Southwest Energy Efficiency Project

Please see the attached comment letter.

November 10, 2023

To: Members of the New Mexico Environmental Improvement Board and the Albuquerque / Bernalillo County Air Quality Control Board

Re: In the Matter of Proposed Amendments to 20.2.91 NMAC, New Motor Vehicle Emission Standards, No. EIB 23-56(R) / In the Matter of Petition to Amend Existing Rule 20.11.104 NMAC, New Motor Vehicle Emission Standards, AQCB Petition No. 2023-01

Respected Board Members,

I submit these comments on behalf of the Southwest Energy Efficiency Project (SWEEP), one of the organizations participating in this proceeding as part of the Climate Advocates Coalition. SWEEP is a public interest 501(c)(3) non-profit working to advance energy efficiency, beneficial electrification and clean transportation in Colorado, Arizona, Nevada, New Mexico, Utah and Wyoming. In collaboration with utilities, state and local governments, environmental and community groups, businesses, national laboratories, federal agencies, and other energy experts, SWEEP promotes programs, policies, and funding to help mitigate climate change and its impacts, lend support to underserved and disadvantaged communities, and save people money on energy bills and transportation costs.

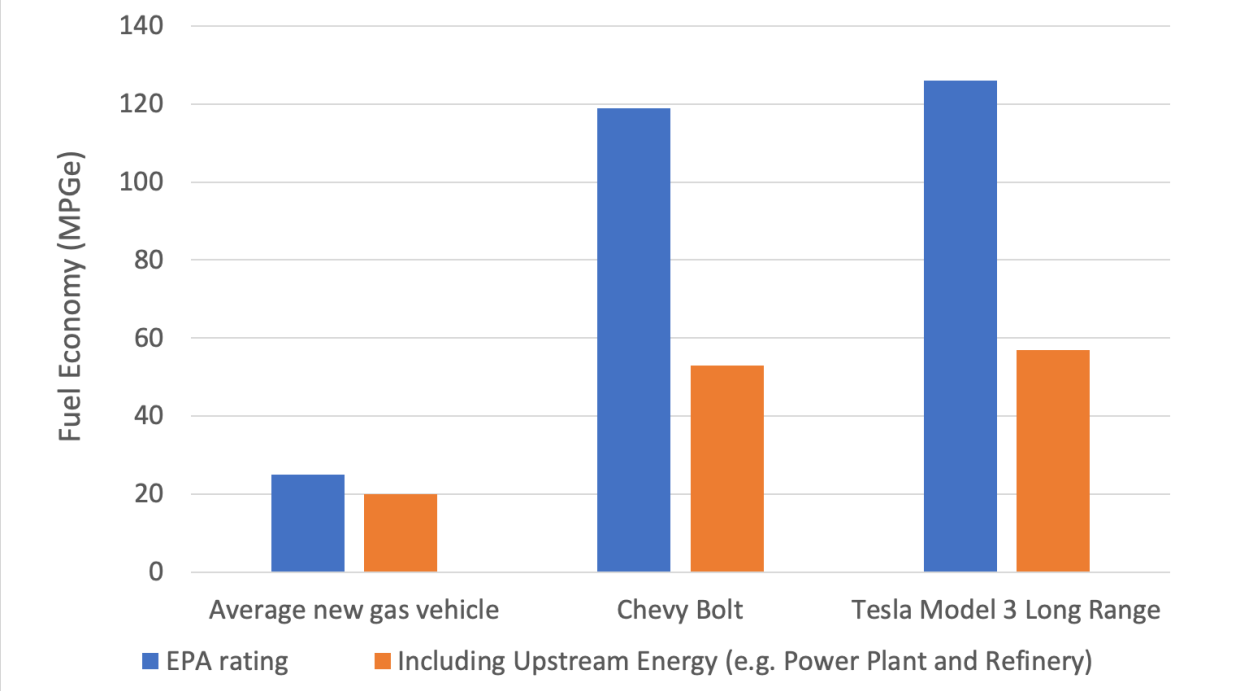
Our formal coalition testimony thoroughly makes the factual case for adopting the Advanced Clean Cars and Advanced Clean Truck regulations. I'd like to add a few additional points from our perspective as an organization focused on efficiency and equity.

Fundamentally, transportation electrification is one of the largest available opportunities to improve energy-efficiency in the New Mexico economy, and nationwide.[1] Because combustion engines in vehicles are inefficient, a lot of the energy in gasoline or diesel (and money spent on the fuel) ends up wasted as heat, doing no useful work. As Figure 1 below shows, electric transportation is almost three times as efficient as combustion – even after accounting for upstream energy consumed in the process of fuel extraction and refining, or electric power generation and distribution.

Electrification will shift a meaningful portion of transportation expenditures from petroleum fuel to the electric system, saving energy – and saving consumers money. For example, a typical

household in Doña Ana County currently spends about $2,700 per year on gasoline at November 2023 fuel prices.[2] Overall, a typical family in the Western United States, spends more on transportation than any other good or service, except housing.[3] Families making less than $70,000 per year spend almost 20 percent of their after-tax income on getting around.[4]

Figure 1: Electric motors are dramatically more efficient than internal combustion engines.[5]



If that hypothetical Doña Ana County family switched all annual miles driven to electricity and charged at home on El Paso Electric's Whole Home EV time-of-use rate during super off-peak hours (midnight to 8 AM), they would save as much as $2,600 per year on fuel.[6] (In other words, compared to gasoline, nighttime electricity in Las Cruces is practically free.) Additional savings would come from the reduced maintenance needs of EVs. Reducing transportation costs on that scale could make a big difference for many families – as well as for businesses, institutions and public fleets across the state.

Electric vehicles' efficiency advantage also translates into an ability to reduce air pollution, producing significant society-wide climate and health benefits. These benefits will only grow larger as New Mexico shifts more of its electricity generation to clean, renewable, pollution-free energy sources.

Adopting the Advanced Clean Cars and Advanced Clean Trucks rules before you this month will help ensure that New Mexico can access its share of these benefits in the decades to come. The rules will make sure that New Mexicans will have timely access to new clean transportation technologies. And as our testimony documents, the rules offer tens of billions of dollars of compelling benefits for residents, businesses and governments.

There will certainly be additional work to do to facilitate New Mexico's transition to Zero Emission transportation. Our groups are doing that work. For example, we are working currently at the Public Regulation Commission to help guide the design and expansion of utility Transportation Electrification Plans, to ensure that our electric system will be ready for a dramatic increase in the number and kinds of electric vehicles operating on New Mexico's roads. I am optimistic that we will be able to solve the challenges ahead.

I am grateful to Governor Lujan Grisham for launching this process and thankful for her vision and courage in pursuing this truly meaningful policy. My sincere thanks also the New Mexico Environment Deparment and the talented staff who put in many, many hours of hard work to bring this proposal before you.

I urge you to carefully consider the evidence presented in NMED's and the Climate Coalition's written and oral testimonies, and I hope that you will agree with us that taking action to accelerate clean transportation is more than worth it. I urge you to adopt the strongest version of the rules before you. Thank you very much for your service.

Sincerely,

Travis Madsen
Transportation Program Director
Southwest Energy Efficiency Project

References cited:

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[1] Steven Nadel & Lowell Ungar, Am. Council for an Energy-Efficient Economy, *Halfway There: Energy Efficiency Can Cut Energy Use and Greenhouse Gas Emissions in Half by 2050* (2019), https://www.aceee.org/research-report/u1907.

[2] Gasoline costs estimated by Center for Neighborhood Technology, *Total Driving Costs Index*, accessed on 10 November 2023 at https://htaindex.cnt.org/total-driving-costs/ assuming a gasoline price of $3.00 per gallon.

[3] U.S. Bureau of Labor Statistics, *Consumer Expenditure Surveys*, September 2022; Table 3134: Western Region by Income Before Taxes: Average Annual Expenditures and Characteristics.

[4] Ibid.

[5] See note 1, Page 17.

[6] Per Center for Neighborhood Technology (Note 2), a typical family in Doña Ana County drives 19,635 miles per year, total. If that driving were done in Chevy Bolt vehicles, which EPA estimates use around 29 kWh to go 100 miles, and all charging were done at home, fuel cost would be less than $50 for the whole year at the standard residential time of use off-peak rate of $0.055 per kWh, minus the super-off-peak Whole House Electric Vehicle Rate Rider Charging Incentive Credit of $0.04740 per kWh, per El Paso Electric Company, *Fourteenth Revised Rate No. 01, Residential Service Rate*, Exhibit BT-3 in NMPRC Case No. 23-00231-UT.