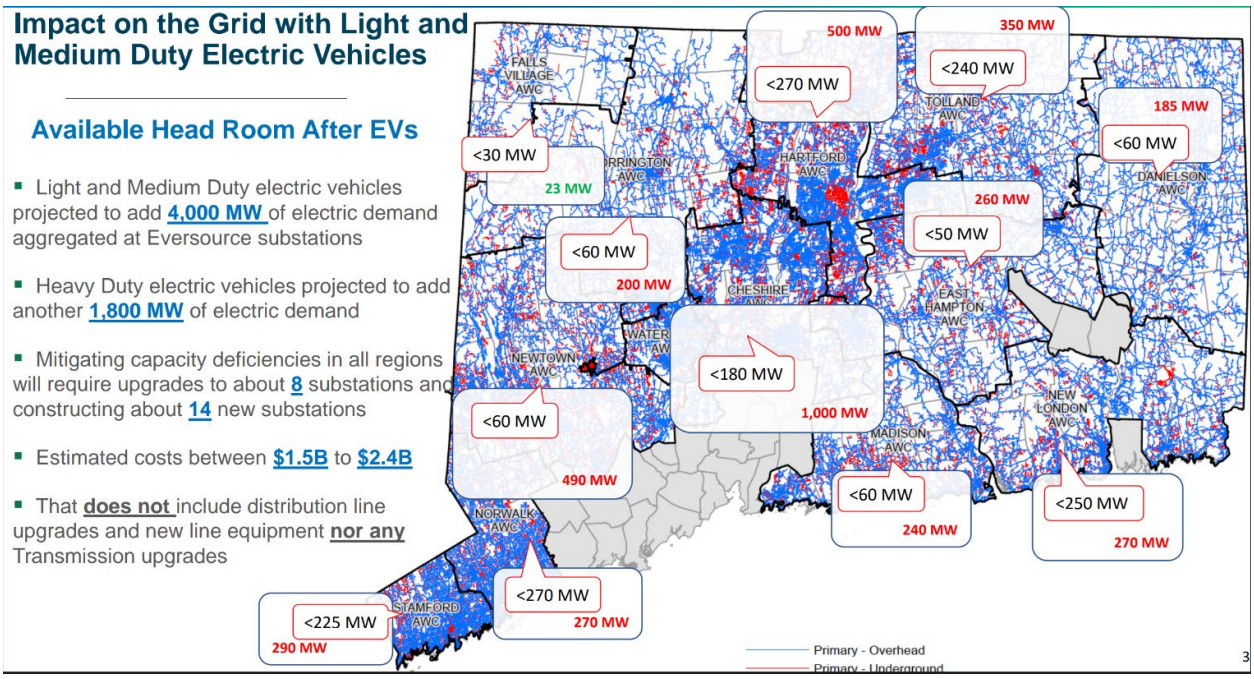
Comment 21. A coalition of Connecticut environmental, labor, social justice, and other groups advocate for Connecticut’s adoption of the ACC II regulation by the end of 2023. The commenter expresses that the regulation aims to ensure that vehicle manufacturers increase their sale of new zero-emission light-duty vehicles, culminating in 100% new sales by 2035. The commenters stress the urgency, indicating that delaying adoption means missing out on a model year of the program's benefits. They explain that the ACC II rule promises cleaner air, improved public health, economic growth, and reduced greenhouse gas emissions. Moreover,

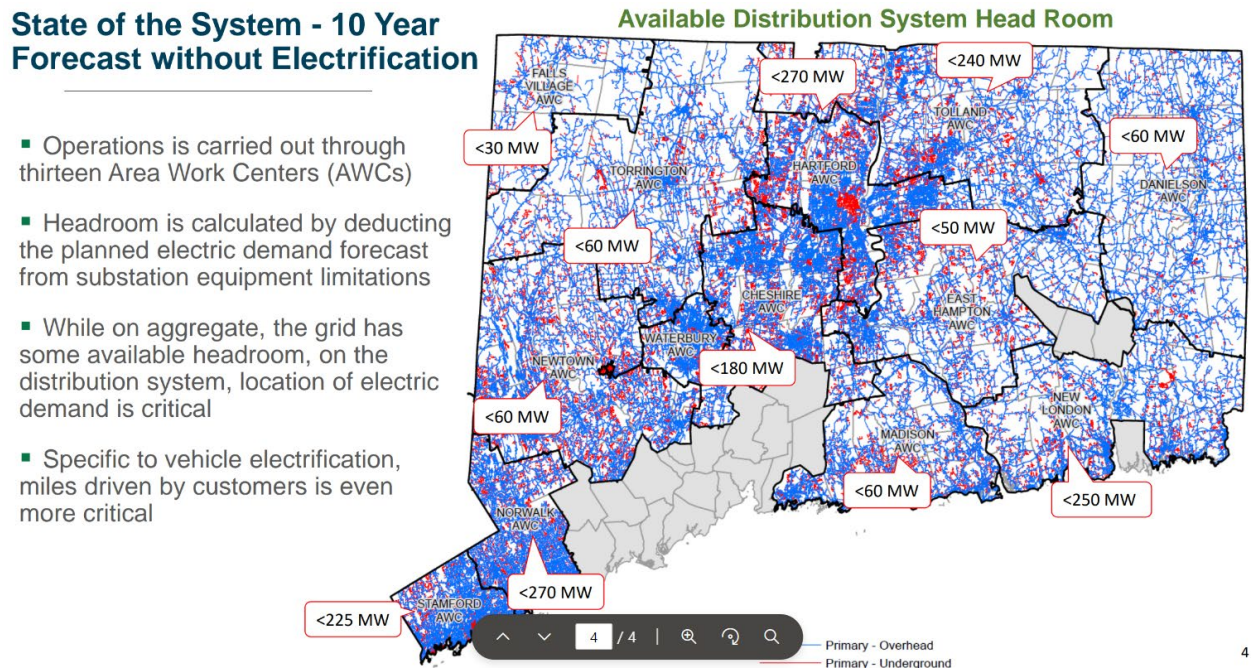
the comments indicate that adoption of the Proposed Regulations would help Connecticut meet its emission reduction goals. The commenters highlight health and environmental benefits, such as reduced pollutants and consequent health complications. By adopting ACC II, the coalition advocates that the state stands to gain substantial economic benefits, including a potential net benefit of $272.7 million; delaying ACC II puts these advantages at risk.

> **Response.** DEEP acknowledges the strong support from a diverse group of stakeholders for the ACC II regulation's swift adoption by the end of 2023 and understands the emphasis placed on the numerous benefits tied to this regulation, including public health, environmental improvements, and economic advantages. The highlighted statistics, such as the expected $11.5 billion in cumulative health benefits between 2020-2050 and the reduction in greenhouse gas emissions, further emphasize the importance of this regulation. The State remains committed to assessing the most effective ways to improve air quality, protect public health and the environment, and bolster Connecticut's economy.

Comment 22. Eversource Energy (Eversource), Connecticut's largest energy distribution company, highlighted their commitment to aiding the State's clean energy objectives and pointed out the steady growth in the stock of EVs in Connecticut and the consequential increase in electric demand. Eversource provided data showing that LDV electrifications on full implementation were going to add 4000 MW of demand by 2035, and that MHD electrification would add 1800 MW of demand. The increased demand would require upgrades to 8 substations and 14 new substations. In total the upgrades were estimated at between $1.5 billion and $2.4 billion dollars. It provides figures and data, referencing attached slides, on the expected electric demand from both Light and Medium-Duty Electric vehicles and Heavy-Duty vehicles.

Against the backdrop of a recent decision by the Public Utilities Regulatory Authority, which Eversource perceived as inhibiting necessary investments for EV infrastructure, Eversource estimated there will be a need for substantial electric infrastructure upgrade to support full vehicle electrification in 2035 in Connecticut, which they estimate to cost between $1.5 billion to $2.4 billion. It highlights a domino effect in infrastructure requirements as more residents adopt EVs, from local transformers to substations and transmission lines. Eversource emphasized challenges they faced as EV users and stresses the importance of having not just sufficient EV infrastructure but also efficient and reliable ones. Eversource provided the graphics below and concluded by emphasizing their readiness to work collaboratively with the State and other utilities to meet clean energy objectives.





Response. DEEP appreciates the detailed feedback provided by Eversource regarding the proposed adoption of Regulations of Connecticut State Agencies section 22a-174-36d, covering Light-Duty vehicles. DEEP recognizes the crucial role utilities will play in ensuring a successful transition to electric vehicles over the next decade. DEEP also notes that energy infrastructure planning is addressed through separate regulatory and

administrative frameworks that are better positioned to assess the planning assumptions utilized by Eversource in their 2035 projections.

While the specific impacts are subject to variables such as the impact of regulatory compliance flexibilities utilized by OEMs, DEEP, along with the utilities and state regulators, is already accounting for increased EV charging through various planning processes. Planning for increases in charging have been addressed by the Connecticut EV Roadmap, the Public Utilities Regulatory Authority (PURA) Zero Emission Vehicle Docket, and the 2020 Integrated Resources Plan.

The PURA ZEV Docket created a plan to provide funding through the utilities to install charging sufficient to meet Connecticut's 2025 and 2030 electric vehicle sales goals of 125,000 vehicles. Modeling for charging needs was done using the U.S. Department of Energy's EV Pro-lite modeling tool. Further planning will account for increases in the number of vehicles, and load management tools such as the National Renewable Energy Lab's load management model will help to improve consumer education and utility demand management to reduce impacts on the grid.

In addition, demand response programs supported through the regional electric grid operator, the ISO-New England, and through other programs, can incentivize EV owners to charge during off-peak hours. Connecticut's EV Charging Program, established by PURA and administered by the Utilities, incentivizes participants to charge their EVs during off-peak hours and to participate in peak demand events. The impacts of EV charging will be further reduced by continuing to offer and promote variable electricity pricing to encourage charging when the grid has surplus capacity, ensuring grid stability.

V. Comments of the Hearing Officer

One comment was received that requires a technical change to the proposal. DEEP agrees with the comment and has made the changes to the proposed regulation.

Comment 1. Tom Miller, of the Alliance, commented that section (*l*) of the proposed regulation contains a typo as Section 1961.1, cited in the section, pertains to the 2009-2016 California GHG regulation and not the current GHG requirements. The proper citation would "1961.3" for 2027 and later GHG requirements.

The proposed regulation is amended to read:

(l) Greenhouse gas emission standards and related requirements.

(2) For all 2027 and subsequent model year vehicles, manufacturers may demonstrate compliance based on the total number of passenger cars, light-duty trucks, and medium-duty passenger vehicles certified to the California exhaust emission standards in California Code of Regulations, Title 13, section **1961.3**, which are produced and delivered for sale in Connecticut, California, and all other states that have adopted California's greenhouse gas emission standards pursuant to section 177 of the Clean Air Act. A manufacturer that fails to comply under the provisions of this subdivision shall be subject to applicable penalties and shall be required to comply with the greenhouse gas standards pursuant to subdivision (1) of this subsection.

VI. Conclusion

Based upon the comments addressed in this Hearing Report, I recommend the proposal be adopted with the technical correction identified above, and that the final proposal be submitted by the Commissioner for approval by the Attorney General and the Legislative Regulations Review Committee and upon adoption, certain provisions be submitted to the U.S. Environmental Protection Agency as a revision to the State Implementation Plan.

Paul Kritzler
_____
/s/ Paul Kritzler
Hearing Officer

9/25/2023
_____
Date