

August 28, 2023

VIA ELECTRONIC MAIL

Maine Board of Environmental Protection Maine Department of Environmental Protection 17 State House Station Augusta, ME 04333

RE: Sierra Club Comments on Chapter 127-A, Advanced Clean Cars II Program

Dear Chair Lessard and Members of the Board of Environmental Protection:

On behalf of its 22,000 members and supporters in Maine, Sierra Club respectfully submits the following comments in response to the Board of Environmental Protection's July 26, 2023 Notice of Rulemaking. Sierra Club thanks the Board for commencing the rulemaking process for the Advanced Clean Cars II rule (ACC II) and supports adoption of ACC II in 2023. Sierra Club urges the Board to adopt the complete version of the ACC II rule, under which the percentage of new zero emission vehicles (ZEVs) and plug-in hybrid electric vehicles (PHEVs) sold will gradually increase each year until reaching 100 percent in 2035, rather than only adopting the ACC II rule through 2032 as currently proposed. The complete ACC II rule has been adopted in seven other states: California, Massachusetts, New York, Oregon, Vermont, Virginia, and Washington, and is under consideration in several others, including Colorado, Delaware, Maryland, New Jersey, and New Mexico. Maine should join these states in adoption of the complete ACC II rule in 2023.

I. Adoption of the Complete ACC II Rule is Critical to Meeting Maine's Climate Targets

Maine's climate law requires the state to reduce greenhouse gas emissions 45% below 1990 levels by 2030, achieve net zero emissions by 2045, and reduce emissions 80% below 1990 levels by 2050.¹ Maine cannot achieve those reductions without greatly reducing emissions from the transportation sector, which accounts for nearly half of Maine's carbon dioxide equivalent (CO2e) emissions from fossil fuels,² with light-duty vehicles contributing about 60% of that total.³ The ACC II program will reduce light-duty vehicle emissions by requiring an increasing number of vehicles sold each year to be zero-emission. The Maine Clean Transportation Roadmap emphasized that ACC II adoption is "critically important in terms of impact on GHG

¹ 38 M.R.S. § 576-A.

² Maine Department of Environmental Protection, Bureau of Air Quality, *Ninth Biennial Report on Progress toward Greenhouse Gas Reduction Goals* (July 2022), at 10.

³ Governor's Energy Office, Governor's Office on Policy, Innovation, and the Future, Cadmus, *Executive Summary: Maine Clean Transportation Roadmap* (Dec. 2021), at 3.

emissions" and would have a "profound impact on GHG emissions from the transportation sector."⁴ In order to comply with the climate law's 2030 target, Maine must adopt ACC II this year so that the regulation can take effect beginning with model year 2027. Further, to meet the 2050 emissions reduction target, Maine must adopt the complete ACC II rule to achieve 100% electric new vehicle sales by 2035—as highlighted in the Maine Clean Transportation Roadmap, Maine's light-duty fleet must achieve "near-zero emissions" by 2050 to comply with the climate law.⁵

Data from the International Council on Clean Transportation illustrates the emissions benefits ACC II adoption would bring to Maine.⁶ Table 1 below summarizes the emission benefits of adopting ACC II starting with model year 2027 compared to a business-as-usual scenario based on EPA projections of ZEV impacts under current light-duty vehicle greenhouse gas rules. Cumulative reductions are provided for 2030, 2035, and 2040.

By 2030			By 2035			By 2040		
NO _x	PM _{2.5}	WTW CO ₂₀	NO _x	PM _{2.5}	WTW CO ₂₀	NO _x	PM _{2.5}	WTW CO _{2e}
236	16	1.8	990	73	8.2	2,274	160	19.0

Table 1: Cumulative ACC II emission benefits compared to a business-as-usual scenario

Notes: Assumes ACC II implementation in model year 2027. NO_x and $PM_{2.5}$ are expressed in U.S. tons, CO_{2e} is expressed in million metric tons.

II. ACC II Adoption Will Benefit the Health of Maine Residents

In addition to CO2, gasoline-powered vehicles emit many other pollutants that are harmful to human health and lead to increased risk of asthma, lung disease and cancer.⁷ As illustrated in Table 1 above, Maine can greatly reduce emissions of NOx and PM 2.5 through adoption of the ACC II rule. An April 2023 report from Energy Innovation Policy & Technology calculates that, from adopting the ACC II rule alone, all Section 177 states⁸ will experience the following tangible public health benefits cumulatively by 2050:

⁷ American Lung Association, Zeroing in on Healthy Air (Mar. 2022) ("Zeroing in on Healthy Air") at 3.

⁴ Governor's Energy Office, Governor's Office on Policy, Innovation and the Future, Cadmus, *Maine Clean Transportation Roadmap* (Dec. 2021) ("Clean Transportation Roadmap") at 53.

⁵ Clean Transportation Roadmap at 1.

⁶ International Council on Clean Transportation, Benefits of Adopting California's Advanced Clean Cars II (ACC II) Standards in Maine, May 2023, https://theicct.org/wp-content/uploads/2023/05/me-acc-ii-benefits-fs-may23.pdf.

⁸ The term "Section 177 states" refers to states that have opted to follow California's regulations concerning vehicle emissions, which is authorized under Section 177 of the Clean Air Act. *See* 42 U.S. Code § 7507. While the above projections include about a dozen other states in addition to Maine, this still illustrates the tangible public health benefits that would accompany adoption of the ACC II Rule in Maine. The projected benefits would be even greater if impacts of the ACT and HDO Rules were taken into account. This report was published in April 2023 and, at the time, included Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, Washington, and California.

- 161,000 Avoided Asthma Attacks
- 574,000 Avoided Lost Workdays
- 5,040 Avoided Premature deaths
- 242,000 Avoided Respiratory Symptoms and Bronchitis
- 6,770 Avoided Nonfatal Heart Attacks
- 3,020 Avoided Hospital Admissions
- 2,660 Avoided Respiratory ER Visits
- 3,560,000 Avoided Minor Restricted Activity Days⁹

The Board should adopt the complete ACC II rule through 2035 to ensure these public health benefits are realized for Maine residents.

III. EV Adoption Will Benefit All Maine Consumers and the Electric Grid

Increased EV adoption will benefit all Maine residents, regardless of whether they are EV owners because EVs drive electricity costs down for all ratepayers. EVs present significant opportunity to reduce electricity costs for all customers by spreading utility fixed costs over a greater quantity of kilowatt-hour sales, particularly if the additional load occurs during off-peak times.¹⁰ Analysis by Synapse Energy Economics, Inc. of empirical evidence from the two utility service territories with the highest EV penetrations in the country (Pacific Gas & Electric's and Southern California Edison's service territories in California) shows that EV load puts downward pressure on rates: over eight years from 2012-2019, EV drivers in these service territories contributed \$806 million more in revenues than associated costs, and drove rates down for all customers.¹¹ As Synapse concluded, "in the two utility service territories with the most EVs in the US, EVs have increased utility revenues more than they have increased utility costs-leading to downward pressure on electric rates for EV-owners and non-EV owners alike."¹² Importantly, Synapse's analysis shows that EVs generated more utility revenue than costs and put downward pressure on rates even when most customers were on traditional tiered rates and these benefits were amplified when time of use rates were implemented.¹³ Similar benefits are expected in Maine as the state accelerates transportation electrification and optimizes charging loads to occur during off-peak hours.

Consumers in Maine are already rapidly adopting electric vehicles. In the past year and a half, the number of electric vehicles registered in the state has grown from roughly 6,000 to over 9,000.¹⁴ Demand is so strong that lack of supply has been a major constraint on Maine residents

⁹ Energy Innovation Policy & Technology LLC, "Nationwide Impacts Of California's Advanced Clean Cars II Rule" (April 9, 2023), <u>https://energyinnovation.org/publication/nationwide-impacts-of-californias-advanced-clean-cars-ii-rule/</u>.

¹⁰ Synapse Energy Economics, *Electric Vehicles Are Driving Electric Rates Down* (June 2020 Update), available at https://www.synapse-energy.com/sites/default/files/EV_Impacts_June_2020_18-

^{122.}pdf#:~:text=EVs%20hold%20significant%20potential%20to%20reduce%20electric%20rates,the%20day%20w hen%20the%20electric%20grid%20is%20underutilized.

¹¹ Id.

¹² Id. ¹³ Id.

⁻⁻ *Id.* 14 p

¹⁴ P. Wright, Maine Public, *The supply of electric vehicles hasn't kept pace with Maine's exploding demand* (May 11, 2023), available at <u>https://www.mainepublic.org/climate/2023-05-11/the-supply-of-electric-vehicles-hasnt-kept-pace-with-maines-exploding-demand</u>.

looking to purchase EVs, with waitlists several months long for certain models.¹⁵ As Sierra Club's 2023 report, "Rev Up Electric Vehicles: A Nationwide Study of the Electric Vehicle Shopping Experience" found, only 32 percent of dealers in the Northeast had an available EV for sale, with half of those dealers without available EVs stating that they would offer an EV for sale if they could.¹⁶ As recognized in the Maine Clean Transportation Roadmap, adoption of the rule would send a "clear, long-term signal to automakers to increase deliveries of EVs."¹⁷ The Roadmap further recognized that EV market share has been approximately twice as high in states that follow California emission regulations, demonstrating the effectiveness of vehicle sales requirements.¹⁸ Adoption of the ACC II rule will ensure Maine's consumers have access to a robust and competitive zero-emission vehicle market.

IV. Conclusion

Sierra Club urges the Board to take this vital step to meet Maine's climate mandates and to protect the health of Maine residents by adopting the complete ACC II rule this year. Thank you for your consideration.

Respectfully submitted,

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¹⁵ See, e.g., P. Wright, Maine Public, *The supply of electric vehicles hasn't kept pace with Maine's exploding demand* (May 11, 2023), available at <u>https://www.mainepublic.org/climate/2023-05-11/the-supply-of-electric-vehicles-hasnt-kept-pace-with-maines-exploding-demand</u>.

¹⁶ Sierra Club, REV UP: A Nationwide Study of the Electric Vehicle Shopping Experience, May 2023, https://www.sierraclub.org/sites/www.sierraclub.org/files/2023-05/SierraClubRevUpReport2023.pdf.

¹⁷ Clean Transportation Roadmap at 2.